



AGENDA OF THE SUSTAINABILITY COMMISSION

**WEDNESDAY, OCTOBER 16, 2024, 5:00 PM
AMENDED**

**In person at City Hall, Room 310.
Virtual attendance also available via Zoom.**

A. Zoom Meeting Information.

- I. Join Zoom Meeting Online:
<https://us02web.zoom.us/j/82236285137?pwd=bzBScDVVRysrQlpSZEZpK2FMSnd4Zz09>

Or call in by phone: +1 312 626 6799
Meeting ID: 822 3628 5137
Passcode: 769016

If you wish to speak at this public meeting or leave a comment, please fill out the online [Comment Form](#) prior to the meeting. More detailed [Zoom Instructions](#) can be found online.

B. Roll Call.

- I. Chair- Christa Kananen; Vice Chair-Ned Dorff; Jenny Brinker; Amy Kox; Kaurie Mihm-Staff; Julia Noordyk; Mark Walter, Alderperson Joey Prestley, Daniela Beall.

C. Approval of the Agenda.

- I. Approval of the Sustainability Commission meeting agenda for October 16, 2024.

D. Approval of Minutes.

- I. Approval of minutes from September 18, 2024.

E. Presentations

- I. Tern Energy Storage Project, Green Bay, WI

F. Informational.

1. Input from the commission on how to incorporate sustainability and positioning Green Bay as a sustainability-forward community as part of the 2025 NFL Draft event.
2. Clean Energy Work Group Report
3. Youth Engagement Work Group Report
4. The American Public Works Association video highlights sustainability and resiliency initiatives from the Dept. of Public Works.
5. Resiliency Coordinator Report
6. Next Sustainability Commission meeting: November 20 at 5:00pm.

G. Adjournment.

- 1) THIS MEETING IS RECORDED: THE VIDEO OF THIS MEETING AND MINUTES ARE AVAILABLE ONLINE AT www.greenbaywi.gov
- 2) ACCESSIBILITY: Any person wishing to attend who requires special accommodation because of a disability, should contact the City Safety Manager at 920-448-3125 at least 48 hours before the scheduled meeting time so that arrangements can be made.
- 3) QUORUM: Please take notice that a majority or quorum of the Common Council will attend this Sustainability Commission meeting and will constitute a meeting of the Common Council for purposes of discussion and information gathering relative to this agenda.
- 4) REPRESENTATION: The party requesting the communication, or their representative, should be present at this meeting.



Tern Energy Storage Project Green Bay, WI

Mark Chrisos, David Jakubiak & Scott McPherson

October 16, 2024

TENASKA[®]

Agenda

- Introduction
- About Tenaska
- Why batteries? Why now?
- Technology Overview
- Project Overview
- Questions

Introduction

Today's Presenters

- Mark Chrisos, Project Developer
- David Jakubiak, Public Relations & Community Engagement
- Scott McPherson, Community Engagement

About Tenaska

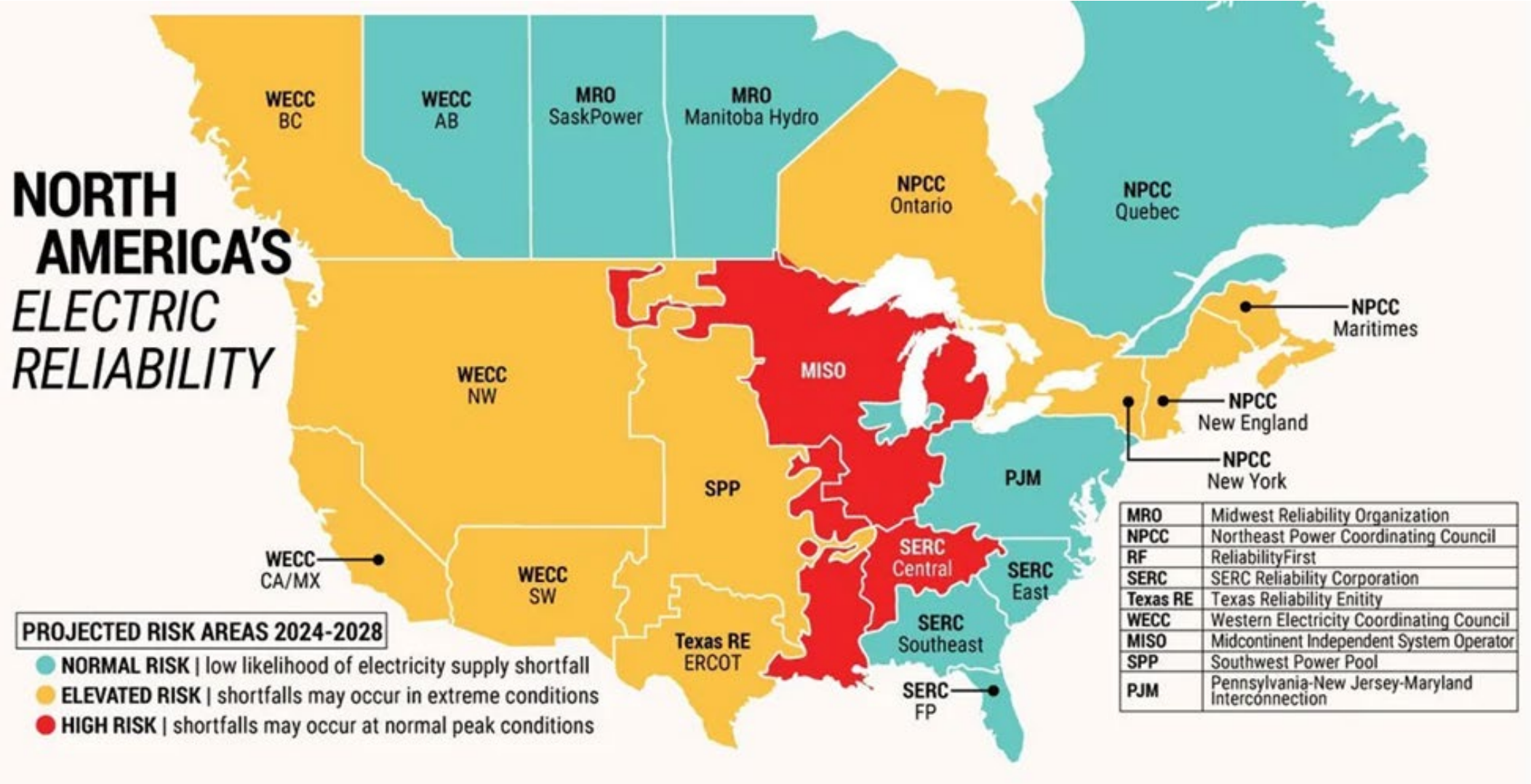
Tenaska Overview

- Headquartered in Omaha, Nebraska
- **35 years of experience** in the energy industry
- Consistently ranked by Forbes magazine as one of the largest privately held companies in the United States
- Named a U.S. Best Managed Company by Deloitte Private and The Wall Street Journal
- Developed, managed and/or operated approximately **22 gigawatts of generation, representing over \$20 billion in investment**
- Consistently **recognized and awarded for safety** in the industry



Why Batteries? Why Now?

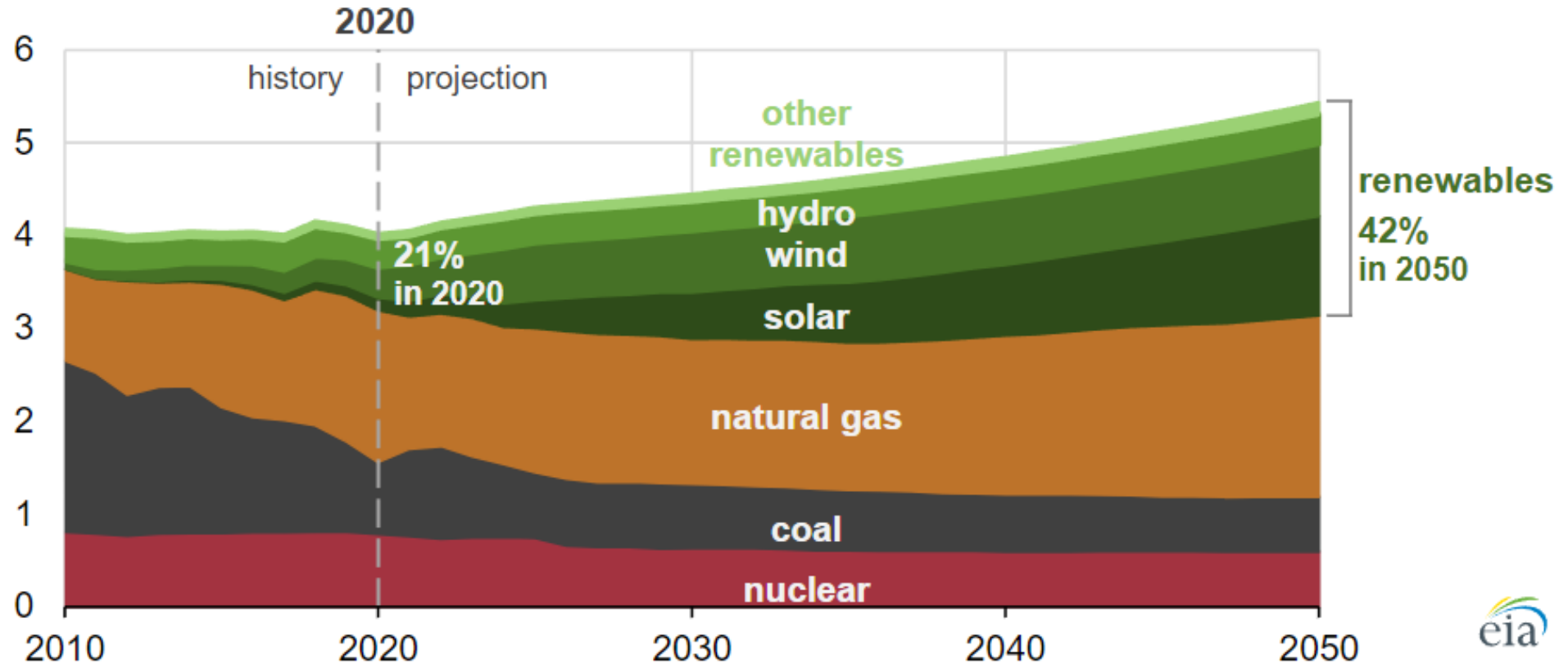
Battery Energy Storage: Why Now?



Battery Energy Storage: Why Now?

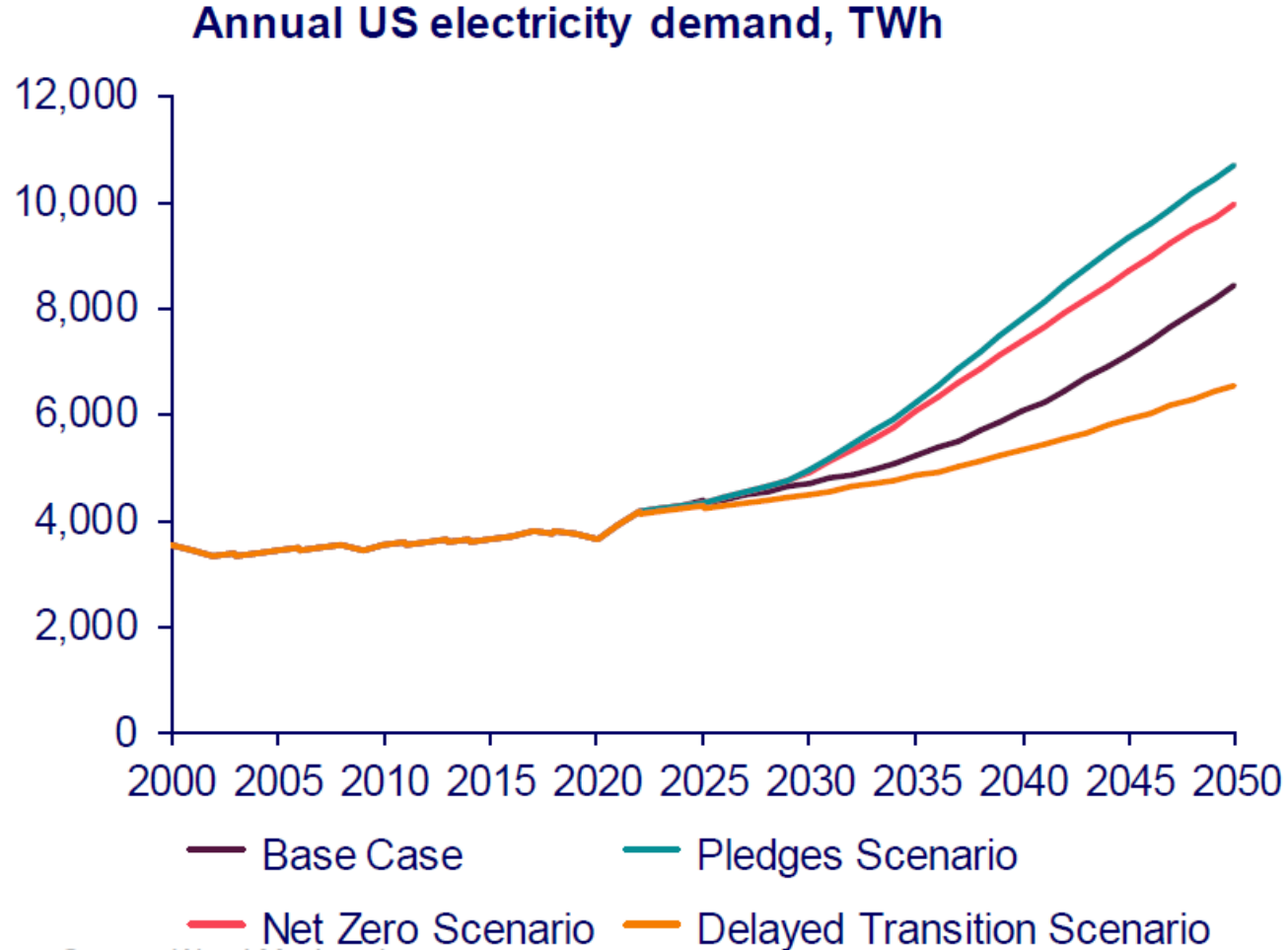
U.S. electricity generation, AEO2021 Reference case (2010–2050)

trillion kilowatthours



Source: U.S. Energy Information Administration, *Annual Energy Outlook 2021* (AEO2021)

Battery Energy Storage: Why Now?



Source: Wood Mackenzie

The United States is entering a period of unprecedented growth in electricity demand driven by:

- Data centers
- Onshoring of manufacturing
- Electrification of transportation, home heating, etc.

Real World Success: BESS in Texas's Winter Storm

- “Batteries provided 1,200 megawatts of backup power... during the Tuesday morning crux ... That much power could have prevented the cascading blackouts in the first hours of Winter Storm Uri.”
- *Houston Chronicle* 1/17/24
- "We're seeing batteries growing very rapidly on the electric grid. We're seeing that every year, the additions of those resources, and they're making a big difference during the summers as well as during the winters."
- *Pablo Vegas, CEO of the Electric Reliability Council of Texas (ERCOT)* 1/15/24

01-17-24

Why Texas's grid isn't failing during this year's extreme cold

Renewables and batteries are playing a part in keeping the power on.



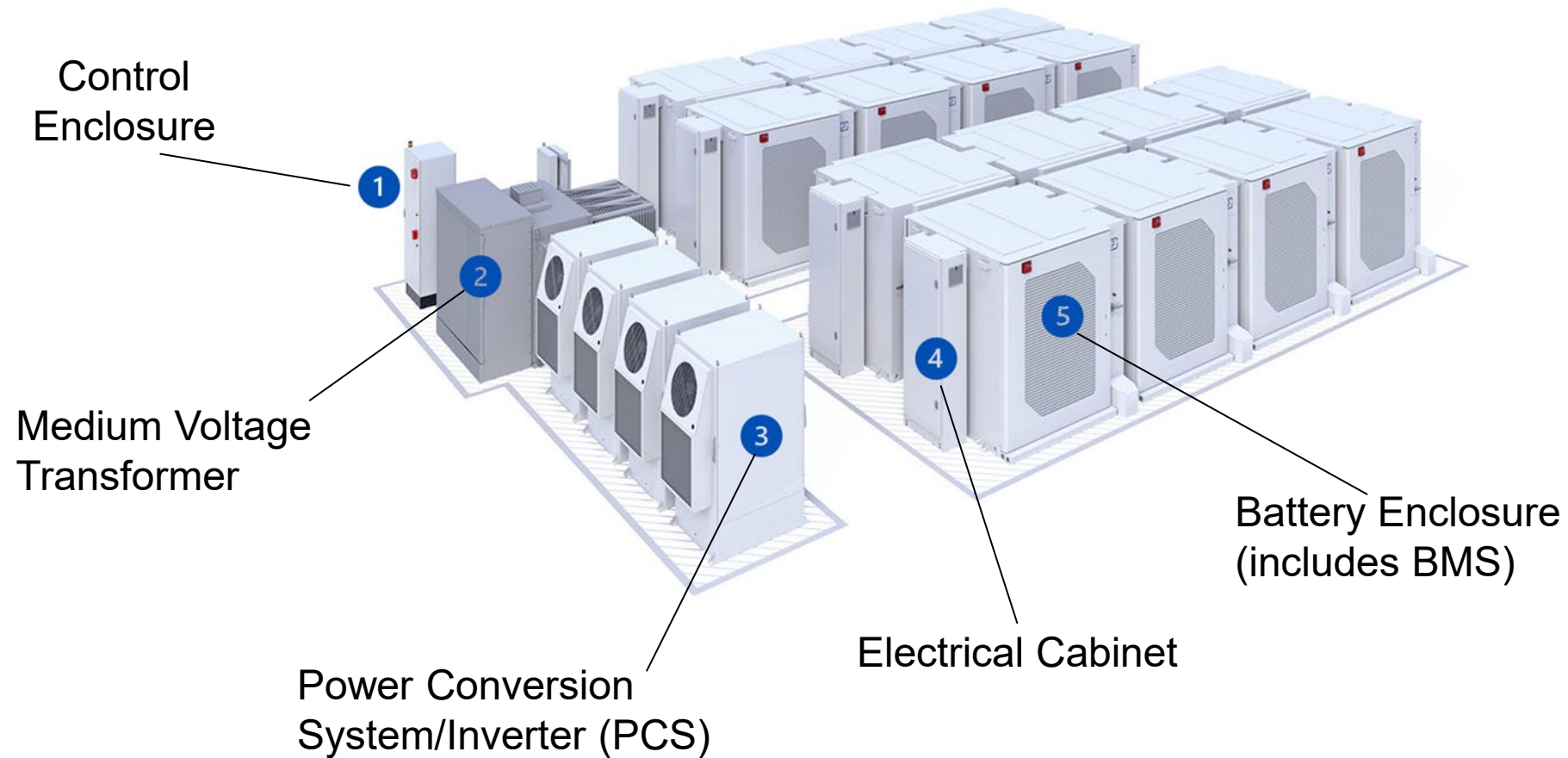
Technology Overview

What is a Battery Energy Storage System?



- Designed to STORE power from the grid
- Charge when power is available
- Discharge when power is needed
- Rapid response to grid need
- Connects to grid via power lines and substation – not connected to a specific generator
- Does NOT GENERATE power

What is a Battery Energy Storage System?

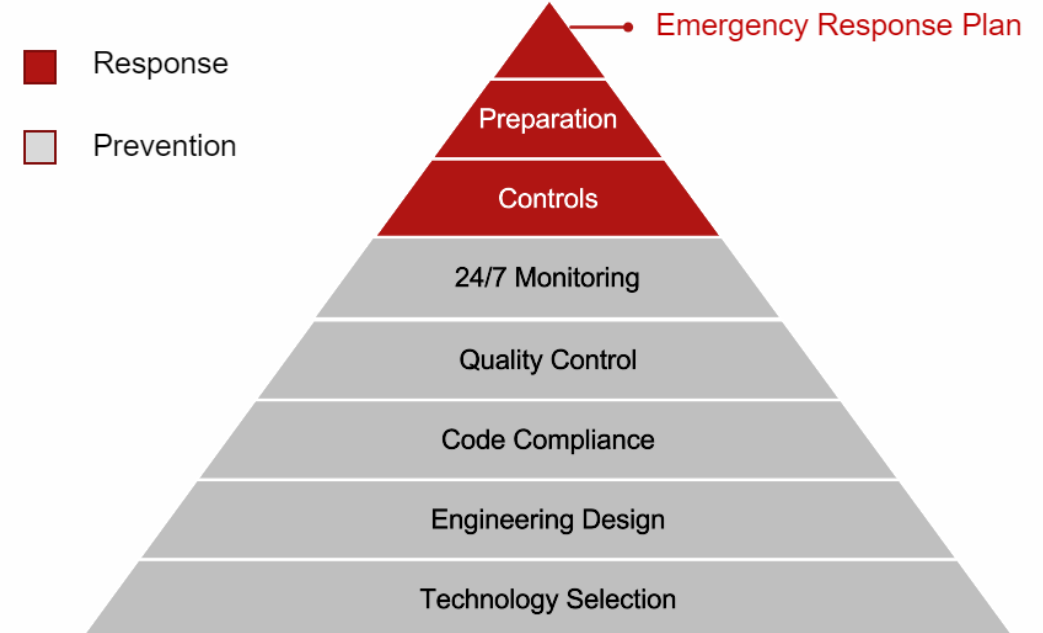


Safety

Battery Energy Storage is safe when it's properly designed, installed, tested, and maintained. Local partnership and coordination are required

- Modules used in projects meet national fire safety and electrical safety codes and standards*
- Built with latest technological advancements in battery safety and reliability (lithium iron phosphate or “LFP”)
- Self-containment
- Protection and control features
- 24/7 monitoring
- Automatic shutdown
- Safety testing required for all equipment
- Training and best practices

Battery Safety – Layers of Safety

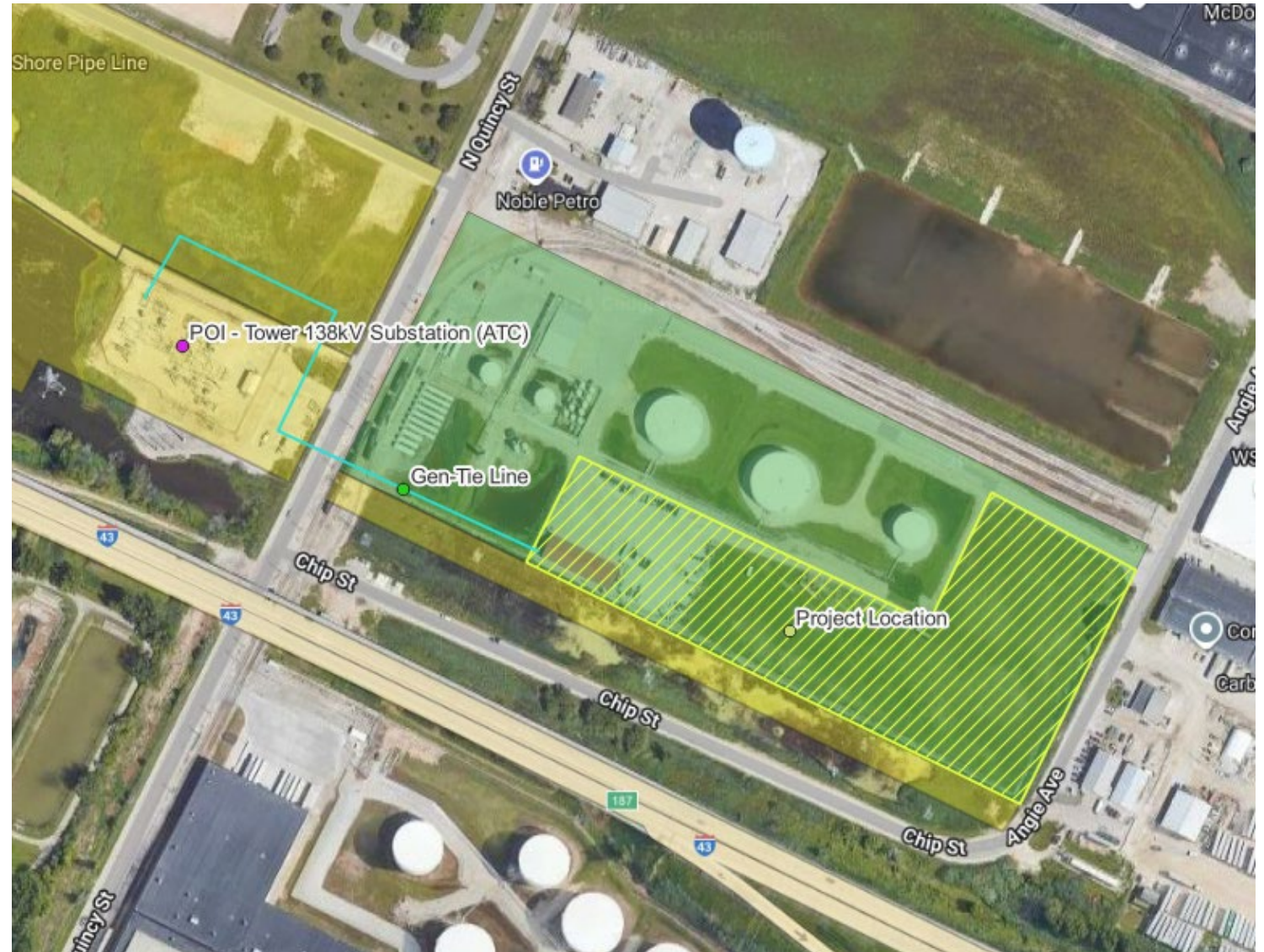


Project Overview

Tern Energy Storage Project Snapshot

Project details:

- Location: Green Bay, WI
- Project Size: 200 MW
- Footprint: 8 acres
- Transmission Utility: ATC
- Current Zoning Type: Industrial
- Construction start: 2025
- Operations start: 2027



Tern Energy Storage Timeline



Questions?

Follow-up questions? Please reach out to me!

➤ Mark Chrisos, Project Developer
Mchrisos@tenaska.com

Thank you!



Report to the
Sustainability Commission
of the City of Green Bay

MEETING DATE

October 16, 2024

AGENDA ITEM # F.I

Input from the commission on how to incorporate sustainability and positioning Green Bay as a sustainability-forward community as part of the 2025 NFL Draft event.

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

None



Report to the
Sustainability Commission
of the City of Green Bay

MEETING DATE

October 16, 2024

AGENDA ITEM # F.2

Clean Energy Work Group Report

BACKGROUND

- On October 25th the Clean Energy Work Group will be hosting the inaugural meeting of the “Large Energy User Roundtable,” a collaboration of stakeholders representing large energy users across Green Bay. The roundtable is focused on bringing together key stakeholders to address challenges and opportunities in reducing industrial emissions in the City of Green Bay.

RECOMMENDATION

FISCAL IMPACT

None

ATTACHMENTS

None



Report to the
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MEETING DATE

October 16, 2024

AGENDA ITEM # F.3

Youth Engagement Work Group Report

BACKGROUND

The Youth Engagement Work Group reached out to the GBAPS student and staff member who are assembling the Youth Advisory Council, to inform them that the Youth Engagement Work Group was approved. The Youth Advisory Council has not yet been formalized but we have requested that they work to establish the group for an initial meeting in Q4 2024.

RECOMMENDATION

FISCAL IMPACT

None.

ATTACHMENTS

None



Report to the
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of the City of Green Bay

MEETING DATE

October 16, 2024

AGENDA ITEM # F.4

The American Public Works Association video highlights sustainability and resiliency initiatives from the Dept. of Public Works.

BACKGROUND

The promotional video highlights initiatives related to collaboration and partnerships; stormwater management & resilience; green stormwater infrastructure; and habitat restoration. Link to YouTube video: [youtube.com](https://www.youtube.com).

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

None



Report to the
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MEETING DATE

October 16, 2024

AGENDA ITEM # F.5

Resiliency Coordinator Report

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

None



Report to the
Sustainability Commission
of the City of Green Bay

MEETING DATE

October 16, 2024

AGENDA ITEM # F.6

Next Sustainability Commission meeting: November 20 at 5:00pm.

BACKGROUND

RECOMMENDATION

FISCAL IMPACT

ATTACHMENTS

None