



Nashua Battery Energy Storage System

Smithville BOA Hearing
7pm July 21, 2026

Executive Summary

Nashua Battery Energy Storage System



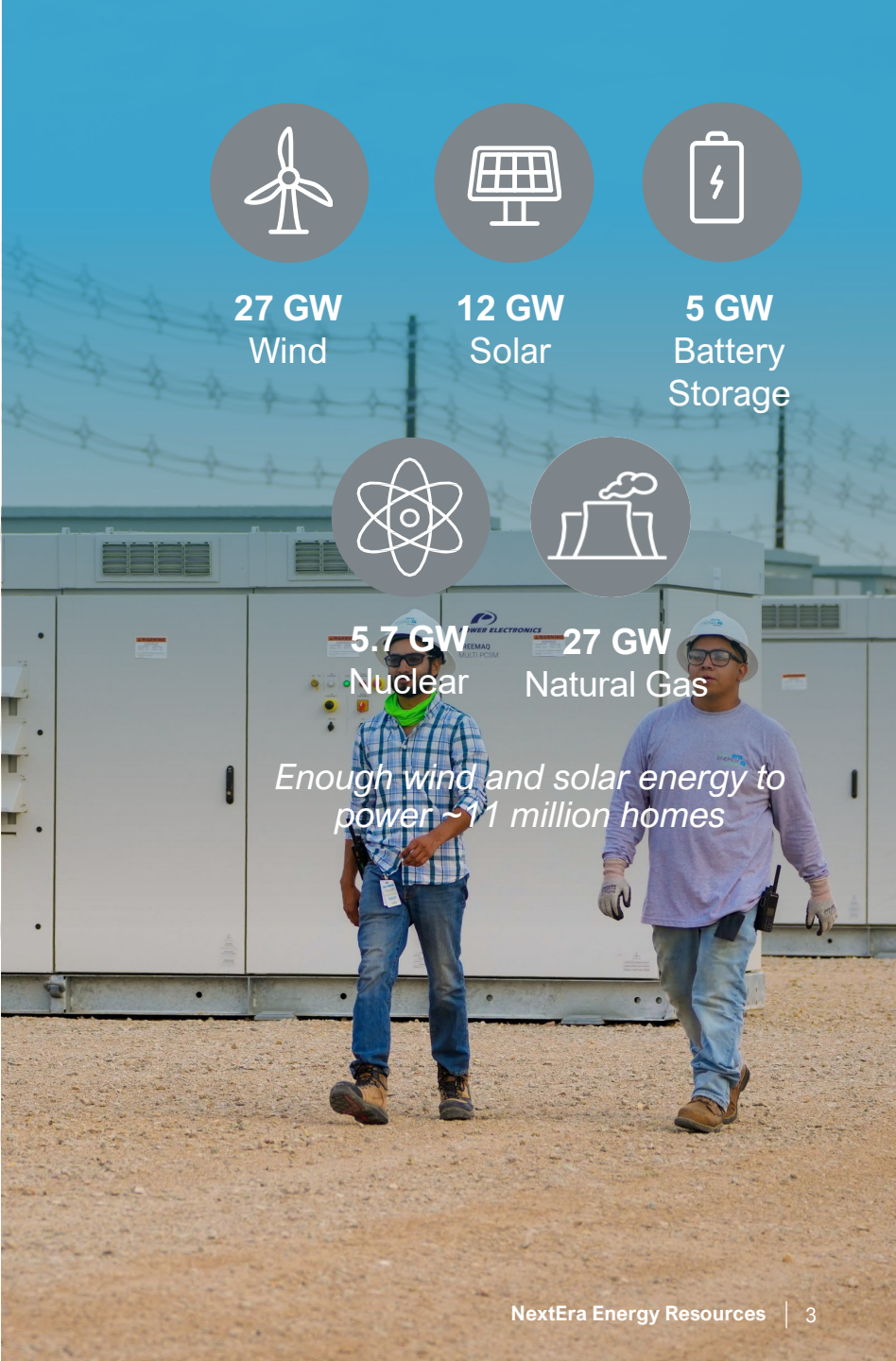
- Nashua Battery Energy Storage System is being developed by NextEra Energy Resources, one of America's largest infrastructure developers with **60+ operating battery energy storage facilities** and **over 35 years of experience** developing, building, and operating energy projects across the United States.
- The project has been designed to **comply with the City of Smithville's Battery Energy Storage Ordinance** and applicable local, state, and federal requirements.
- **Environmental studies and due diligence have been completed**, with additional permitting and agency coordination (U.S. Army Corps of Engineers, MO Department of Conservation, MO Department of Natural Resources) occurring as the project advances.
- The facility will utilize modern battery technology designed and operated in accordance with **NFPA 855, the national standard governing battery energy storage system safety**.
- NextEra will develop a comprehensive **emergency response plan in coordination with Smithville Fire Protection District** and other relevant agencies.
- A comprehensive **visual screening and landscape plan** has been developed to **minimize visibility from surrounding properties and roadways**.
- The project will support **grid reliability, enhance energy resilience and provide long-term economic benefits to the Smithville community**.
- **NextEra Energy Resources is committed to being a long-term community partner** and continuing open communication with residents, local officials, and first responders.

NextEra Energy Resources

One of America’s largest infrastructure developers, building all forms of energy across renewables, battery energy storage, natural gas and nuclear

NextEra Energy Resources – your trusted energy developer:

-  **American-owned and operated company** with more than **35 years** of energy infrastructure experience
-  **Trusted energy provider** working with local utilities in **44 states across 400+ projects**
-  Committed to enhancing **energy reliability, sustainability, and safety** for communities nationwide
-  **Proven track record** of being a good neighbor through **\$9 MM+** invested local community programs (2022-24) and **\$200 MM+** in property taxes and fees (2024).



NextEra Energy Resources in Missouri



Investing in Missouri for more than a decade



Own and operate one wind energy center and one solar energy center



Five battery energy storage projects in development and two solar energy projects in development and one solar energy project in construction



~\$537 million
total investment



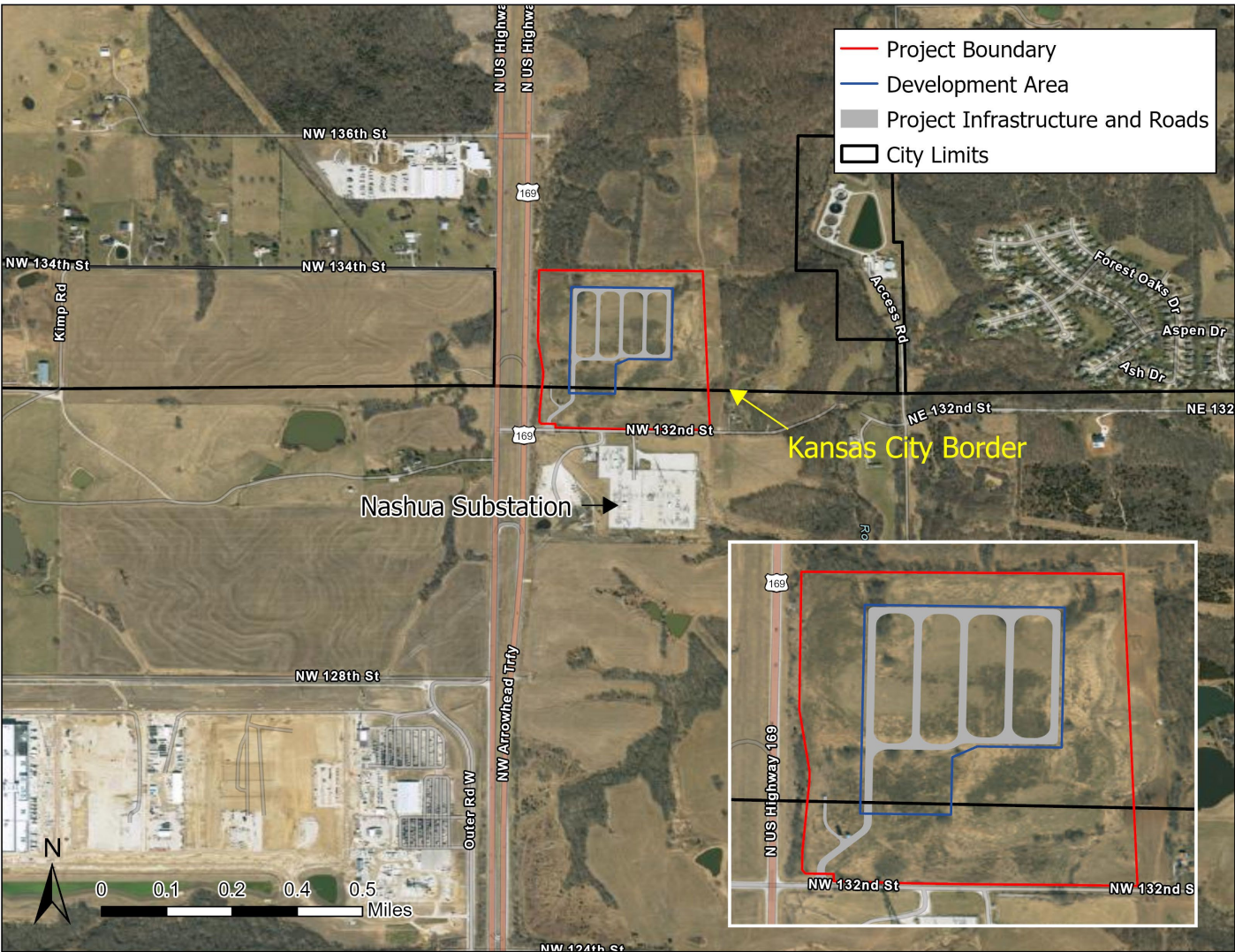
~\$1.6 million
annual land
payments



~\$2.5 million
in property
taxes, 2024



Project boundary



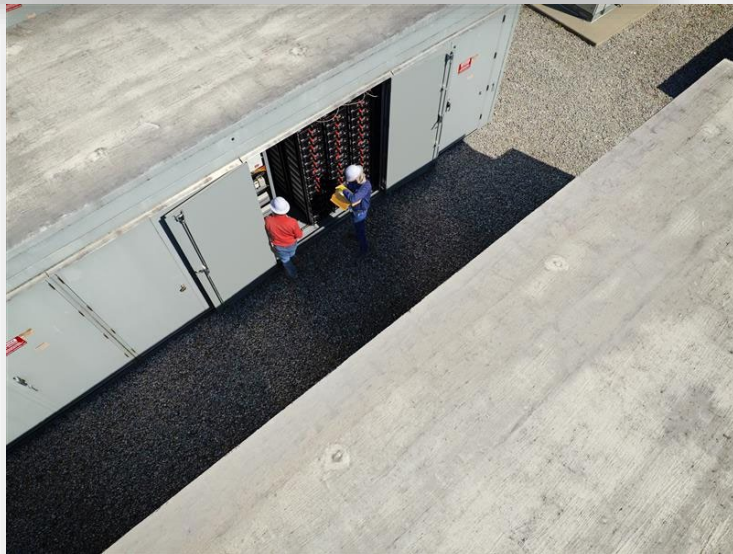
300
Megawatts
of BESS

Proposed
Operation
Date:
2029

Interconnect
on Nashua /
Smithville
line 161 kV

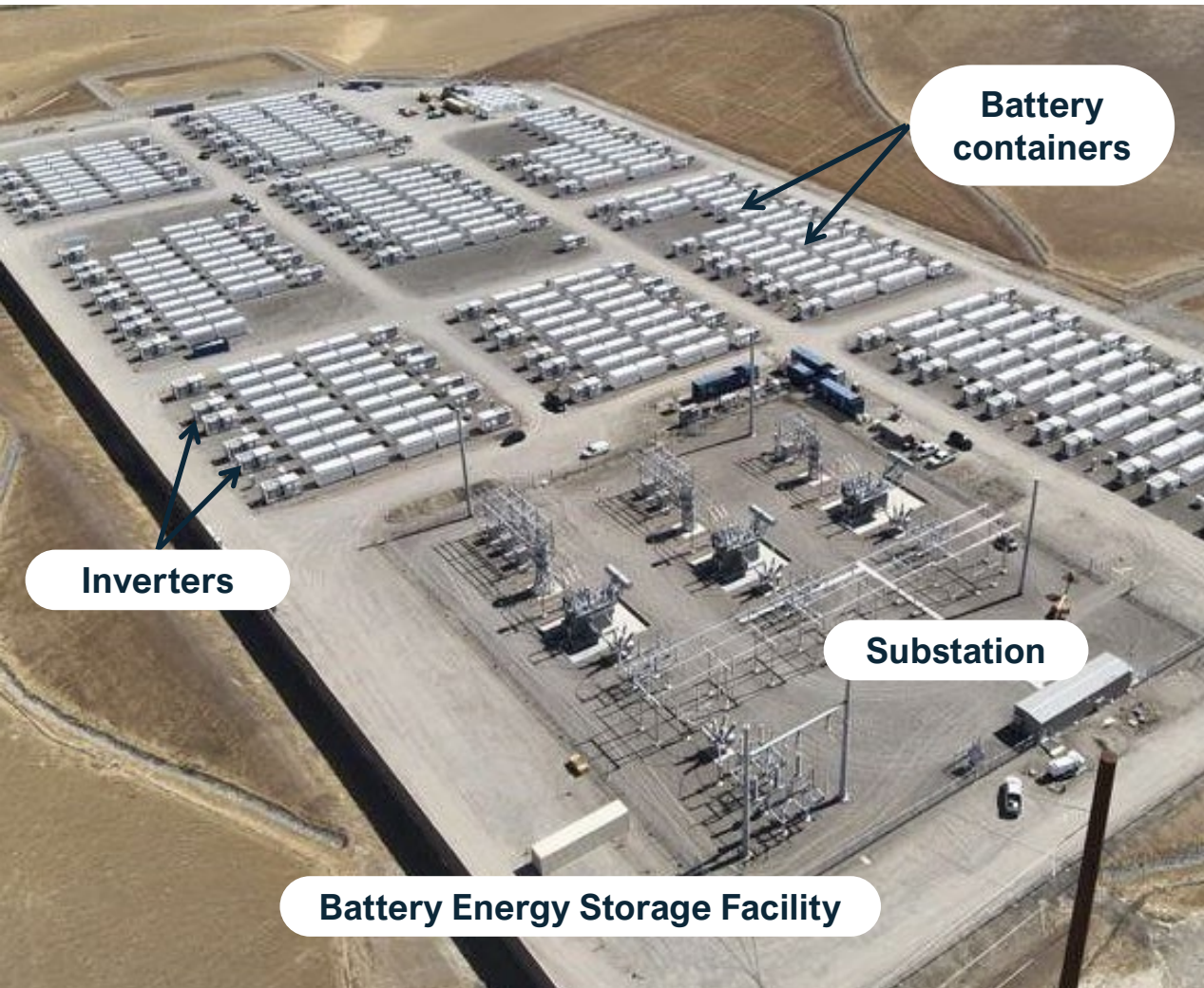
Projected
30-year
project life

What do battery energy storage systems look like?



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 ~9 acres for 100 MW (4hr), minimizing land disturbance
- A single container can provide energy for over 700 homes for 4 hours daily⁽¹⁾
- Designed to adhere to specific site requirements
- NextEra Energy Resources carefully designs battery sites to minimize sound impacts

- **Strategically located near existing infrastructure to reduce disruption**

- Close to substation (Point of Interconnection)

- **Safety features**

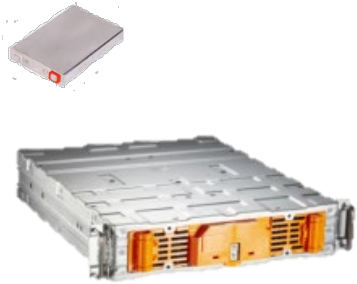
- Entire site fenced with security gates
- Access roads for operations, maintenance and safety

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

Inside a battery energy storage system

Modular and outdoor battery energy storage container 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



Containers



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

NFPA 855

Standard for the Installation of Stationary Energy Storage Systems

- **Large Scale Fire Testing**
- **Listed Equipment**
- **Hazard Mitigation Analysis**
- **Failure Mode Effects Analysis**
- **Emergency Response Plan**
- **First Responder Training**

NFPA®

855

Standard for
the Installation of Stationary
Energy Storage Systems

2026

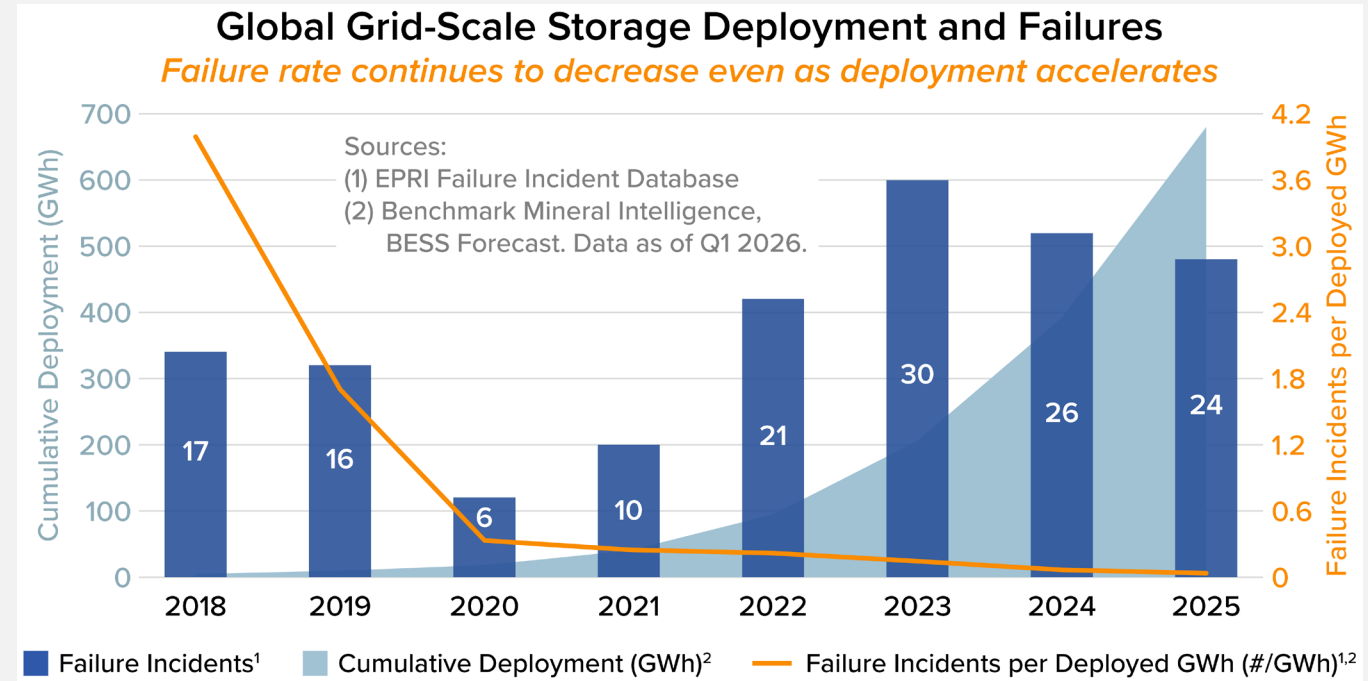


BESS is Growing Fast and Safer than Ever

More projects, fewer incidents.



- Battery storage has expanded worldwide since 2018 – from 3 GW to more than 48 GW.
- Concurrently, the chance of BESS failure rate has dropped by about 99%.
- Incidents are now very rare, thanks to better codes and standards, equipment, fire detection, and 24/7 monitoring.
- Proper training of the Fire Department to ensure that the response tactics will provide a safe site-specific plan to handle an event.
- Smoke from the fire will not pose a risk to the residents.



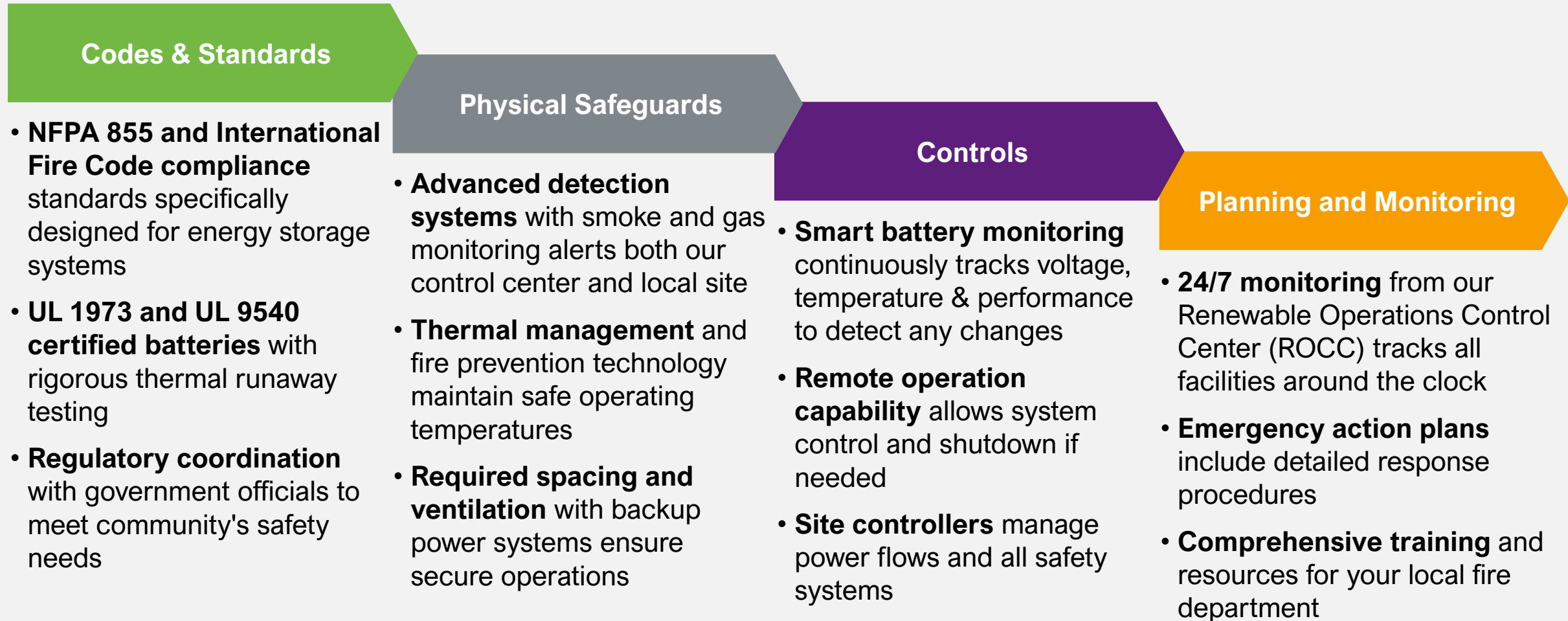
There will be no air emissions health risk, nor impact to local soil, groundwater or surface water if a fire were to occur.

Key Safety Points – Nashua Energy Storage

- Nashua Energy Storage will be designed to the NFPA 855 and other applicable standards.
- Therefore, the likelihood of a fire is low, but if there is a fire:
 - The systems will safely fail within expected engineering design;
 - The container will consume itself and not spread to an adjacent container.
 - There will be no spread of the fire from the BESS facility to neighboring land; and
 - There will be no air emissions health risk, nor impact to local soil, groundwater or surface water if a fire were to occur.
 - The fire department will receive site-specific emergency response training before operations begin and on an annual basis to maintain preparedness and ensure safe response tactics.

Battery energy storage systems – a layered approach to safety

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



Proactive operations and maintenance

24/7 monitoring provides peace of mind for your community

Onsite Control Center

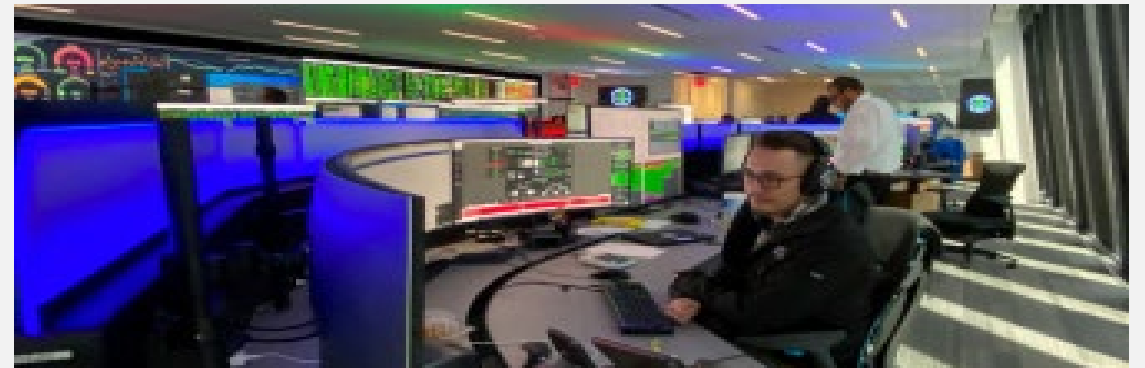


Renewable Operations Control Center (ROCC)

Key operating parameters continuously monitored on site include:

- Real-time sensors
- Battery temperature
- Battery cell voltages
- Gas alarm levels
- Status of doors and ventilation

- ROCC, operating 24/7/365 is notified of any deviation from normal conditions and can dispatch local technicians to address issues or can safely shut-down the facility if required
- Advanced cybersecurity systems provide continuous monitoring, real-time threat detection and proactive security updates that protect your community's energy infrastructure

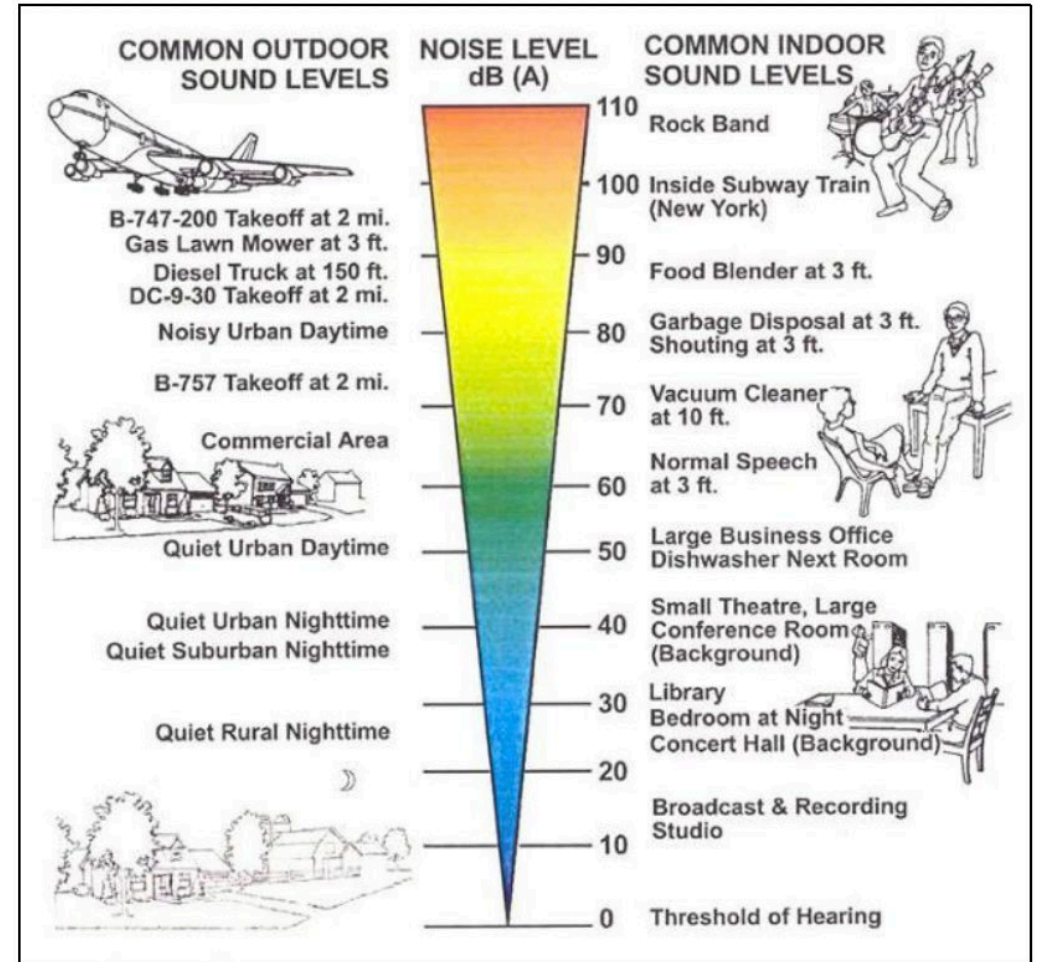


ROCC operates a fleet of over 400 wind, solar and battery energy storage sites

Public Health and Safety

Sound

- The closest home is 745 ft from project infrastructure.
- The baseline measured ambient sound levels are between 50 dBA to 65 dBA.
- Modeled sound levels for the project range between 32 dBA to 54 dBA.
- The BESS will not appreciably change the existing soundscape in the area.



Environmental Documentation and Permitting

Due diligence surveys for all projects includes:

-  Aquatic features delineation
-  Wildlife assessments/surveys
-  General ecological assessments
-  Phase I Environmental Site Assessment
-  Cultural and archaeological surveys



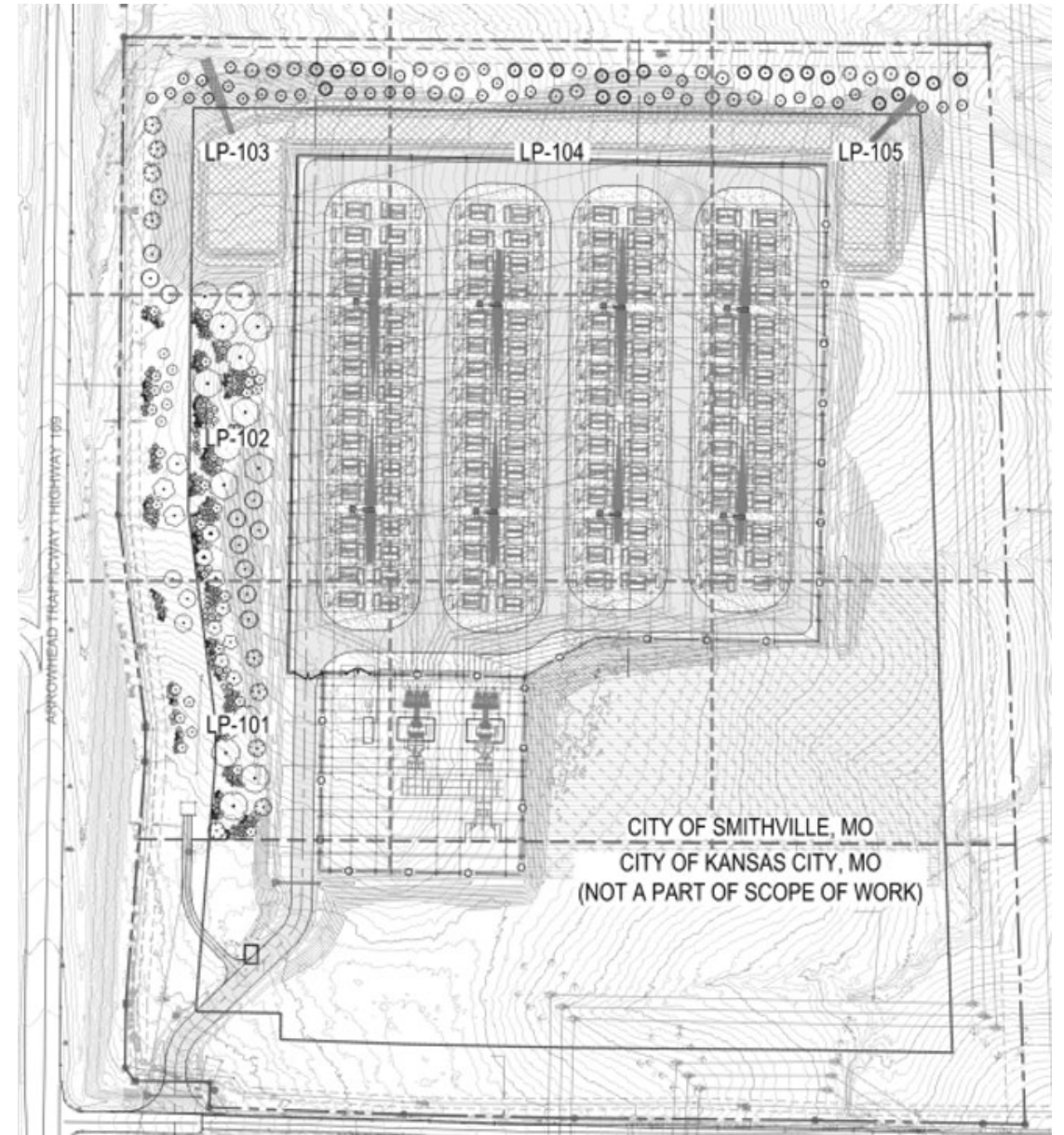
Permitting and Agency coordination for project includes:

- Coordination with the **U.S. Army Corps of Engineers** for potential impacts to waterbodies within the project – a request for review has been submitted.
- Coordination with **Missouri Department of Conservation** for review of wildlife concerns – their online database indicated no further consultation was necessary
- A stormwater permit will be submitted to the **Missouri Department of Natural Resources** prior to construction.

Landscape Screening

PLANT SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME	ROOT	SIZE	WATER USE	HEIGHT	SPREAD
DECIDUOUS TREES								
GY DI	9	GYMNOCLADUS DIOICUS	KENTUCKY COFFEETREE	B & B	3" CAL.	MOD	50'-80'	40'-50'
NY SY	10	NYSSA SYLVATICA	BLACK GUM	B & B	3" CAL.	MOD	30'-40'	20'-30'
OS VI	10	OSTRYA VIRGINIANA	AMERICAN HOPHORNBEAM	B & B	3" CAL.	HIGH	30'-40'	20'-30'
PR SE	5	PRUNUS SEROTINA	BLACK CHERRY	B & B	3" CAL.	MOD	50'-80'	30'-60'
EVERGREEN TREES								
JU VI	35	JUNIPERUS VIRGINIANA	EASTERN REDCEDAR	B & B	6" HT.	LOW	40'-50'	10'-20'
PI OM	19	PICEA OMORICA	SERBIAN SPRUCE	B & B	6" HT.	MOD	40'-60'	15'-20'
TA MI	23	TAXODIUM DISTICHUM 'MICKELSON'	SHAWNEE BRAVE™ BALD CYPRESS	B & B	6" HT.	MOD	50'-80'	15'-20'
ORNAMENTAL TREES								
AE PA	5	AESCULUS PAVIA	RED BUCKEYE	B & B	3" CAL.	MOD	12'-15'	12'-15'
AM AR	5	AMELANCHIER ARBOREA	DOWNY SERVICEBERRY	B & B	3" CAL.	MOD	15'-25'	15'-25'
CE CA	3	CERCIS CANADENSIS	EASTERN REDBUD MULTI-TRUNK	B & B	3" CAL.	MOD	20'-30'	20'-30'
CH VI	5	CHIONANTHUS VIRGINICUS	WHITE FRINGETREE	B & B	3" CAL.	MOD	15'-20'	12'-20'
CO OB	3	COTINUS OBOVATUS	AMERICAN SMOKE TREE	B & B	3" CAL.	MOD	20'-30'	20'-30'
CR VI	3	CRATAEGUS VIRIDIS	GREEN HAWTHORN	B & B	3" CAL.	LOW	25'-35'	25'-35'
DECIDUOUS SHRUBS								
AR ME	31	ARONIA MELANOCARPA	BLACK CHOKEBERRY	CONT.	#5	MOD	3'-6'	3'-6'
CA AM	39	CALLICARPA AMERICANA	AMERICAN BEAUTYBERRY	CONT.	#5	MOD	3'-6'	3'-6'
CE AM	36	CEANOTHUS AMERICANUS	NEW JERSEY TEA	CONT.	#5	MOD	3'-4'	3'-5'
HA VI	23	HAMAMELIS VIRGINIANA	COMMON WITCH HAZEL	CONT.	#5	MOD	15'-20'	15'-20'
HY AR	27	HYDRANGEA ARBORESCENS	SMOOTH HYDRANGEA	CONT.	#5	MOD	3'-5'	3'-5'
IL VE	30	ILEX VERTICILLATA	WINTERBERRY	CONT.	#5	MOD	6'-12'	6'-12'
LI BE	20	LINDERA BENZOIN	SPICEBUSH	CONT.	#5	MOD	6'-12'	6'-12'
PH OP	28	PHYSOCARPUS OPULIFOLIUS	NINEBARK	CONT.	#5	LOW	5'-8'	4'-6'
PH PU	41	PHILADELPHUS PUBESCENS	BROADLEAF MOCK ORANGE	CONT.	#5	MOD	6'-10'	6'-10'
RH AR	29	RHUS AROMATICA	FRAGRANT SUMAC	CONT.	#5	LOW	2'-6'	6'-10'
SA HU	36	SALIX HUMILIS	PRAIRIE WILLOW	CONT.	#5	LOW	5'-8'	4'-8'
ST AM	32	STYRAX AMERICANUS	AMERICAN SNOWBELL	CONT.	#5	MOD	6'-10'	6'-10'
VA ST	24	VACCINIUM STAMINEUM	DEEBERRY	CONT.	#5	MOD	3'-6'	3'-6'





SMITHVILLE



SMITHVILLE

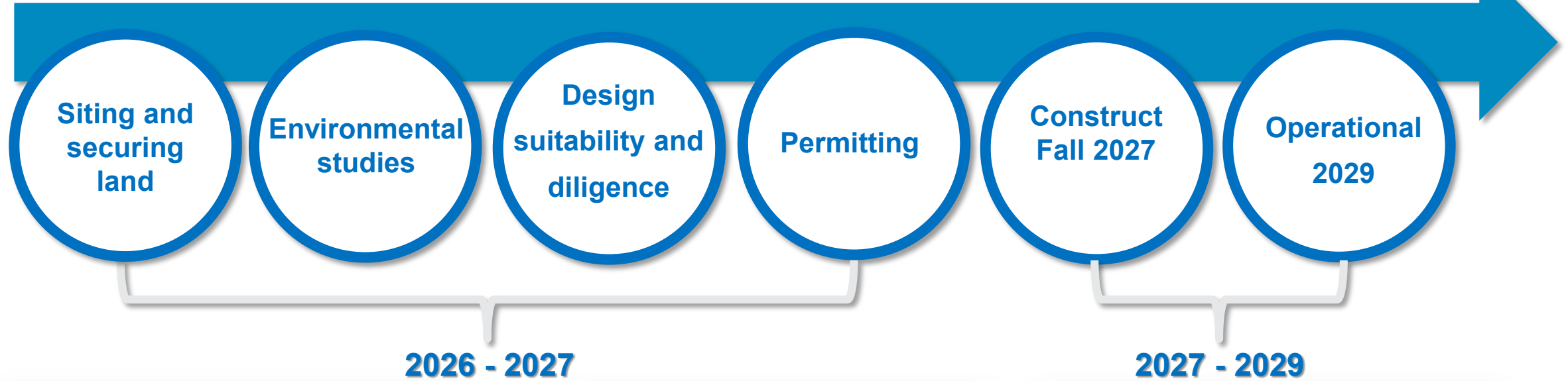


SMITHVILLE

50

ONE WAY

Project timeline



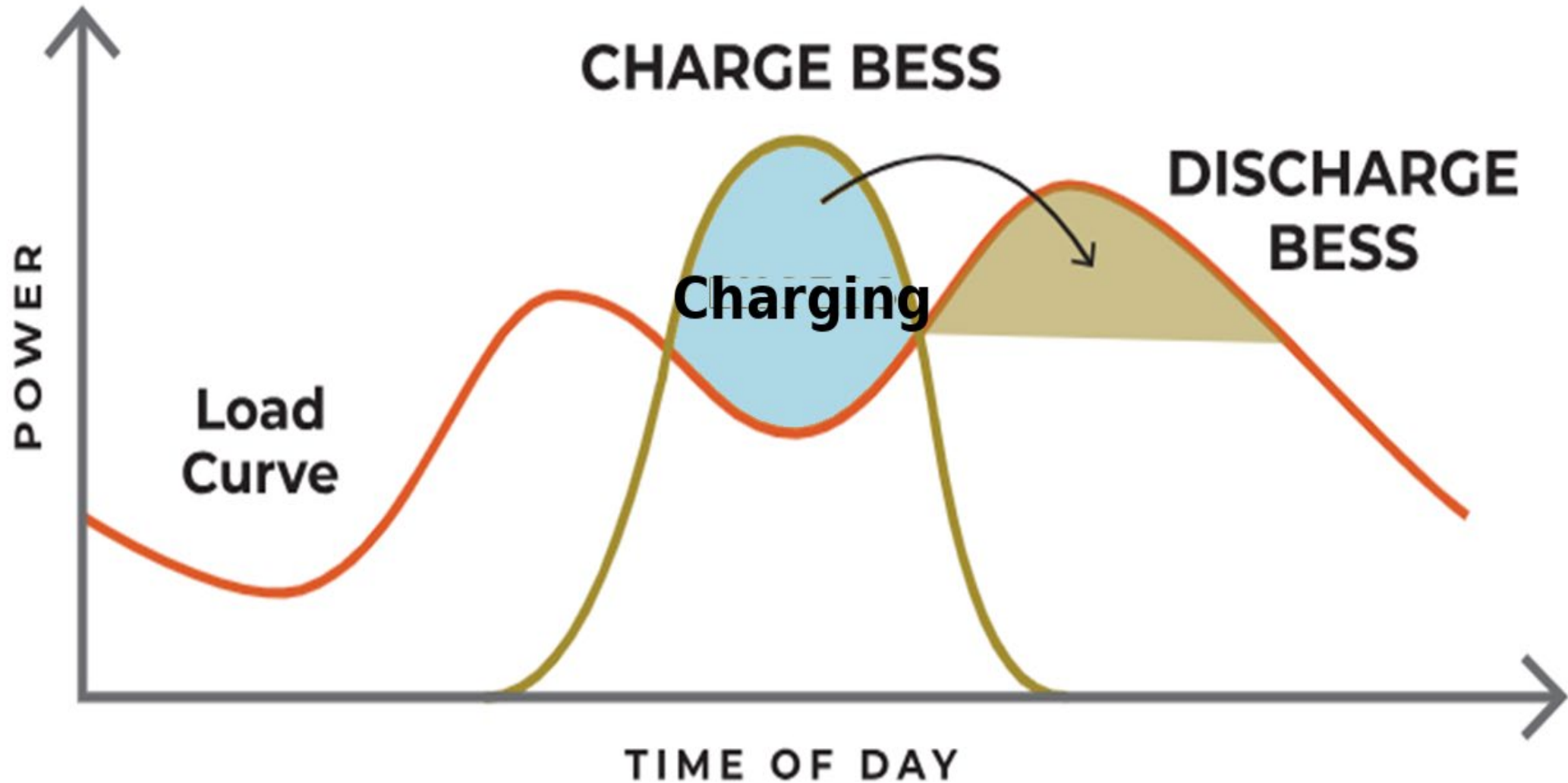
Economic Benefits - Tax estimate over 30-year project life

~\$2.7 Million in total local property taxes

Approximately 150 jobs during construction and material acquisition

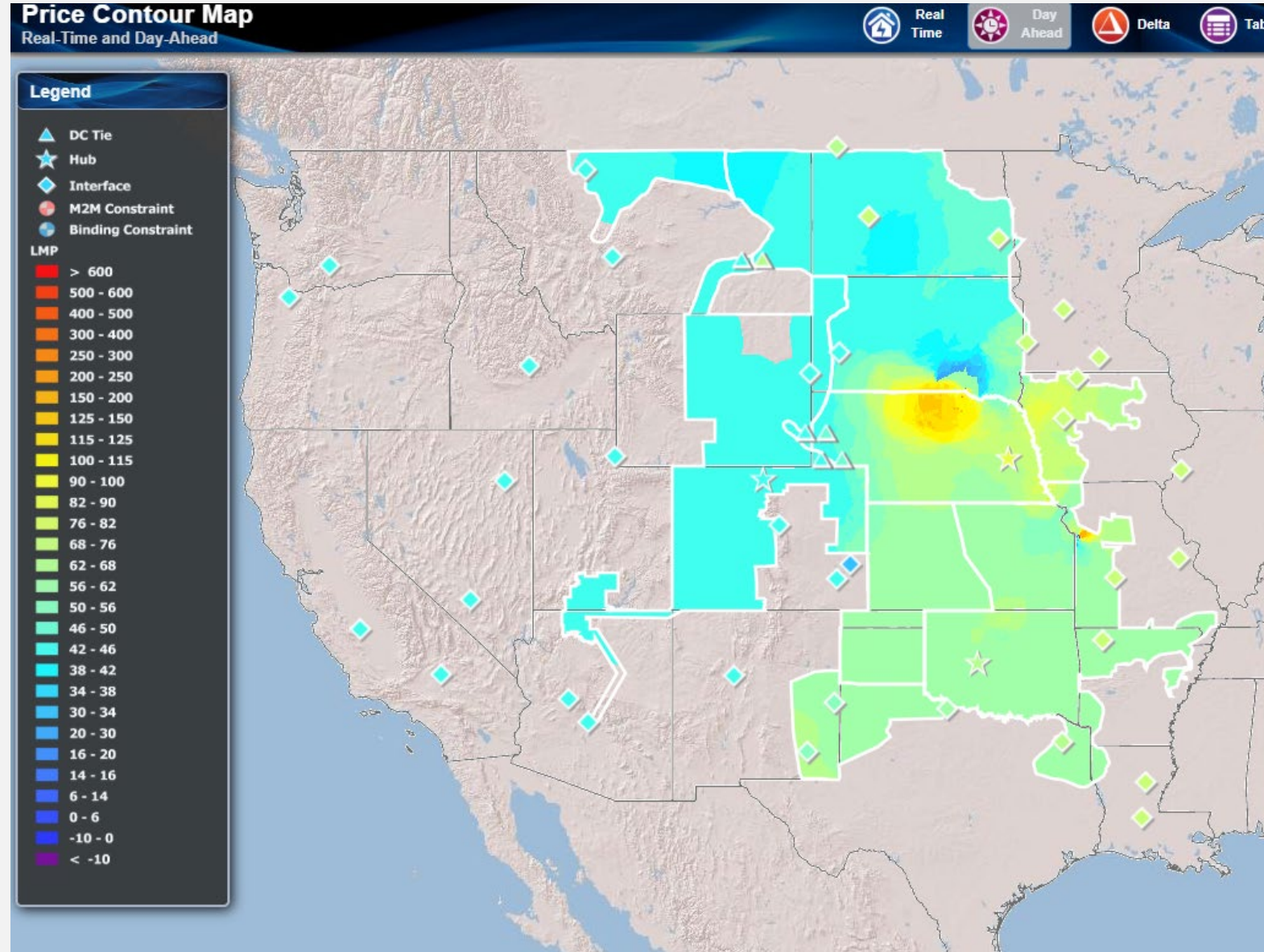
Project expected to bring up to 6 full-time jobs

Batteries Ease Grid Strain and Lower Costs



SPP Wholesale Pricing & Role of Battery Storage

- Pricing for energy fluctuates by the minute and by location
- Using battery storage that can delivery energy to specific locations provides benefits to energy strained areas or during emergencies.
- Battery storage can also lower the cost of electricity during peak demand. Stored energy will be discharged onto the grid when real-time energy costs are high, thereby lowering the cost of energy during peak pricing.
- This has particular benefits to local communities; local utilities can rely on stored energy to reduce costs



FISCAL NOTES

A REVIEW OF THE TEXAS ECONOMY

INFRASTRUCTURE

Battery energy storage in Texas

Utility-scale batteries emerge as key to stabilizing energy grid

NOVEMBER 2024 | BY NATHAN GONZALES

“.... when Winter Storm Heather impacted Texas in January 2024, BESS units generated \$750 million in market savings by delivering ancillary services and freeing up to 3 GW of gas generation to meet demand and lower prices. And when record hot temperatures strained the grid in September 2023, energy stored by BESS supplied electricity to approximately 434,000 homes and helped avoid grid failure.”

Key takeaways: safe and reliable energy solutions for your community

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

NextEra Energy Resources has over a decade of experience in Battery Energy Storage Systems

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





Thank You! Any questions?