

Minutes of Public Community Meeting

Tuesday, November 14th, 2023

Brentwood BESS Limited Partnership

Brentwood BESS Project

Algonquin Power dba Liberty Power

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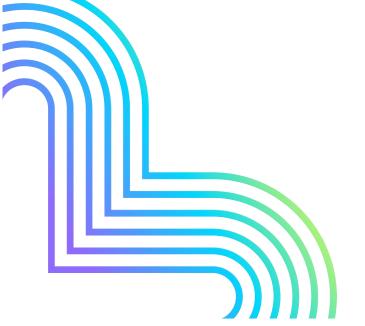




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Land Acknowledgement

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The planned projects are located on the Traditional Territory of several First Nations communities. We acknowledge and respect their historical connection to this land and the treaties that recognize those relationships: the Upper Canada Land Surrenders (1764-1862) and Treaty 18 (Lake Simcoe-Nottawasaga Treaty).

Liberty recognizes and respects Indigenous Peoples as the traditional stewards of this land and the enduring relationship that exists between Indigenous Peoples and their traditional territories.

We acknowledge and thank the following First Nations for being stewards of this traditional territory:

Beausoleil First Nation, Chippewas of Georgina's Island First Nation

Chippewas of Rama First Nation

Mississaugas of Scugog Island First Nation

Wahta Mohawk First Nation

Moose Deer Point First Nation

Saugeen First Nation

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Summary IESO's LT1 RFP

With demand for clean energy expected to outperform Ontario's current generation capacity over the next decade, there is an urgent need for innovative solutions that will help meet Ontario's energy needs while contributing to our province's climate change goals.

In response to this demand, Liberty Power, via its Brentwood BESS Limited Partnership affiliate, is submitting a proposal for a Battery Energy Storage System (BESS) project to the Independent Electricity System Operator's (IESO) procurement process. The project is located in the Township of Clearview and is named the Brentwood BESS Project. The proposed BESS facility operates by charging a battery bank during hours of surplus energy generation in the grid and then discharging the battery bank during energy deficit hours to meet grid demand. By storing clean energy when demand is low and releasing it when it is high, BESS optimize the efficiency of our grid by creating a steady, affordable supply of energy when and where we need it most.

The Battery Energy Storage System Liberty is proposing in Clearview is in response to the Government of Ontario's procurement (managed by the Independent Electricity System Operator, or IESO) to increase energy storage capacity over the next decade. The IESO has announced a procurement for 1,600 MW of capacity resources, with a submission date of December 12, 2023, contract awards anticipated in Q2 2024, and with requested operations as early as May 2027. This is a competitive bid process, with multiple parties planning to submit projects for consideration across Ontario. Successful projects will be awarded based on price, among other criteria, and only some of the currently proposed projects will be awarded contracts.

The Brentwood BESS Project will help address the grid capacity needs of the province and region, increase municipal tax revenue to Clearview, and will allow for more efficient operations of Ontario's gas plant fleet, reducing carbon emissions and contributing to cleaner air.

Liberty has begun engaging with stakeholders such as landowners and the local government to discuss these projects. If awarded a contract with the IESO, we will be consulting and engaging with additional stakeholders and Indigenous communities to ensure our projects meet the needs and interests of residents in Clearview and engaged Indigenous communities. We look forward to bringing this much-needed energy solution to the region.

We place a high priority on local support for our projects, and community consultations like these offer an opportunity for us to listen to community feedback and answer questions. We also place priority on giving back to the communities in which we operate, and look forward to partnering through donations, community events, and sponsorships, and working with residents to make Clearview a Battery Energy Storage System leader in Ontario.



The Brentwood BESS Project

The Brentwood BESS Project will be capable of providing up to 200 MW of energy storage for up to 4 hours over a maximum operational period of between 20-30 years, which could power approximately 50,000 homes in the Clearview area.

Liberty's proposed Brentwood BESS is designed as a standalone BESS with factory built and modular containers that will use industry-leading lithium-iron-phosphate (LFP) batteries. The Brentwood BESS will be located on approximately 8 acres of land in Brentwood, on Concession Road 2 & County Road 10. Construction of the Brentwood BESS is expected to take approximately 6-12 months, with commercial operations targeted for mid-2027. Construction activities will include delivery of factory assembled fully containerized solution and components, installation, and Hydro One interconnection.

Project information and updates are provided on Project website at the following address: <u>www.brentwoodbess.com</u>.

The map for the Brentwood BESS project, **Appendix A**, shows the land area considered as part of the proposed project, assumed acreage for the project components as well as some of the key geographic, electric and transportation features of this area. The project's environmental studies will be focused on the land within the project footprint.



Notification Methods

Liberty Power implemented diverse communication strategies to exceed the IESO's community and Indigenous engagement standards. This included notifications for adjacent landowners, landowners within a distance of the project, Indigenous communities, the Clearview municipal council, and the general population of the Clearview and Simcoe County area.

In alignment with the IESO's guidelines for engaging public and Indigenous communities, Liberty Power established a dedicated project website and communicated with adjacent landowners. Additionally, the public community meeting was advertised in the local newspaper and directly distributing project notices.

Project Website

Liberty Power set up a website (www.brentwoodbess.com) offering details about the project to the public. The site was made public on October 12, 2023, and in compliance with the IESO LT1 requirements, will be accessible until the LT1 RFP outcome is declared.

The website included the project's name, nameplate capacity, and a detailed map showing the project's location, including the connection point and line. It also provided information about the public community meeting notice, posted 25 days ahead of the event, the Community and Indigenous Engagement Plan, the project timeline, and contact information.

Notification Letter

As required by the IESO's LT1 process, notification letters regarding the public community meeting were sent to adjacent property owners more than 15 days before the meeting. **Appendix B** includes a copy of this letter. Although Liberty had previously been in regular contact with the municipality, the Municipality of Clearview staff were also informed of the public community meeting and invited to attend.

Though not mandated by IESO's LT1 RFP, a notice about the public community meeting was published on the Simcoe Reformer website on October 26th, to inform the wider public of the meeting. **Appendix C** has a copy of this posting. Also not required by the RFP, during the week of October 30th, project notices were delivered via Canada Post mail to 913 nearby residences and businesses to inform them of the public community meeting and invite them to attend.



Summary of Public Community Meeting

Liberty Power's Brentwood BESS public community meeting was held for the purpose of engaging community members in discussions about the project, providing information, answering questions, and addressing concerns of those in attendance.

Meeting Details

The community meeting took place on Tuesday, November 14th, 2023, from 5:30 p.m. to 7:30 p.m. at the Brentwood Community Centre in Brentwood, Ontario. During the event, participants were invited to engage in discussions with Liberty Power representatives, to ask questions and provide their feedback on the project. For those who were unable to attend the meeting, this could also be done through the dedicated email address (ontariobess@algonquinpower.com).

Attendance

Approximately 50-60 individuals attended the event. The group consisted mainly of nearby residents and property owners in the vicinity. Attendees were requested to sign in for record-keeping purposes upon their arrival.

Structure and Content of the Meeting

The format was an interactive open house, allowing attendees to freely explore display boards and engage in conversations about the project with team members. Display boards including a detailed project map was provided. The display boards were arranged around the venue, and included information about Liberty's parent company, Algonquin Power & Utilities, the technology and purpose of battery energy storage systems, project-specific information, and permitting & environmental requirements. The display boards used during the public community meeting can be found in **Appendix D**.

Please see the **Appendix E** for photographs taken at the meeting.



Summary of Questions and Answers

The following questions were asked by attendees at the Brentwood BESS public community meeting. Liberty Power representatives answered these questions at the event, and here provides these questions and responses, with additional details added.

Additionally, questions and responses that were asked at Liberty Power's other public community meetings for other projects are added here as well, for the benefit of the Brentwood community members.

If there are additional questions, please visit the project website at <u>www.brentwoodbess.com</u>, or email <u>ontariobess@algonquinpower.com</u>.

Question	Response
General Questions	
Who is the IESO?	The Independent Electricity System Operator (the "IESO") works at the heart of Ontario's power system as the system operator, directing the flow of electricity across the grid and administering the wholesale electricity market. It sets the hourly Ontario electricity price and ensures there is enough power to meet the province's energy needs in real time.
	The IESO works with stakeholders and communities across the province to plan and secure energy for the future, as well as to guide conservation efforts in Ontario. The IESO has a role in planning for and competitively procuring resources that meet Ontario's needs today and into the future. These may be met through diverse resources such as wind, solar, hydro, biomass, nuclear, natural gas, demand response, conservation, storage, or other innovative technologies.
	The IESO is governed by an independent board of directors that is appointed by the Government of Ontario. Its fees and license are set by the Ontario Energy Board (the "OEB"), and it operates independently of all other participants in the electricity market.
What is the IESO LT1 process and where are we in the process?	The IESO quantified the near-term additional energy supply need in Ontario, stating that an additional 4,000 MW of new capacity is required by 2027-2028. Procurements for projects capable of meeting the increased energy demand in 2027/2028 will need to be completed in the short-term. Liberty Power is prepared to help meet that need and support ratepayers in Ontario.
	As such the IESO is competitively securing additional capacity through the Long-Term Request for Proposals (LT1 RFP) and Expedited Process. The IESO sought qualification submissions to qualify participants to participate in



	the LT1 to develop and operate Electricity resources capable of providing capacity services to meet system reliability needs.
	Liberty Power is responding to the LT1 process with several projects including generating station expansions and battery energy storage systems (BESS) that will enable and support increased energy generation. These submissions are due on December 12 th , and contract award is expected in May 2024.
What is the commitment period?	The Selected Proponents of the LT1 RFP are required to enter into an Long- Term Reliability Services Contract with the IESO for a commitment period commencing on the commercial operation date of the Long-Term Reliability Project as set out in the LT1 Contract and expiring on April 30, 2048.
Are other BESS facilities being operated elsewhere in Ontario or Canada?	There are currently energy storage projects installed in four provinces in Canada: Ontario, Alberta, Saskatchewan, and PEI. The are several additional projects slotted for development in these provinces in the coming years, as well as in New Brunswick and Nova Scotia.
	In Ontario there are 200+ MW of storage installed behind the meter (BTM). BTM is power that can be consumed without having to pass through a meter or the electricity grid to be used, and is typically used for industrial facilities.
Why is Liberty Power pursuing the LT1 projects?	To prepare for future electricity demands and support a reliable grid for Ontarians, the IESO has initiated a Long-Term Request for Proposals (LT1 RFP) to secure new electricity resources that could be in service by 2027- 2028, including energy storage facilities. As a developer, owner, operator of energy projects in North America and Ontario specifically, Liberty Power is well-positioned to respond to this call for projects.
What are the benefits of these projects to the community?	 Provide reliable power when energy demand is at its peak. Reduced outages Increased uptime of production and critical infrastructure Reduced carbon footprint by reducing operating needs of gas facilities Community benefits payments to the community
After 20 years of operating under the IESO contract, do you plan to close the facility?	If selected by the IESO, Liberty Power is required to operate the project over a 20-year period. As part of the planning process, Liberty Power is required to develop a plan for decommissioning the facility at the end of its life which includes removing and recycling project components and restoring the land to a condition like pre-existing conditions.
	However, we anticipate that electricity demands will continue to increase and hope that in 20 years we can secure another contract to continue operating. It is worth noting that the batteries proposed are highly recyclable and we expect to be able to do so at the end of the contract life.
What is a Battery Energy Storage System (BESS)?	A battery energy storage system's (BESS) consists of large rechargeable battery container like units that can accumulate & store energy during an off- peak time then distribute energy back to the grid when needed at peak time. For example, when more energy is generated from sources such as natural gas, wind, solar, hydro, nuclear, etc. than is needed, energy from the grid is



	converted and stored in the battery system. When the electricity is needed, it is converted for distribution through the grid.
How long will the construction of all project components take?	Construction of the BESS is estimated to take approximately 6-12 months to complete. There may be additional site preparation work that occurs before this time frame.
What is the size of the project? How wide is the area of the project?	The project will be 200 MW. The exact size will depends on our final project layout, but it will be between 5-10 acres, and we are currently planning to use approximately 8 acres.
If the project does not make it through the approval process, are you still on the hook for the lease?	We have a lease with a local landowner that provides the option to proceed with the project. If the project does not proceed, we would not exercise that option.
Who pays for the project?	The project will have a long-term contract with the IESO that provides a payment to offer capacity into the electricity market. The project will be constructed and paid for by Liberty Power, backed by our parent company, Algonquin Power & Utilities.
How does Liberty get the power off the grid?	The project is designed to draw power from the grid as a whole in times of low demand and release it back onto the grid in times of high demand.
Why is the whole land parcel outlined?	We identified the land parcel in which we are building the project. We will not be using the entire parcel to build the project.
When is your next community meeting?	We do not currently have another community meeting planned, but if we move forward with the project we plan to hold regular meetings and communications with the community.
What happens if Liberty goes bankrupt? Haven't you already gone bankrupt recently?	Liberty Power has a long-standing history, operating power projects in Ontario for around 35 years, and is not expected to face financial challenges like this. Regardless, it would be hard to speculate what happens in this situation, but the project once constructed would be a valuable asset, so it is likely the project would be taken over by another company and operated to the end of its expected life. There is another Liberty Power that recently declared bankruptcy, but this entity is not related to the Liberty Power that is developing this project. We are a wholly-owned entity of the publicly listed company Algonquin Power &
How did you determine this particular site?	Utilities Corp. We are currently pursuing three projects for submission to the upcoming Long-Term 1 (LT1) Request For Proposals (RFP) with the Independent Electricity System Operator (IESO). We chose these sites based on the proximity to high-voltage transmission lines of 115kV and above, suitable land to permit building of the project with appropriate setbacks from noise



	receptors, communities, and Hydro One infrastructure, as well as feedback from the IESO on the ability to integrate into the grid.
Will there be operators on site once the project is operational?	There will be occasional maintenance teams and site managers that will go to site for routine activities such maintenance and testing. However, the battery plant will be largely operated remotely. The remote monitoring station will be located in Liberty's headquarters in Oakville, Ontario, and will be able to oversee the system and respond to any maintenance needs on-site.
Is Liberty being sponsored for this project?	Liberty Power is a wholly owned subsidiary of Algonquin Power & Utilities, a publicly listed power and utility company with assets around North America. Algonquin owns approximately 4 GW of generation assets, and delivers gas, water, and electricity to approximately 1.2 million utility customers.
Are you definitely proceeding with the project if you win the bid? Does the community still have a say?	If we submit the project, and the IESO chooses our project to proceed, we would have a contractual obligation to proceed with the project, otherwise we would face significant contractual and financial penalties. We are engaging with the community before bid submission to allow the community to have a say.
Say :	That being said, if we are awarded a contract, we will continue our community consultation after this point, and allow the community to give feedback and guide development of the project wherever possible.
What's the benefit of coming to this municipality rather than going to a solar/wind municipality?	We look to site projects based on the proximity to high-voltage transmission lines of 115kV and above, suitable land to permit building of the project with appropriate setbacks from noise receptors, communities, and Hydro One infrastructure, as well as feedback from the IESO on the ability to integrate into the grid. Locations near any houses are to be avoided, as they would not adhere to the noise restrictions that the project will be subject to.
	Additionally, the requirement of this RFP is to site standalone BESS projects, so being adjacent to wind or solar projects would not provide any meaningful benefit to the project.
Was this funded by our government?	The IESO is a provincial government run organization, and is the entity that will be signing contracts for the projects, and providing payments to projects. Additionally, the project is expected to make use of the Federal government's Income Tax Credit available to renewable energy and battery energy generation projects.
How will Algonquin's large amounts of debt and the sale of renewables group factor into this?	We don't expect Algonquin's financial situation to influence the development of this project. Liberty is proceeding with all of our projects that are currently in development while the sale process continues. We believe that the value to a buyer of the company is in the projects we are developing, so are continuing our efforts as normal.
Why doesn't the government do it themselves?	We would not like to speculate on the government's reasoning for their strategy, but generally the IESO does not build generation facilities, instead they contract out to experienced developers of projects and purchase the power from them. We welcome you to submit this question to the IESO through their public question email address, found on the RFP website, so they can answer directly.



Did you have to send out notifications about the project? Many people in the community were not aware.	We did – the IESO required us to send out notifications to landowners adjacent to our project, which we did. Additionally, we sent out ~900 notifications to all landowners within a several kilometer radius through regular Canada Post mail, informed the municipality, council, and the Mayor, and posted the notification of the public community meeting on the Simcoe Reformer website. We regret if there were some people who did not receive this invitation, and would welcome them to reach out to us with any questions at <u>ontariobess@algonquinpower.com</u>
Technology/Manufactu	ring Questions
What does BESS consist of?	Battery Energy Storage System Projects generally consist of battery container units and critical components ranging from battery cells to semiconductors in inverters and control systems. The system will convert electrical alternating current (AC) to direct current (DC) for battery storage, as well as have ancillary components such as transformers, emergency power, support buildings and transmission connection facilities. A transmission substation is required to connect the BESS to the Ontario grid.
What type of battery is being used and what is the life span?	Lithium-ion batteries. The system has a life span of about 20+ years.
How will leakage from the battery cells be prevented?	Generally, lithium-ion cells will not leak electrolyte or any other chemical material in normal conditions. The battery cells are hermetically sealed and are about the size of half a tissue box. The battery cells are housed within larger battery modules, and multiple modules are housed within a battery enclosure. The enclosures typically have their own containment for liquid coolant (typically water/glycol).
	Detection systems will detect abnormal conditions within the cell (e.g., leakage of electrolyte or electrolyte off-gas) and place the battery in a safe state for troubleshooting.
How will stray voltage from the battery cells be prevented?	Stray voltage is a low-level electrical current or shock (typically under 10 volts) that usually results from an improperly grounded, or in some cases ungrounded, electrical distribution system. While potential exists for stray voltage in residential areas, it is most found at agricultural operations and is often attributed to poor grounding of the wiring system in an environment where the presence of water increases conductivity. The BESS will be designed with the appropriate grounding for a facility connected to the grid. The BESS will have its own grounding grid and may be directly grounded with the other electrical facilities.
Can the batteries be recycled when you're done with them?	Yes, the batteries can be recycled when the facility is eventually decommissioned. Historically, the cost of battery recycling was too high to realistically consider this option. However, there are now many businesses working on the recycling of lithium and it is expected that by the end of the project's life we will be able to recycle the batteries.



Would the transmission line have enough capacity for 2 projects?	It would depend on the size of each of the projects connecting to the line, but we are aware that there is at least 200 MW of capacity on the line. Unfortunately the IESO does not share exact capacity of transmission lines with proponents, so we cannot definitively answer this question.
Is there explosion prevention in place?	Yes, the systems is required to detect and vent any dangerous gasses within the battery enclosure. This is a requirement of NFPA 855 and UL9540, which are the governing codes in Ontario.
Will this project be submitted as a 75 or 200 MW?	We have not determined final project size yet. The project will be sized based on the final investment decision of senior leadership at Liberty, and the number of projects we submit to the RFP. [Note: We have subsequently decided to submit this project as a 200 MW facility. This project will be our only submission to the RFP]
How many containers will there be?	There will be around 200-300 containers for a project size of 200 MW. Up to four battery containers can be grouped together to form blocks that are connected to a medium voltage transformer, in a well-organized fashion, making it appear as though here are fewer individual containers.
Are you having agreements with other landowners?	We currently only have agreements with one landowner for this project, but are considering 'good neighbour' agreements for adjacent landowners.
Does venting gases produce any air contaminants?	There are no gases vented during normal operations of a battery facility. In the unlikely event of a fire, the gases that will be vented are hydrogen, carbon dioxide, carbon monoxide, and hydrocarbons. These are similar to gases emitted from other forms of combustion.
Are the batteries assembled in Canada?	The assembly will occur at the place of manufacturing and then shipped out to site. They will not be assembled in Canada.
Where are they manufactured?	A winning vendor has not been selected, but some of the places that these systems are manufactured are China and the United States.
Where does the electricity come from?	The electricity to charge the batteries will come from the grid as a whole, and from no specific source or generator.
Does 200 MW even make an impact?	Absolutely – this is the equivalent of powering many thousands of homes and businesses when the project is discharging. And this project is one of many that the IESO is procuring, which, when taken as a whole, will have a meaningful impact in meeting the grid's peak demand hours, as designed by the IESO.
Have you factored in all the materials in the mining process in calculating the emissions reduction?	Emission reductions from the project will be seen by looking at the Ontario electricity grid as a whole. The IESO's goal for this RFP is to reduce the load on existing gas plants, and when looking at the grid-level, our facility's emissions will be equal to the average of all energy sources on the grid, which emit less than gas projects specifically.
Does the battery use water cooling or air cooling?	Some Battery Energy Storage System (BESS) vendors provide cooling via air and others have a combination of liquid/air cooled systems in place.



	Whichever the methodology, it will be designed purposely to maintain temperature for the specific climate it will be deployed in.
Are these batteries like car batteries?	The only similarity between the car batteries and the project's batteries are that they both store and provide energy. Car batteries are typically lead acid batteries, whereas BESS uses lithium-Ion technology. They have very different chemistry and properties.
What is the response time?	Specific response time is to be determine. However, the system responds to dispatch commands in milliseconds/seconds.
Is the power going into our community exclusively?	It is difficult to determine where electrons are going. The electricity is being exported into the local transmission line running adjacent the project, and from there will go where it is most needed.
Power outages in this area have been from power lines being damaged from weather, sometimes for weeks. How will the battery stay powered in the event of a power outage?	The BESS will be in standby until the power outage is resolved.
If there is a blackout, how is the battery cooled?	This will be determined with a more detailed design. Some methods that can be incorporated are back-up batteries or using stored energy in the BESS system itself. Another advantage of LFP chemistry is that they are stable in a wide temperature range.
Environmental/Commu	nity Impact Questions
Is there no other location that limits effects on residents?	This location was the ideal choice for our project to limit the effect on residents. We carefully considered several factors, such as proximity to a transformer station, an interested landowner, and minimizing impact on nearby residents. Our project is set back from the road by around 800m, behind multiple hedgerows, and surrounded by trees on three sides. It will not be visible from any road or adjacent parcel of land. It is located approximately 350m from the nearest residence, through a small wooded area.
	initial phase, and we still have the Environmental Assessment process, permitting applications, and regulatory procedures ahead.
If you don't have any batteries currently in operation, how do you know it's safe?	There are many utility-scale battery projects in operation, some in Ontario, and many around North America and the world. Although Liberty does not have any operational sites yet, we are developing several projects right now, and expect to construct our first projects before this project is built. We are working with experienced consultants, battery manufacturers, engineers, and construction companies who have built these projects before.



Will there be an increase in noise level due to BESS? construction and operation?	Additionally, the Liberty team has experience entering new industries, as we started as a hydro developer before successfully expanding into wind projects, solar projects, and most recently renewable natural gas (RNG). We will be building these projects in adherence with all relevant safety standards and guidelines. Typical noise disturbances associated with construction projects are expected during construction of the BESS. The operation of the BESS is expected to slightly increase the noise levels in the area, but these will be in line with provincial regulations, and limited to approximately 45dB. The sound is a low hum, similar to an air conditioner operated at a distance, and the sound level is compared to that of a quiet office or library.
	The completion of the Environmental Activity and Sector Registry (EASR) process for noise and compliance with provincial noise guidelines will be required for the project to move forward.
What are the potential impacts to air quality due to this project?	There are no air emissions associated with the operation of the BESS. Standard Environmental Management Practices will be applied during construction.
What is your decommissioning plan?	Battery decommissioning would involve the safe removal of all batteries from the system and shipment of the batteries to a recycling facility. All other equipment would be removed and disposed of through typical practices for electrical equipment (removal from site followed by disposal or recycling as applicable).
Is an Environmental Assessment required?	While the battery energy storage units are not subject to an EA, the transformer substations are subject to the Class Environmental Assessment for Minor Transmission Facilities (Class EA for MTF) (www.hydroone.com/ClassEA) in accordance with Ontario's Environmental Assessment Act. It is anticipated that the Class EA Screening process for smaller scale projects with minimal environmental effects will be followed.
My main concern is fire safety. I would like to receive information on how fire potential is addressed?	Safety is a primary concern for the energy storage industry when developing energy storage systems based on lithium-ion batteries. Over the last few years, industry standards have been developed to address and mitigate the hazards so that BESSs can be deployed and operated safely.
	These standards include: the National Fire Protection Association's Standard for the Installation of Energy Storage Systems (NFPA 855); the Underwriters Laboratories' (UL's) Safety Standards for Energy Storage Systems (UL9540); and the Standard for Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems (UL9540a).
	The Project is being designed and built to meet these standards as well as the required building, fire, and electrical codes and recommendations from the insurance industry.
	The battery storage equipment has been selected from a Tier 1 supplier, meaning that they have:Demonstrated a well thought-through safety philosophy.



	 Selected a battery chemistry which is more resistant to thermal runaways and fires; Designed the battery management system to monitor control and optimize performance of each battery module including disconnecting battery modules in the event of abnormal conditions; and Designed BESS units to incorporate layers of protection to prevent the initiation and propagation of fires and prevention/protection against explosions.
	The equipment is evaluated in the test method of UL9540A, subjecting the entire unit to a burn test. This test provides a detailed understanding of what will happen in a thermal runaway/fire event so that the data can be used to determine the fire and explosion protection systems/features required for a BESS unit and the full project installation. The equipment selected for the project has demonstrated that a fire in one module would not spread beyond the initiating module, and destructive unit-level tests showed that the units are capable of safely failing without propagating to other neighboring units. Design of the BESS facility will minimize fire propagation risk by incorporating spacing between battery units.
	First responders need to be aware of BESS technologies deployed in the community and be ready to handle different types of systems and incidents. This would involve training like that required for responding to incidents with electric cars.
	Sites with a BESS will undertake pre-incident planning with the local fire department and Liberty Power's Generating Station staff to develop plans for responding to fires or other emergency conditions. The planning will incorporate site-specific information, the NFPA855, UL9540a test results, manufacturers' recommendations, and learnings from other jurisdictions. These emergency management plans will ensure first responder and public safety.
	Additional reference information: NFPA. Fact Sheet on ESS [National Fire Protection Association https://www.nfpa.org/~/media/Files/Code%20or%20topic%20fact%20sheets/ ESSFactSheet.ashx NFPA. Energy Storage Systems: Is your community ready - https://www.nfpa.org/-/media/Files/About-NFPA/Policy- Institute/PolicyInstituteESS.pdf
What happens at the end of their lives?	The batteries will be returned to the manufacturer for recycling or recycled locally into new battery products, and the site will be remediated.
Will the project affect property access and traffic?	A detailed traffic study including the potential impacts to local traffic will be undertaken as part of the permitting process. The project team will work with the Municipality to determine what is required to ensure safe access to the site with minimal effect to local traffic.
Do you have zoning?	We have started this conversation with Clearview Township, but it will require further discussion with the Township. We anticipate requiring either an Official Plan Amendment to permit our use within the Township, and/or a Zoning By Law Amendment to permit the facility on the land.
	Official Plan Amendment to permit our use within the Township, and/or a



Township of Clearview (Simcoe County) Section 4.3.2.12 of the Clearview Official Plan public uses within the Agricultural designation includes "Public Uses limited to Public Transportation, Utility and Communication Facilities and Structures."
We are in the very early stages of planning and at this point we have completed internal analysis of the project site and surrounding area. We have retained a third-party subject matter expert to help us with the required studies. This project will need to abide by the Hydro One Class Environmental Assessment (EA) for Minor Transmission Facilities and will need to be approved by the Ministry of Environment.
The BESS would be designed to meet the highest health and safety standards, including the containment of any escaped liquids. The batteries themselves are thoroughly tested and driven to the point of failure by the manufacturer to understand, mitigate, and avoid the risk of this occurrence. We do not anticipate any impacts to groundwater quality or quantity.
In addition, the BESS would be designed to meet the highest health and safety standards, including the containment measures to avoid escaped liquids that could negatively impact groundwater. Ongoing geotechnical and hydrological studies, as well as the final battery electrochemistry and design, will help us properly assess and characterize the environmental risks, if any, to surface water features, wells, or any underlying aquifers.
The nearest fire station is located: Brentwood BESS/ Clearview: 5212 County Rd 9, New Lowell, Ontario L0M 1N0 approximately 5 km from the proposed site.
Each battery enclosure is made to contain any escaped liquids and is sealed to avoid any leaks. The specialized exterior containers also serve to prevent any fluids from escaping the system.
Only materially, directly, and adversely impacted landowners will be compensated. However, given that no such impacts are expected, it is anticipated that only the owners of the property on which the BESS will be located will be compensated.
Evaluating the incident as reported in the following post (https://fsri.org/research-update/report-four-firefighters-injured-lithium-ion- battery-energy-storage-system).
The report states that the injuries occurred due to deflagration incident caused by a buildup of gases. The report also mention that this BESS unit was built before the NFPA 855 standard per following quote: "Note: The lithium-ion battery ESS involved in this incident was commissioned prior to release of a first draft of the current consensus standard on ESS installations, NFPA 855; the design of the ESS complied with the pertinent codes and standards active at the time of its commissioning."



	The current NFPA standards require that gases in the enclosure to be monitored and vented at unsafe levels. The BESS systems being proposed for this project comply with those standards to prevent such incidents.
	Regardless, an emergency response plan will be developed for the site, along with appropriate training for local first responders which will outline the safety features of the system and the appropriate strategies to respond to a thermal runaway.
How will my livestock be affected?	Potential impacts to any nearby cattle are not anticipated, for the same reasons that human health and safety impacts are not expected. Stray voltage is not anticipated, and only occurs when relatively small amounts of electricity "stray" from the system into the ground. In most cases, this risk can be minimized, if not entirely avoided, by proper design, construction, and regular maintenance, testing, and monitoring of the facility. Before coming online, the Project requires approval from the Ontario Electrical Safety Authority to ensure it is safe for humans and animals alike.
What happens if you don't pass the environmental assessments?	The project is required to pass environmental assessments in order to reach operations.
How do you limit the noise created by the batteries?	We will ensure noise generated by the batteries, and the project as a whole, conform to all permitting and environmental regulations. We have conducted a high-level noise study that confirms the noise emitted will be restricted to the appropriate levels at nearby receptors, and not unduly contribute to noise pollution in the area. We will ensure this by selecting equipment that generates a low volume of noise, mitigating with appropriate noise walls as appropriate, and install additional equipment from the battery manufacturer to mitigate noise as necessary.
Where does the concrete or gravel go after decommissioning of the project?	The gravel/concrete and all materials will be dug out and removed from site. Materials will be recycled, reused elsewhere (e.g. local beneficial opportunities for reuse of clean gravel may be explored), or scrapped as appropriate. The site will be restored to its original state.
What about protecting the Greenbelt areas and local agriculture?	We believe the project is a permitted use and can be developed in a manner that avoids or significantly limits impacts to the environment. It's important to note that this marks the initial phase. Upon award, we will commence the Environmental Assessment process and permitting applications. These processes require that we complete baseline environmental studies within the area, an assessment of potential impacts to the environment, and if impacts are present prepare detailed mitigation plans to ensure impacts are avoided or minimized to the greatest extent possible.
There are many sensitive species within the area that could be impacted by the project. How will this be considered?	Upon award, we will commence the Environmental Assessment process and permitting applications. These processes require that we complete baseline environmental studies within the area, an assessment of potential impacts to the environment, and if impacts are present prepare detailed mitigation plans to ensure impacts are avoided or minimized to the greatest extent possible.



What environmental effects will this have on the environment in the event of a fire?	Since there is no suppression system and no water present, it is unlikely to contaminate any water. The only liquid present is a coolant like what you may find in your car. All the materials used are common, and a fire would not be materially different than a house fire.
Who will pay for the road maintenance during operations?	Liberty Power will pay for any road upgrades required for construction, and repairs for any damages to roads during construction or operations.
How will the community benefit?	We will be offering a Community Benefit Agreement, providing annual community payments. The project will provide stability to the electricity grid in the area, and economic benefits during construction, including using local labour whenever possible. Additionally, we are in negotiations to partner with a local First Nations community for a meaningful economic interest and financial benefits in the project.
How will you manage dust during construction and what impacts could we expect at our nearby residence?	Liberty is committed to reducing environmental impacts associated with the development of the project. Prior to construction, independent experts will evaluate current conditions within the area, assess potential impacts to the environment – including dust, noise, and other nuisance impacts to residences – and then propose mitigation measures that will be used to avoid or minimize any impacts to the greatest extend possible. This work will be made publicly available for review prior to construction and will be completed in accordance with the Ontario Environmental Assessment Act.
Would it create an industrial area?	We can't say what will happen to the makeup of the area in the future, as we are only proposing one battery project in the area. We will, however, implement our project in a way that minimizes the impact to the look and feel of the built environment, by setting back our project as far as possible from roads and houses, installing fences, noise barriers, local vegetation, and limited site lighting.
Why are you not proposing the project in an industrial area?	We have sited the project based on providing direct access to transmission lines to limit infrastructure needed to connect to the grid; ability to set the project back a sufficient distance from residences, transmission lines, roads, and environmentally sensitive areas; feedback from the IESO on suitable areas to connect the project; and availability of land and interest of the landowner to sign a lease with us. We were unable to find a suitable location that met this criteria, while also being located in an industrial area.
What is the fire response plan? Will there be evacuations in case of a fire?	The possibility of fire is a very low risk, but one which Liberty will mitigate in part by selecting a quality battery manufacturer through our rigorous procurement process. This will ensure quality battery chemistry and therefore reduced fire risk. Fire incidence and propagation risk will also be reduced through facility design, battery spacing, onboard fire monitoring and design measures to reduce propagation of fire between battery cells, modules and racks (such as fire retardant materials and rack level cabinets to reduce risk of propagation), gas ventilation systems and various other design and operation measures.
	Additionally, all BESS facilities will be developed and tested in compliance with UL Standard which requires a battery design to demonstrate how well it controls fire propagation. The design for this project will also incorporate

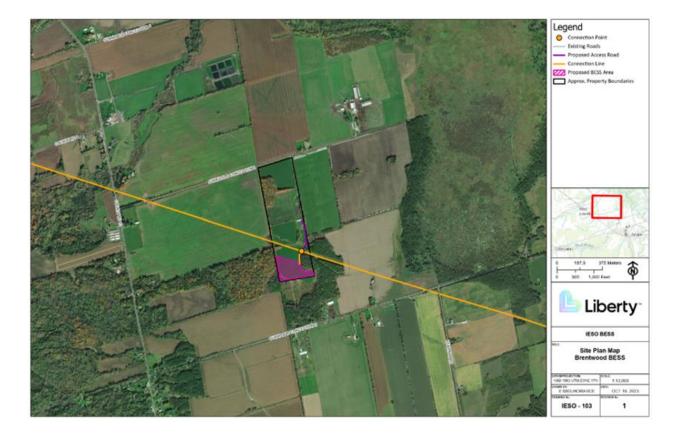


	battery spacing, onboard temperature monitoring, and state-of-the art fire detection systems and active ventilation systems to ensure the facility is as safe as possible. These systems are automated and will be activated remotely. Liberty will work with the municipality, local fire departments, and emergency response services to develop a detailed Emergency Response Plan. This will be a collaborative process to ensure they have the necessary resources, training, and equipment in the unlikely event that they'll need to respond to a battery fire.
How much will you pay in property taxes?	This estimation is currently underway with our consultants, and we will be happy to share an update once available.
How will emissions be reduced from this?	Emissions reductions will be seen from this and other projects by considering the grid-level emissions of all forms of generation. While the IESO develops its own strategy for system management and dispatch, it is understood that the battery projects they are seeking in this RFP will be used instead of peaking facilities such as existing gas plants. Given the lower emissions involved in a BESS projects (the average emissions of all sources of generation on the grid), than a gas plant, operating BESS projects would result in a net reduction in emissions at a grid level.
What donations will be made?	If awarded a contract with the IESO, Liberty would look to make financial contributions to the community in the form of a community benefits agreement, as it does at other projects. We will work with the community and municipality to direct these funds most effectively.
How can we trust that you will not harm our community?	If awarded a contract, we will work with the community and the municipality to develop and build the project according to all required by-laws, regulations, and laws to ensure the safety and success of the project, and the benefit of the community.



Appendices

Appendix A – Project Map





Appendix B – Notification Letter

Liberty

NOTICE OF PUBLIC COMMUNITY MEETING

Brentwood Battery Energy Storage System

Liberty Power is proposing a Battery Energy Storage System (BESS) project in Brentwood, in response to the Independent Electric System Operator's (IESO) need to increase energy storage capacity over the next decade to cope with rising energy demands.

Brentwood BESS Project Open House

Please join us on **November 14th** between **5:30 pm and 7:30 pm** at the **Brentwood Community Centre** at 9926 County Road 10 in Brentwood to learn more about how Battery Energy Storage Systems can benefit your community, and the Brentwood BESS project being proposed by Liberty Power. We will be available to review the display materials with you and to answer your questions. Refreshments will be provided.

About The Project

Liberty Power's proposed Brentwood BESS will be located next to an existing Hydro One transmission line on land leased by Liberty Power near the intersection of Concession Road 2 & County Road 10. The project

will bring revenue to Brentwood through community donations, events and sponsorships, as well as providing local employment and growth for local businesses during construction. The project will help address the grid capacity and stability needs of the province and region, and allow for more efficient operations of Ontario's gas plant fleet, resulting in a significant reduction in carbon emissions over the project's lifespan.



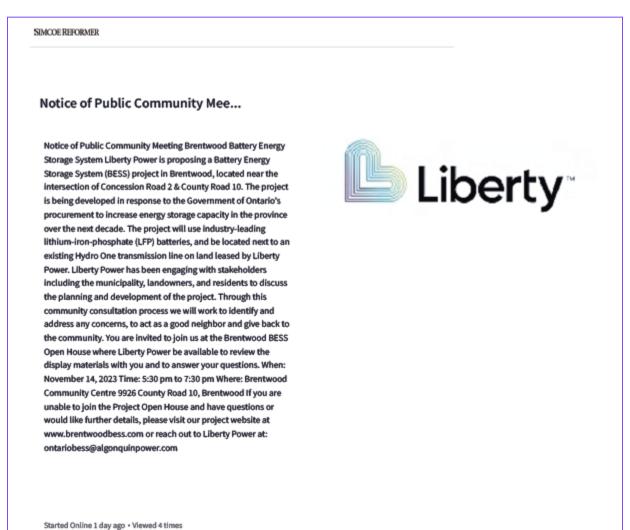
About Liberty Power

Liberty Power is a Canadian company that has grown into a North American leader in power generation. Liberty owns and operates 4 GW of generation assets across North America. We prioritize local support for our projects and value community consultations to hear your feedback and address questions. We are also committed to being a positive member of our communities, and collaborate with residents to establish Brentwood BESS as a leading Battery Energy Storage System in Ontario.

If you are unable to join the Project Open House and have questions or would like further details, please visit our project website at www.brentwoodbess.com or reach out to Liberty Power at ontariobess@algonquinpower.com



Appendix C – Newspaper Announcement



Published in Simcoe Reformer



Appendix D – Display Boards





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What to Expect Today **Open House Format**

Why an Open House?

- · An informal event and a tool for information exchange
- Allows the public to aather and discuss the proposal
- An opportunity to ask questions and provide feedback

Open House Format and Benefits

- · Informal setting, encourages members of the community to interact equally and freely
- · Display panels set-up around the room and printed materials that can be taken home
- · Flexibility provided to the community, including flexible hours allowing interested public to visit at their convenience
- · Offers participation more accessible to persons with small children, youth and seniors
- · Well suited for more direct community contact and discussion

Future Community Participation

If awarded the proposed project, Liberty will continue to engage with community through the development process. We will provide ongoing opportunities to provide input and feedback for the project, to guide project development, and result in a project designed in line with the community's priorities.



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About Algonquin Power & Utilities

Established in 1988 as a developer of small hydro projects in Contario, Algonquin Power & Utilities (APUC) is a Canadian company that has grown into a North American energy leader. Through its power generation assets and utilities businesses, APUC owns and operates generation assets and utilities across North America.

Algonquin Power & Utilities

utility services to over 1 million customers

 Headquartered in Oakville, Ontario
 Liberty Power owns a portfolio of >4 GW of operational renewable energy projects, with a 4 GW development portfolio Liberty Utilities provides regulated electricity, water and gas

BESS Projects Algonquin Power Co., dba Liberty Power, is proposing a BESS project in response to the Government of Ontario's procurement, managed by the Independent Electric System Operator to increase energy storage capacity over the next decade.

These projects will address the grid capacity needs of the province and region, and allow for more efficient operations of Ontario's gas plant fleet, reducing carbon emission, contributing to cleaner air.

We place high priority on local support for our projects, and community consultations like these offer an opportunity for us to listen to your feedback and answer your questions. We also place priority on giving back to our communities and look forward to partnering with the community through donations, community events, and sponsorships, and working with residents throughout our project development process.

ESG Focus Environmental Commitment to achieve company Net-Zero status by 2050 Reduced GHG emissions by >1M tones since 2017 6.9GW renewables in operation/construction Alignment with United Nations н Sustainable Development Goals L н Social More than 30% of women in leadership L

- Women are 40% of the executive team
- н Board is 44% diverse

н

- Health, and safety of the public and
- our employees in the communities where we operate is a priority Priority on energy reliability, wildlife
- protection, and wildlife mitigation programs

Algonquin



Liberty

What are BESS? How Battery Energy Storage Systems Work

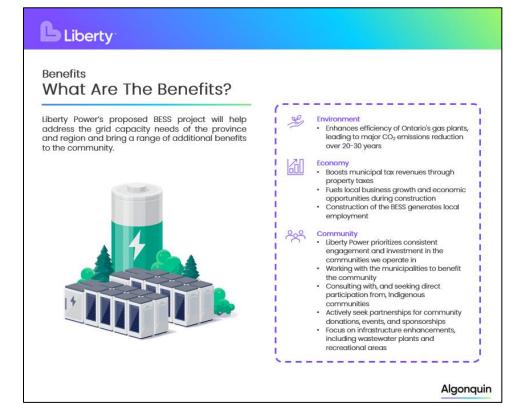
Storing surplus energy from the grid when demand is low and releasing it when demand is high, Battery Energy Storage Systems (BESS) optimize the efficiency of our grid by creating a steady, affordable supply of energy when and where we need it most.

This innovative solution will maximize the efficiency of our existing energy assets by increasing supply while reducing emissions, and specifically address any electricity demand overload conditions experienced in the area as set out by the province's Independent Electricity System Operator (IESO).

BESS projects are already operational around the world, and have proven to be a reliable technology able to provide much needed power to the grid with rapid response time. They are a cleaner way of providing baseload backup power than the traditional reliance on coal or gas projects.

The Liberty BESS Project will be capable of providing full capacity output of energy storage for up to 4 hours each day, providing this much needed power to consumers in times of high demand, powering homes and business in the area, and reducing our reliance on fossil fuels.

Charge battery bank during hours of surplus energy generation in the grid
J 1
Discharge battery bank during energy deficit hours and support grid
Algonquin





Liberty

BESS in Your Community Your Comments And Concerns Are Important To Us

We design our facilities so that they integrate into the community as much as possible. This includes the following:



IESO Process

The IESO has announced a procurement for 1,600MW of capacity resources, with submission dates of December 12, 2023, contract awards in mid 2024, with requested operations as early as May 2027. It is a competitive bid process with multiple parties planning to submit projects for consideration across Ontario.

Successful projects will be awarded based on price, amona other criteria, so only a small number of currently proposed projects will be awarded contracts.



Algonquin

Liberty

Project Overview

Brentwood BESS

Liberty Power's proposed Brentwood BESS project is being developed in response to the Government of Ontario's procurement to increase energy storage capacity in the province over the next decade. The project will use industry-leading lithium-iron-phosphate (LFP) batteries, and will be located next to an existing Hydro One transmission line on land leased by Liberty Power.

Liberty has been engaging with stakeholders including the municipality, landowners, and residents to discuss the planning and development of the project. Through this community consultation process we will work to identify and address any concerns, to act as a good neighbor, and to give back to the community.

Location 0

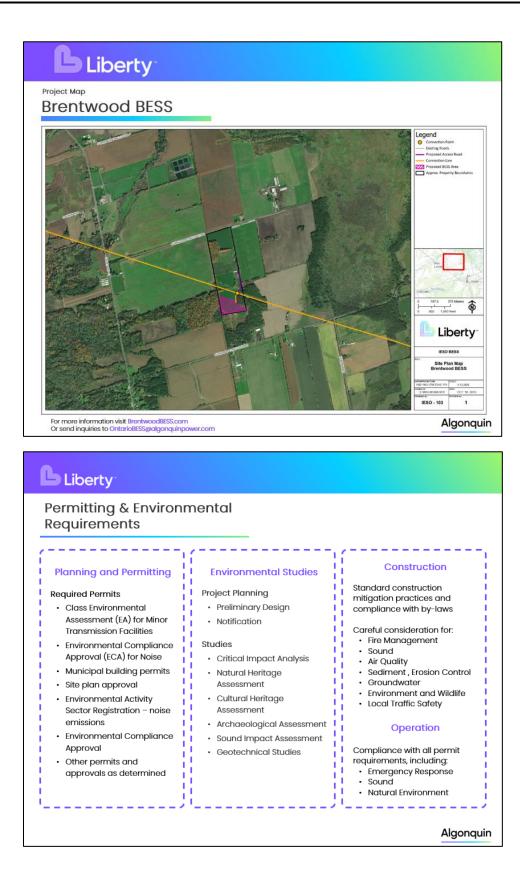
- The Brentwood BESS will be located on approximately 5 to 10 acres of land in Clearview near Concession Rd 2 and County Rd 10.
- Operational Capacity The Brentwood BESS is planned to provide up to 200 MW of energy storage for up to 4 hours over an expected operational period of 20-30 years.
- Construction Timeline & Activities
- Construction over an approximately 6-month period, expected to begin in 2026 with completion in mid-2027. Construction activities will include delivery of factory assembled fully containerized BESS components, installation, and the Hydro One interconnection.



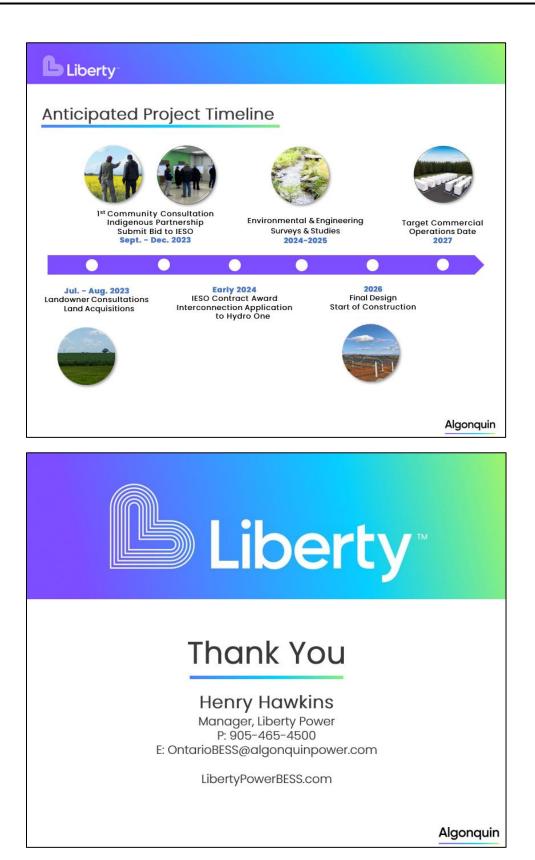














Appendix E – Photos

























