Brocton Community Engagement Meeting Minutes

MEETING SPECIFICS:

- Date – November 9, 2023
- Location - Cargill Community Centre, 999 Greenock-Brant Line, Cargill, ON N0G 1J0 (also available virtually via zoom)
- Hosts:
    - David Anders, Director – Alectra Energy Solutions
    - Tremor Temchin, SVP - Convergent Energy and Power

ATTENDEES:

- Sonya W
- Fiona H
- Evelyn D
- Gregory J
- Tanya P
- Jim W
- Audry W
- Aaron W
- Joyce W
- Adam D
- Nancy D
- Douglas L

NOTES:

- Meeting started at 6:00pm and ended at 7:30pm
- Hosts obtained consent to post anonymized Q&A's on project website
- Slideshow presented including:
    - Introduction of Alectra and Convergent and the JV
    - IESO RFP background including the Long Term 1 RFP processes
    - Overview of Battery Energy Storage Systems
    - Presentation of the proposed BESS project (address, MW size, site footprint, layout)
    - Good to keep in mind that this project was presented to Council on 10/24, and will be voted on by Council on 11/14.
    - Project benefits including – economic, resiliency, carbon emissions reduction
    - Question and Answer session
- Questions & Answers recorded below:

Question	Answer
Map shows two potential parcels – would the system use both?	No, only one site will be utilized. The proposed BESS will only require approximately 10 acres for the batteries, with some additional land used for access roads and the easement to the points of interconnection on the transmission circuits.

Will solar panels be deployed?	No. This is a stand-alone BESS.
What is the size of the system?	250 MW / 1,000 MWh
The maps shows a setback from transmission line – what is the setback from roadways?	There is a 20-meter setback from the roadway.
Will there be a burden on the local fire department?	As shown in the presentation, the BESS system incorporates 24/7 monitoring, and a suite of best-in-class fire mitigation technologies, potentially including dry chemical suppression and/or water deluge systems. These systems and system components comply with all the latest applicable energy storage system (ESS) electrical, safety, and industry standards, including UL 1741 (inverter-based generation) and UL 9540 (ESS), and will meet or exceed NFPA 855 and NFPA 68 and/or 69, as applicable. This ensures that the proposed BESS will incorporate the latest risk mitigation technology and best practices will be strictly adhered to in the operations and maintenance of these systems. In addition, we are also working with industry-leading consultants to support our efforts in evaluating our suppliers' safety practices, system compliance, and hazard mitigation, and we will commission a study specific to this project, if awarded. Lastly, we will work with the local fire department and other relevant agencies having jurisdiction to provide annual training in how to respond to emergency situations at this facility, and we will bear the cost of this training.
Batteries degrade over time and the system becomes less efficient. Will the taxpayers of Ontario be burdened by the cost of this?	The IESO procurement contract allows for a maximum of 1% system degradation per year, such that the BESS will still have over 80% of its capacity at the end of the 20-year contract period. In relation to this loss of capacity, the capacity payments made by the IESO are correspondingly reduced. This ensures that the ratepayers of Ontario are only paying for the service they receive. During the previous phase of the IESO Expedited LT1 procurement, BESS systems were procured at a significantly lower cost per kWh than competing gas generation contracts, so these battery systems are much better financial investments in Ontario's electricity grid than gas plants.

	It is also essential to consider that the Alectra Convergent Development JV will be investing hundreds of millions of dollars to develop this system, and our company will only get paid if the BESS performs and delivers the available capacity to Ontario's grid. This combination of factors makes energy storage a cost-effective and safe investment in Ontario's electricity grid.
Where does the power you supply go?	The electricity from the BESS is injected into the 230 kV transmission system operated by Hydro One. This power will span the grid, being utilized by electricity consumers from small scale homes to large industrial and commercial facilities.
What is the lifespan of the batteries?	As discussed, the IESO contract is 20 years long, and these batteries will still have 80% of their capacity at the end of that contract, so they could be recontracted for additional use beyond that timeframe. The battery system and all related equipment is considered utility-grade, meaning it has a lifespan of over 30 years. At the end of the asset's operational life, these batteries will be removed from the site and recycled.
Who does this project benefit?	This project primarily serves Ontario's electricity grids and ratepayers, helping shift excess power production from the night to the times of peak demand in the day. Ontario needs more power to serve its growing demand due to Electric Vehicles and increased demand from large industrial facilities, and investing in energy storage is more efficient than investing in new transmission lines, new hydro power, new nuclear power, or new gas generation. This project will also benefit the local electricity grid in the Greenock / Brockton area, as it can provide resiliency and stability during volatile grid conditions.
Has the Ministry of Environment and Conservation or Saugeen Valley Conservation Authority been consulted?	The Ministry of Environment and Conservation has been consulted, and the primary guideline they have provided pertains to acoustic noise emissions. These systems do not produce air or gas emissions, so the noise from the heating and cooling system is the only concern. We are conducting an acoustic study, and this system will be designed to produce less than 40 dB of noise at the receptor points, which is the acoustic level of a library. In the coming weeks, we will submit an application to the Saugeen Valley Conservation Authority, and we will conduct

	a preliminary consultation with them as soon as they are available.
Will this site have 24/7 security?	This site will be surrounded by utility-specification fencing and remotely monitored with security cameras 24/7.
Why was this site selected, and not a site closer to the load center?	The IESO has conducted deliverability tests and determined that the load centers to the South (near Sarnia and Windsor) do not have the interconnection capacity to accommodate new generation resources.
The map shows two potential sites? Why would you use one site versus the other?	Our preferred site (labeled Option A) is significantly set back from the road and any nearby residences, allowing isolation and reduced visual and acoustic impacts in the community. It is also closer to the Hydro One transmission circuits where we intend to interconnect. For these reasons, it is our preferred site, but it is currently zoned for agricultural use. A zoning variance would be required for this site. Our secondary site (labeled Option B) is closer to the road, and it is being presented because it is on a parcel of land that is partially zoned as Industrial. If the Municipal authority determines that the zoning variance required for Option A is not feasible, we would be happy to consider siting the BESS on the Option B parcel.
If this project is awarded, would you expand the system and build more BESS nearby?	It is unlikely that we would seek to expand this project given the limitations on the transmission circuits to which the system would interconnect. If an expansion was contemplated in the future, it would require a full municipal zoning and permitting process, extensive community consultation, as well as the involvement of the landowners and the Saugeen Valley Conservation Authority.
How would the proposed BESS affect the value of the property?	The sites being considered for this BESS are currently being used to grow corn and/or hay. The landowners have determined that the value they will receive from leasing the site for the BESS significantly exceeds the value they get from farming these crops. Once the BESS reaches the end of its contracted life, it can be easily removed from site, and the site can be restored for agricultural use. We are not aware of any studies on the impact BESS projects to nearby property values.
What is the benefit to the local community?	The BESS project will generate jobs during the construction phase and during the operations and maintenance phase. It will also support the local electrical grid to provide resilience and enhance reliability.

How will the BESS power be split between the two circuits?	The proposed 250 MW will be evenly split between the two transmission circuits: 125 MW per circuit.
How does the Municipal Council Support Resolution work?	The JV discussed this project with the Municipal Council on 10/24, and the Council will vote on the question of whether or not to offer a Support Resolution to the IESO in the coming weeks. The Support Resolution is not a guarantee of approval by the Municipality; it is a statement of support showing the Municipality's interest in hosting the BESS project. The JV will still have to work closely with the Municipality and local constituents to adhere to all zoning, permitting, and construction regulations.
How do we make sure the IESO is not over-procuring batteries?	The IESO has conducted extensive studies to determine how best to proceed with procuring new resources to address the capacity shortfall starting in 2025 and extending throughout the 2030s. It concluded its first round of BESS and natural gas procurement in June of 2023, and is already planning to conduct additional procurement after the LT1 tranche. The IESO's sequential procurement processes allow them to procure resources in phases and adjust procurement targets in line with evolving forecasts.
Is the goal to phase out gas plants?	In Canada, there is a growing concern over global warming and green house gas emissions. In response to this, the Federal Carbon Tax is going to increase the cost of using gas to generate electricity, and Ontario is working to reduce its reliance on gas generation.
Is the province considering smaller hydroelectric generation?	No, the IESO is not actively pursuing additional hydroelectric generation.
Are the fire mitigation systems automatic?	Yes. The fire response systems are automatic.
Will there be any impact to the local fire department?	As part of our permitting, development and ongoing operations, the JV will conduct periodic trainings with the local fire department and first responders. Emergency response teams will be trained to prioritize their safety during any response, and to help them understand the best practices when responding to any hazards on site. The cost of these trainings will be borne by the Alectra Convergent Development JV.
How large are deluge tanks? Where does the water come from? Is it a commercial water supply?	Water is one of several fire mitigation tools, but it may not be used for the Greenock BESS. The Hazard Mitigation Study commissioned at this site will dictate the optimal fire

Where does the water go if it gets sprayed?	mitigation strategy, and that study take into account any potential impact to the surrounding environment.
What are the batteries located in? Is cement used as a container?	The batteries are located in engineered, NEMA-rated containment units. These units are usually metal clad, and they sit on concrete foundations.
Is there a fire suppression certification system for these systems?	While there is currently no fire suppression certification in Ontario, there are numerous certifications from the United States that are being adopted by Hydro One. These certifications include UL9540A, NFPA 68, 69, 551, 850 and 855, and IEEE 979, 2030.2.1.
Is this procurement subsidized by the Ontario Government?	The IESO is a public entity, and the contracts will be funded by Ontario's ratepayers, just like other nuclear and gas generation contracts.
What landscaping will be used to minimize the visual impact of these systems?	Mature trees, shrubs and plants will be utilized at the exposed perimeter of the project site to minimize the visibility of the BESS.
Can the runoff impact the ground water?	Under normal operations, the BESS does not emit any gas or liquid, so there is no risk to ground water. In the event of a fire, studies have shown that impacts to air quality are similar to other fires, with no detectable concentrations of toxic chemicals in soil or water.
Have Indigenous Communities been consulted?	Yes, the JV has contacted the Saugeen Ojibway First Nation and the Chippewas of Nawash Unceded First Nation. If awarded a contract by the IESO, these local Indigenous Communities will be consulted again prior to the commencement of construction.