

# Appeal for Municipal Support Resolution

Belwood Energy Storage Project

November 16, 2023



Centre Wellington

# Agenda

- Introduction to the Alectra Convergent Joint Venture
- Overview of Ontario's Electrical Needs and the IESO Procurement
- Battery Energy Storage System Operations and Technology
- Belwood Project Overview
- Benefits for the Township of Centre Wellington and Ontario
- Contact Information



# About the Alectra Convergent JV

*The Alectra Convergent Development JV's goal is to help meet Ontario's growing electricity reliability and decarbonization needs*



- Alectra Energy Solutions (AES) is a progressive and customer-focused energy company working in many Ontario communities
- As part of the Alectra Inc. family of companies, which includes Alectra Utilities Corporation, a **local utility company** serving more than one million homes and businesses in 17 communities in Ontario's Greater Golden Horseshoe area
- Alectra Utilities is the largest **municipally-owned** electric utility in Canada, based on the total number of customers served

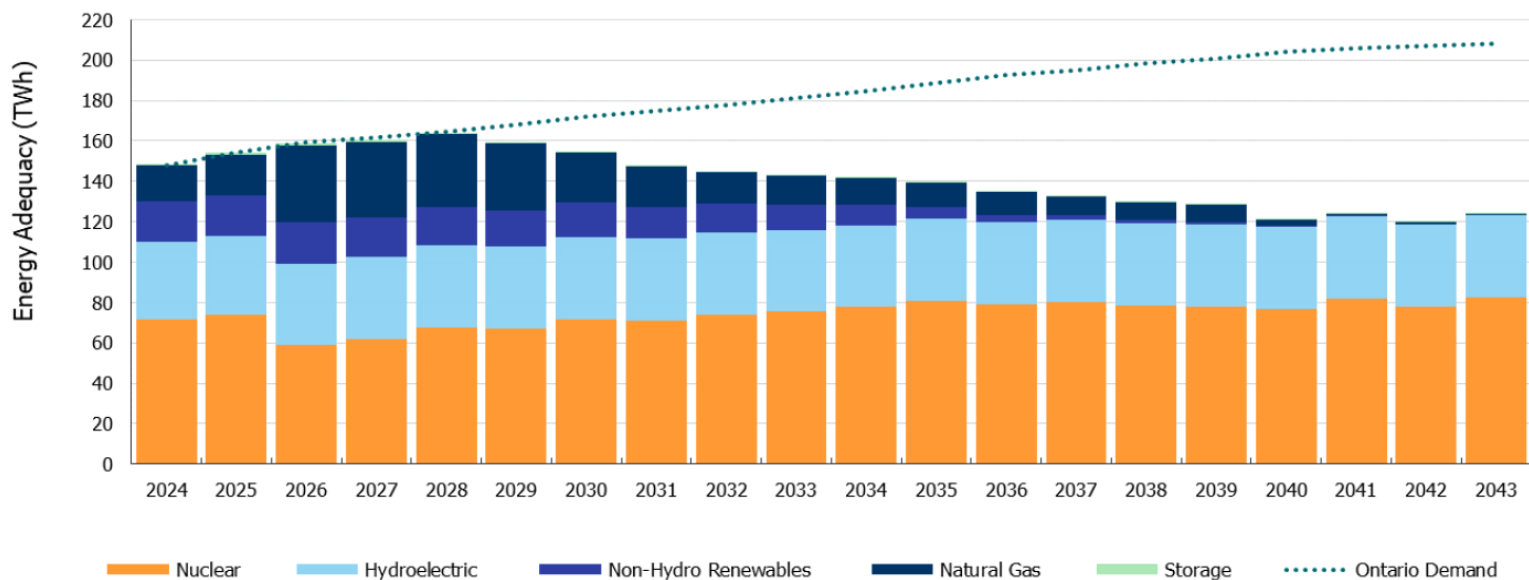
## CONVERGENT

- Founded in 2011, Convergent Energy and Power is a **leading developer of energy storage solutions** in North America.
- Portfolio includes over **1 GW of storage** solutions operating, in construction, or awarded to-date
- Owned by Energy Capital Partners, a leading energy transition private equity fund with **\$500M of capital** support for Convergent to-date
- Built **first energy storage asset in Ontario** in 2015; currently operating >45MWs in the Province with customers such as Shell, Ford, Pilkington and the IESO

# Ontario Needs New Capacity

*Ontario is facing a gap in forecast energy demand and contracted supply starting in 2028*

- The IESO has forecast the need for additional resources to support the grid, starting in 2028, due to load growth, and retirement of generation assets
- IESO is seeking to contract additional supply of power to meet short duration needs (up to 4 hours) to meet these needs
- Resource adequacy is critical to support the reliability of the grid at both the local and system-wide levels



Source: IESO.ca

# Overview of the IESO Procurement

*Ontario is in the process of acquiring long term capacity to support future growth, and the Alectra Convergent JV firmly believes in the “Power of Partnership” with local communities*

## **The Opportunity**



- To support projected capacity needs, a Long-Term RFP (“LT1”) has been issued by the Independent Electricity System Operator (IESO)
- The LT1 process is now underway with a target of procuring a total of 2200 MW in additional resources to be online by 2028
- Our JV has been pre-qualified to participate in the request for proposals; and was awarded 80MW / 320 MWh of projects in the previous round of the RFP
- The IESO has conducted deliverability assessments on specific proposed project locations put forward by the proponents; capacity for our projects has been affirmed

## **The JV Approach**



- The Alectra Convergent JV firmly believes that partnership with local communities is the best pathway to achieving long-term, sustainable success for LT1 projects
- We will work expeditiously to consult with local communities and Municipal Councils to address concerns and build support for the proposed project

# Battery Energy Storage Systems - Operations

*Battery Energy Storage Systems (BESS) are safe, affordable, long-lasting energy resources that will make Ontario's electricity grid cleaner, more reliable and more resilient*



- **Operations Profile:** BESS provides flexible power to support the operation of the electricity grid; overnight, the BESS will charge using surplus power on the grid, and it will store that power for use during the day, when demand for electricity is higher
- **Advantages over traditional generation:** BESS can be deployed more quickly than new transmission lines, gas plants or nuclear generation
- **Emissions Free:** BESS produce no point source air, gas or liquid emissions, and will not produce pollution that could contaminate soil or water
- **Visual & Acoustic Impact Mitigation:** In an effort to minimize the visual impact of the BESS, the site will be screened by vegetation and landscaping. An acoustic study will be conducted to ensure that noise emissions from the BESS comply with all MECP requirements (40 dB at receptors).

# Battery Energy Storage Systems - Technology

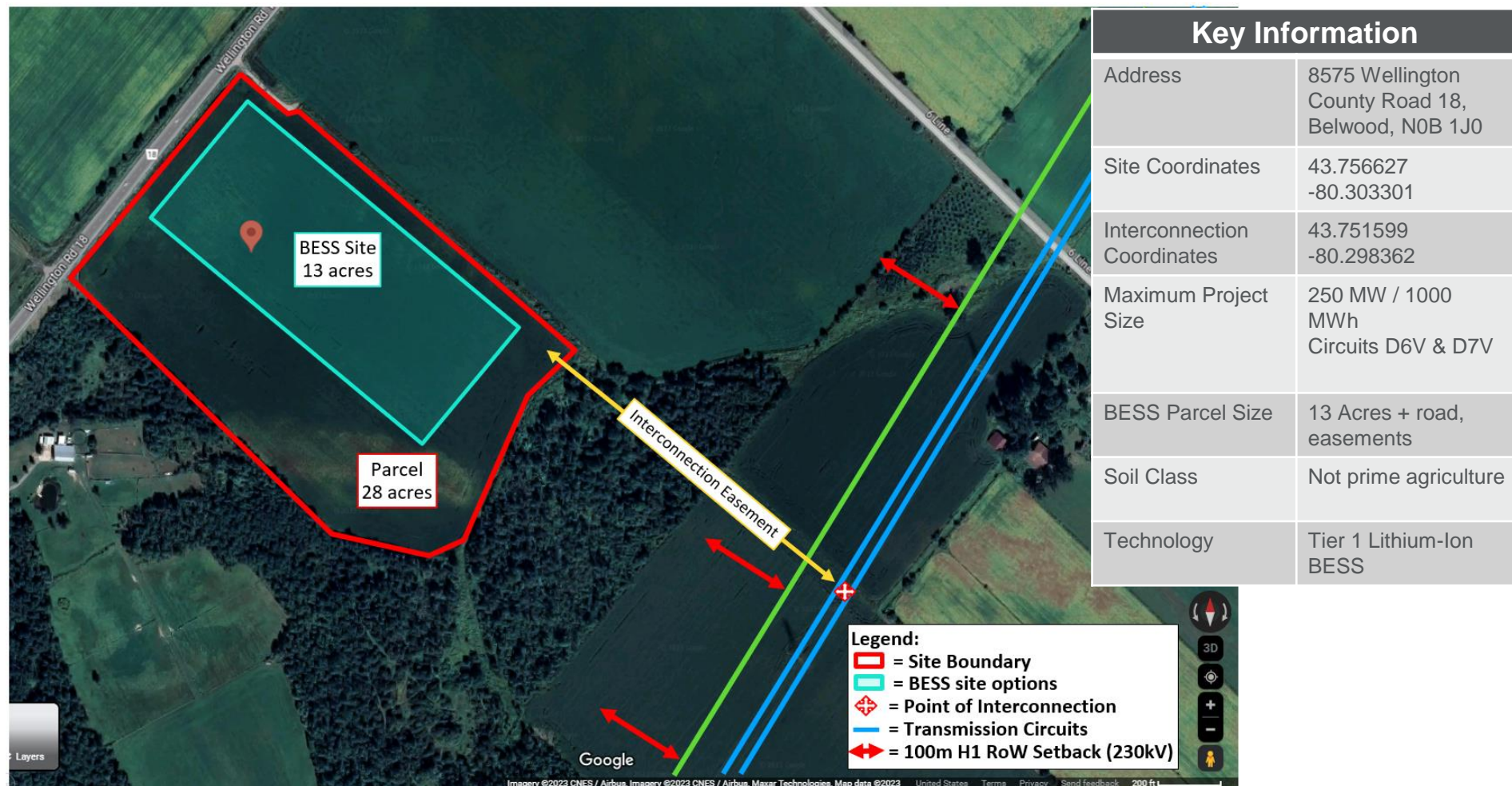
*Battery Energy Storage Systems (BESS) are safe, affordable, long-lasting energy resources that will make Ontario's electricity grid cleaner, more reliable and more resilient*

- **Tier 1 Batteries & Best-in-Class Integrators:** the Alectra Convergent Development JV will exclusively use Tier 1 Lithium-Ion batteries integrated by major manufacturers that provide performance guarantees for the full contract duration.
- **Safety:** BESS will incorporate 24/7 remote monitoring with a multi-layer approach to fire suppression including dry chemicals and/or deluge systems, in accordance with UL and CUL certifications and NFPA855 codes.



# Proposed Project Details: Belwood

*The Belwood BESS project intends to build 250MW of capacity*





# Project Benefits – Community Benefit Payment

*The Alectra Convergent JV recognizes the importance of partnership with the Township of Centre Wellington, and is offering a meaningful long-term investment in the community*

## Funding to Support Centre Wellington

- If the Township of Centre Wellington provides a Municipal Council Support Resolution for the Belwood project before the Dec. 12 bid deadline, the Alectra Convergent JV will offer the Township an annual payment of \$1,000 / MW of Contracted Capacity for the 21-year life of the contract.
- These annual payments will start 1 year after the project achieves Commercial Operation
- If the IESO awards the full proposed Contracted Capacity to the project, this funding would equate to:
  - Up to **\$250,000 per year**
  - Up to **\$5,250,000** over the 21-year contract life



# Project Benefits – Beyond Centre Wellington

*The Alectra Convergent JV will maximize local and province-wide benefits in the following key areas*

## **Strengthening Ontario's grid**

- These projects will be a key resource in maintaining the safe and reliable operation of Ontario's electricity grid; they will serve as a flexible, quick-reacting resource to balance the grid during volatility
- Additional capacity will give Ontario the ability to address increased load growth and electrification over the coming decades

## **Local and province-wide economic benefits**

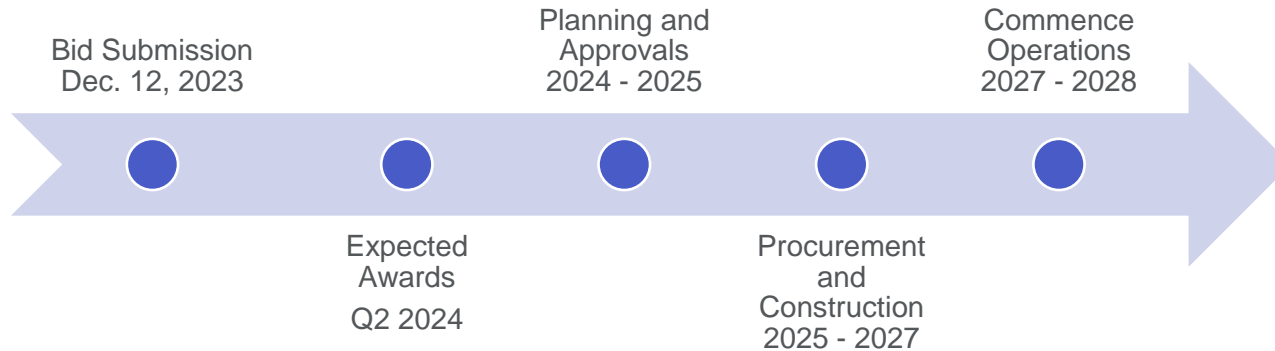
- BESS can provide needed capacity at a lower cost than traditional generation or transmission infrastructure, meaning lower costs for ratepayers
- Project construction and operations will engage local labour and businesses, leading to job creation
- Tax revenue will flow to both the Municipality and the Province

## **Protecting the environment and supporting clean energy production**

- Technology will have minimal site impact, with no emissions
- BESS will reduce the reliance on natural gas peaking plants, and maximize the use of clean Hydro, Nuclear and Renewable energy
- Each MW of storage will eliminate 40.23 tonnes of CO<sub>2</sub> per year.

# Project Next Steps

*The Alectra Convergent JV will work with the municipal and provincial authorities as part of the planning and approvals process*



- Projects will seek Municipal Council Support for our proposal to the IESO (does not constitute approval of project)
- After project award, we will continue to engage with the municipality as part of the planning and approvals process
- Projects will be subject to reviews and approvals related to site plan, environment, noise, safety, and interconnection

# Frequently Asked Questions

*The Alectra Convergent JV values feedback, and aims to provide transparent, accurate responses to your questions*

## **Q: What happens to the BESS at the end of the contract?**

- At the end of the contract, the BESS will have approximately 80% of its capacity remaining, so it can be recontracted (to continue serving Ontario's grid) or removed from the site and recycled.

## **Q: Will the BESS impose any costs on the Municipality's ratepayers?**

- The BESS is 100% contracted by the IESO, so it is paid for by all of Ontario's ratepayers as the BESS delivers its capacity to the grid. Beyond that cost, there will be no costs to the Municipality. The Alectra Convergent JV will pay for the training of the local fire department, and cover all costs associated with the operations and maintenance of the system.

## **Q: What does the Alectra Convergent Development JV do to mitigate the risk of environmental contamination?**

- All systems are sourced from Tier 1 suppliers with best-in-class designs and safety track records
- The BESS are designed around best practices to minimize environmental and fire risk
- All systems are monitored 24/7
- All BESS incorporate advanced fire suppression systems
- The Alectra Convergent JV will adhere to a strict Operations and Maintenance schedule to ensure all systems (including fire detection and suppression systems) are operational
- The Alectra Convergent JV will train and support (at our cost) the local Fire Department and Emergency Response teams

# Questions?

*We look forward to forging a strong partnership with you to help Ontario meet its energy needs, and build meaningful energy projects within our communities*

Minutes from this meeting will be uploaded to

[www.AlectraConvergentJV.com](http://www.AlectraConvergentJV.com)

for reference by community members who were not able to attend this meeting

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