

Renewable Energy Systems Canada Inc. (RES)
Ontario Battery Energy Storage System (BESS) Projects
November 29 – December 1, 2023 Public Community Meeting Questions & Answers

#	Project Relevance			Question/Comment	Response
	Barley	Soy	Wheat		
Project Overview					
1.	✓	✓	✓	Why is this Project required?	<p>The Province has identified the need for more electricity in the coming years, due to increasing demand, retirement of the Pickering Nuclear Generating Station and the refurbishment of other nuclear facilities, as well as expiring contracts for existing oil and natural gas-fired facilities. To address this anticipated need, Ontario’s Independent Electricity System Operator (IESO) has issued a Request for Proposal (the E-LT1 RFP) to competitively procure approximately 1.5 gigawatts (GW) or 1,500 megawatts (MW) of additional capacity by 2025. A subsequent RFP (the LT1 RFP) will seek to procure an additional 2.5 GW (2,500 MW) by 2027. To put that in perspective, that’s enough to power approximately three million homes.</p> <p>This Battery Energy Storage System (BESS) Project is being proposed as just one of numerous other projects under development throughout Ontario. Only a select few of these proposed projects will secure long-term electricity supply contracts with the IESO and, ultimately, come into operation.</p>
2.	✓	✓	✓	How do these battery energy storage facilities work?	<p>The BESS will not generate its own electricity. Rather, the BESS will charge and discharge electricity onto the existing Ontario grid via: (i) for Barley, the Longwood Transformer Station immediately adjacent to the proposed BESS property; (ii) for Soy, a new substation and switch yard connected to the high-voltage 230 kilovolt (kV) transmission system passing immediately adjacent to the proposed BESS property; and (iii) for Wheat, a new substation and switch yard connection to the Spence Switching Station, also immediately adjacent to the proposed BESS property.</p> <p>The BESS will charge during periods where nuclear is generating more than the demand (generally at night), or during the day when it’s really windy or sunny and Ontario’s wind turbines and solar panels are producing more electricity than required. Amongst other valuable services provided to the grid, it is in this way that BESS facilities effectively ‘time-shift’ electricity supply by feeding the stored energy back into the grid during periods of high demand, when baseload generators and renewable energy is not generating enough.</p>

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3.			✓	Will the BESS draw on surplus power?	Yes, the BESS will store the electric energy when demand is low, meaning there’s a good chance the batteries will be charging during those periods when available electricity is least valuable and would otherwise go unused.
4.		✓		Why are there two options for siting the BESS?	RES has secured the right to site the Soy Energy Storage Project on one of two parcels of land owned by a single landowner. We’ve not yet determined which parcel or configuration might work better from a social acceptability and permitting standpoint. This determination will be made through additional study and consultation with stakeholders.
5.	✓	✓	✓	How much of the property will be required?	The exact size will depend on the transmission capacity availability on the grid at the proposed point of interconnection. This will be informed, in large part, by the results of the IESO Deliverability Test (released on November 30, 2022). For the purpose of the E-LT1 RFP submission, the footprint of the proposed BESS facility will be a maximum of: (i) in the case of Soy, 30 acres; (ii) in the case of Barley, 20 acres; and (iii) in the case of Wheat, 30 acres. It is critical to note, however, that the batteries and related electric equipment won’t cover that entire surface area. To ensure the safe and effective operation of the BESS facilities, there will be approximately 3 to 6 metres (10 to 20 feet) between each battery enclosure, so we anticipate approximately 15 to 20% site coverage. Details on the proposed BESS site layout will be published and subject to public review and scrutiny under the Province’s environmental permitting process.

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6.		✓		What kind of structures will be required on-site?	There will be battery units or modules, inverters, and a substation. The battery modules are similar in shape and size to shipping containers, though different manufacturers offer varying configurations. Each battery enclosure includes the battery itself and various system components including HVAC [heating, ventilation, and air conditioning], fire suppression, and battery management (computerized electrical) systems. For every two or three battery containers there's also an inverter, also called a power conversion system (PCS), of much smaller dimensions. Conceptual illustrations of these components are shown on our Public Community Meeting (PCM) information panels. The substation area is conceptually shown in orange on our PCM information panels and will include the main power transformer(s) and other electrical equipment necessary to condition and step-up or step-down the power (voltage) drawn from, or discharged onto, the grid.
7.	✓	✓	✓	How big are the battery containers?	The battery enclosures are similar in shape and size to shipping containers, sized approximately 6 to 12 metres (20 - 40 feet) in length and 2.5 to 3 metres (8 to 10 feet) tall, depending on the manufacturer.
8.		✓		Are the batteries actually enclosed in shipping containers?	No. While constructed of metal and sometimes resembling shipping containers, today's battery enclosures are highly engineered, purpose-built metal containers designed for safe and efficient operation and maintenance of each unit and the system as a whole.
9.	✓	✓	✓	How many batteries will there be?	For a 250 MW project, approximately 300 40-foot enclosures, and more than 300 40-foot enclosures for a 250-350 MW project, all within the facility perimeter. From a bird's eye view, it will look like a lot of containers, but from ground level, you'll likely only see plants, trees and/or a wall serving as visual screening. The above-ground connection line or interconnection facilities with the grid will be the exception; these components will likely have greater visibility due to the height of the structures.
10.	✓	✓	✓	Why did you choose this area? Does it have to go there?	Southwestern Ontario has been identified by the Province as a priority area in order to address both province-wide and regional electricity needs. The parcels selected for each Project are especially advantageous because of their proximity to existing infrastructure, which is more cost-effective and should allow us to submit a more price-competitive bid. Project locations were also selected because the proposed use would not introduce a novel activity to the immediate vicinity where electricity infrastructure has already been constructed and operated for some time.

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11.	✓	✓	✓	Why is a connection line required? Is Hydro One involved?	Yes, we would have to connect the BESS to the existing grid and the only way to do so is via: (i) for Barley, the adjacent Longwood Transformer Station; (ii) for Soy, a new interconnection between the BESS substation and the adjacent Hydro One high voltage transmission lines; and (iii) for Wheat, the adjacent Spence Switching Station. RES will have more details to share with the public through its consultation with Hydro One, as the relevant transmission system operator, and the Connection Impact Assessment (CIA) process it administers for new interconnection applicants. The potential connection line currently illustrated on the aerial mapping included in the PCM information panels is conceptual and subject to change.
12.			✓	The switching station is not at capacity then?	RES cannot speak to the exact capacity limits at the Spence Switching Station; however, results provided by the IESO Deliverability Test indicate that the proposed BESS Project can be supported at the designated point of interconnection.
13.	✓	✓	✓	How long will this take? When would construction happen?	If we receive an IESO E-LT1 contract for the Project, the BESS facility needs to be in-service by May 1, 2025. This means that construction would need to start by mid-2024, pending multiple approvals at both the provincial and municipal level.
14.	✓	✓	✓	How long is IESO's E-LT1 electricity contract?	If we are successful in the E-LT1 RFP, the contract will require the specified electricity services to be provided for a term of 22-years, so until at least 2047. After that time, the contract may be renewed, or the facility may be decommissioned and the property returned to its existing condition or better.
15.	✓	✓		How will this affect me as a local resident?	Depending on the relative location of your home or property, the impact of the BESS on your quality of life should be minimal or, ideally, nil. Before the Project receives its permits and enters construction, RES will study and publish detailed analysis of the potential impacts that may arise. We anticipate that the primary Project impacts will relate to the visual and sonic landscape: <ul style="list-style-type: none"> - Visual impact will depend on your location. Where justified, visual screening in the form of privacy fencing, a wall, landscaping, or natural screening will be used to block your view of the facility. - Noise impacts will also vary as a function of your proximity to the BESS facility, the time of day, season of the year, and weather conditions. RES will be responsible for characterizing these impacts, presenting detailed study results to the public and the Ministry of the Environment, Conservation, and Parks, mitigating potential impacts, and in all cases, ensuring that the BESS facility complies with applicable provincial noise regulations.

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16.	✓	✓		How will this benefit us - cheaper electricity?	<p>The Project will create a range of direct and indirect benefits for the community including: (i) increased municipal property tax revenues, (ii) the creation of local work opportunities and support for small, local businesses, and (iii) a community vibrancy fund (or similar) to which the Project will make annual contributions to be used for local, community-administered projects.</p> <p>While the Project won't necessarily provide you with cheaper electricity, it will provide additional capacity to the grid which will improve reliability and help to prevent the need for rolling blackouts or brownouts in the future. In addition, if the Project is selected by the IESO through the E-LT1 RFP process, it means it will be the most cost-effective solution proposed in a competitive process.</p>
17.			✓	How will the facility be decommissioned?	All the equipment will be removed and, to the extent possible, recycled and the property will be returned to its existing condition or better, including removal of subgrade materials.
18.	✓	✓	✓	How far along is this Project?	The Project is still undergoing early-stage development and studies – it's far from set in stone. Over the year ahead, we'll need to complete detailed hydrological, geotechnical, environmental, and land use planning studies to ensure that the Project can be constructed and operated with minimal to no negative impacts. Some of these tasks are underway and others will commence in early 2023. We'll also have to carry out critical public consultation and First Nation engagement activities.
19.	✓	✓	✓	How likely is it that this Project will proceed?	<p>This is a very difficult question to answer. RES is just one of approximately 55 qualified applicants who will be bidding to receive an IESO E-LT1 contract. If on average, we assume that each applicant is submitting two proposed projects for consideration, then there are over 100 projects being proposed throughout Ontario. How many of those projects will be awarded an IESO E-LT1 contract is unknown and to be decided solely by the IESO.</p> <p>If this Project does not receive a contract through IESO's Expedited RFP (E-LT1) process for projects that must be in-service by 2025, RES may choose to re-submit it under the IESO's subsequent LT1 RFP process, scheduled to be launched in mid-2023. Our decision here will depend on the feedback we receive from the IESO, local residents, and the local municipality.</p>
20.	✓	✓	✓	How many projects are you applying for?	RES is proposing three BESS Projects as part of the IESO E-LT1 process: the Barley Energy Storage Project in Strathroy-Caradoc; the Soy Energy Storage Project in Enniskillen Township; and the Wheat Energy Storage Project in the Municipality of Chatham-Kent.

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21.			✓	What competition is there in the area [for an IESO contract]?	We're aware of at least one other project in Chatham-Kent, but the municipality would know better. Any project proponent would have had to receive a "Qualified Applicant" designation under the IESO's summer 2022 qualification process. In addition, like RES, a project proponent is required to hold a public meeting to inform the public of the development before it submits a project for the IESO's consideration.
Environmental Considerations					
22.	✓	✓		Are there any environmental constraints on the property?	The only constraint that we know of right now is the floodplain associated with the drainage features that bisect the property. We have had preliminary discussions with the St. Clair Region Conservation Authority (SCRCA) about this, but further technical studies and engineering design work will be required to address the floodplain issue. For Barley, this issue has already been mostly addressed by siting of the BESS outside of the floodplain on only the northern portion of the property.
23.	✓			It's very low-lying land. When it's wet, the ground sinks, and the soil is very soupy. This year is very dry, but it's wet most of the time.	Thank you for this – we often learn the most valuable information just by talking to our neighbours! We are aware that portions of the property are regulated floodplain area, but geotechnical and hydrological studies will be undertaken to better understand any potential risks and to inform our engineering design requirements.
24.		✓	✓	What about onsite drainage control? You can't just discharge runoff into the field. Where will the water go?	All construction and operation phase activities will be performed in compliance with applicable water use and management regulations. The water drainage issues you've highlighted here are important both to the proper design and safe operation of the Project, but equally important to the surrounding environment and management of adjacent lands. Stormwater management, geotechnical, and hydrological studies will be undertaken to inform the most suitable engineering design requirements. As we advance these studies and development of the Project, we'll be sure to share more details with the public and provide answers to these questions.
25.			✓	Will there be a drainage outlet?	A hydrological study will be a major component of future studies to inform our design requirements. Stormwater management will also be part of the broader requirements. If any drainage or tiling is required, RES would manage those works and costs in coordination with the relevant local or provincial authority.

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26.	✓			The adjacent drain was recently made municipal. Municipal drain work is being done on some adjacent properties to help get rid of the standing water.	We will be sure to discuss the implications of any municipal drainage works with Strathroy-Caradoc staff when we meet with them to discuss their approval requirements.
27.	✓		✓	How will this affect groundwater? [And for Wheat] We've had quality and quantity issues with our well since they installed a wind turbine near us.	We do not anticipate any impacts to groundwater quality or quantity. The foundations of the wind turbines would have been much deeper than those we'd expect for a BESS facility; one could speculate that there might have been vibrations associated with the wind turbines and resultant silting into the aquifer at that time. As there are no mechanical or moving parts to a BESS, no vibrations are anticipated during the operation of the facility. 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.
28.			✓	Won't you need to level the area?	Sections may need to be levelled, but likely not the entire site. All three BESS Project sites were selected to allow minimal ground disturbance or landscaping during construction.
29.	✓			Will there be any radio or cellphone interference from the project?	No, there will be no interference with short-wave radio or cellphones. BESS Project communication systems will be installed belowground via fibre optics.
30.	✓		✓	Where will you store the topsoil? Where will the waste go?	Any excess soil that may result from site preparation and foundation construction will be retained on-site, if possible, and managed in accordance with our obligations to the landowners or relevant authorities. Though not anticipated, any soil removed to landfill would be required to follow all Provincial testing protocols and disposal requirements.

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31.		✓		The trees you plant won't grow quickly.	For that reason, for visual screening and landscaping purposes, we may decide to plant evergreens which mature within 5 years, or we could plant more mature trees right away, depending on other landscaping constraints and design considerations. This is the type of thing we'll be looking for feedback on at our next Public Community Meeting if the Project is awarded an IESO contract.
Health & Safety Considerations					
32.	✓	✓	✓	Will the batteries leak, or anything leach into the ground?	No, 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 every manufacturer to understand, mitigate, and avoid the risk of this occurrence.
33.	✓			Won't toxic chemicals like PCBs leak out?	We recognize that the presence and potential for toxic chemical leakage is a major concern, but we believe the risk of any contamination to be very low to nil. As we advance the development of this Project, RES commits to providing detailed and definitive information on the presence, use, and management of any on-site chemicals susceptible to leakage. More specifically, the use of polychlorinated biphenyls (PCBs) is strictly controlled under PCB regulations adopted under the <i>Canadian Environmental Protection Act</i> , through which the manufacturing, processing, and importing of PCBs have been prohibited in Canada since 1977. While the BESS technology used will depend on several factors and the chosen battery manufacturer, PCBs are not used in any of the Project components.
34.	✓			Do the batteries give off any gas?	No, the BESS will not emit any gases. The storage system contains an HVAC unit to regulate temperature inside the batteries and, as with all air conditioning systems, will release heated air as a part of the cooling process.
35.	✓			Do the batteries give off any smells?	No, the BESS operation will not emit any odours. During the construction phase of the project there will be diesel-fueled trucks coming and going from the site, which may emit odours.
36.			✓	Do the units overheat?	While manufacturing defects and improper design or operation may lead to batteries overheating, RES has been operating BESS Projects for over 10 years and has never had a battery overheat to the point of creating local environmental or safety concerns. Any overheating that has occurred due to minor failures was detected by the array of sensors installed throughout the system and was addressed within seconds.

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37.	✓	✓	✓	What about fire hazards or explosions?	The possibility of fire is a risk, but one which RES 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 suppression systems, and various other design and operation measures. Additionally, all BESS facilities will be developed and designed in compliance with UL Standard 9540A which, among other things 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 suppression systems to ensure the facility is as safe as possible. As always, RES commits to early and thorough engagement with local emergency response services to ensure that an Emergency Response Plan and training is developed in close collaboration with local authorities and service members.
38.		✓	✓	Will you need special fire equipment? Because each rural community has their own volunteer fire department.	RES 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. It is usually the case that no additional or special fire equipment is necessary.
39.	✓		✓	The land is principally used as grazing ground for cattle. Could this Project result in possible health impacts on cattle, like through stray voltage?	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.
Noise Considerations					
40.	✓	✓	✓	Do these batteries make noise?	The batteries themselves do not make noise, however the cooling system fans do generate noise when operating. Use of an HVAC [heating, ventilation, and air conditioning] system is required to keep the batteries at safe operating temperatures (approximately ± 21°C), especially during the summer months. The other major components that will produce noise during the Project’s operation include the power inverters and the facility’s main power transformer(s).

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					Preliminary noise studies of these noise-emitting components are underway using computer modelling software to determine how loud the BESS could be at each nearby residence, and what mitigation – if any – may be required to satisfy provincial noise regulations.
41.	✓	✓	✓	How do you mitigate noise?	Sound barriers like a noise wall and/or landscaping are an option. Noise levels will also depend on the battery system manufacturer who will determine the type of HVAC system used and where/how these units are integrated into the containers. For example, liquid-cooled HVAC systems produce less noise than air-cooled systems. As another example, if all the HVAC units are situated on the roof of the containers, the sound would carry farther than if the HVAC units were lower and oriented toward a noise wall.
42.	✓			There's always a buzzing from the transformer station.	Hydro One wasn't required to install a sound barrier around its facility. We cannot address the reason for this here. RES, however, is very much open to these measures should they be deemed to be effective and reasonable through the computer noise modelling that is currently underway.
Land Use Considerations					
43.	✓			Why can't you put it next door on the Hydro One property?	RES does not have permission to develop on Hydro One property. We can only speculate, but it's possible that the parcel owned by Hydro One is being retained for future expansion of the Longwood TS and/or as a buffer from the existing substation facilities.
44.	✓		✓	Does the landowner know? Do they want this?	Yes, the landowners of the property support this project and are willing to lease or sell the land to RES for the purpose of constructing and operating the BESS Project.
45.		✓		What will this do to my property values?	RES believes our projects have a net positive impact on the communities where they are located. Local infrastructure improvements that are often enabled through the influx of property taxes and annual Project Vibrancy Fund contributions are factors that support strengthened property values. Furthermore, following the BESS construction period and depending on the location of your property and residence relative to the Project, prospective buyers may not even be able to detect the operation of the BESS.
46.			✓	This is farmland. I thought you weren't allowed to use it for renewable energy?	The <i>Green Energy Act</i> didn't allow large solar farms on prime agricultural lands, but the Act was repealed in 2018 and no longer applies. There are provincial policies which aim to prevent the conversion of prime agricultural land to non-agricultural uses, but there are exceptions for infrastructure such as grid connected electrical facilities.

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47.			✓	We're losing 400 acres of farmland per day! You need to find ways of reducing the land requirements.	Agreed, but we also need more reliable capacity on the grid or there will be rolling brownouts or blackouts. Also, energy storage projects like the ones we are proposing allow Ontario to defer or entirely avoid major (and costly) transmission system upgrades and/or investments in new carbon-emitting power generation. These public policy priorities are also in the interest of Ontarians and Ontario farmers. The development of this Project is a response to the compelling energy, economic, and environmental initiatives that the Province has identified as a priority.
48.			✓	Can't you stack the batteries?	Batteries have been stacked in some limited cases, but not for projects of this scale. Stacking enclosures also adds additional operational constraints, complexity, and safety concerns such as limiting space for operations and maintenance crews, creating potentially greater noise impacts to mitigate, and adding security and access challenges for emergency response teams. While RES is always open to novel design practices that reduce overall project risk and environmental impacts, we do not presently believe that stacking enclosures is a successful strategy. However, creating a project that minimizes the loss of farmland will be an important design consideration.
49.			✓	Will there be traffic during construction?	Yes, the batteries will be delivered by truck. Since the battery enclosures aren't much longer than about 20 feet and approximately 8 feet wide, they generally fit on a standard-sized transport truck. Due to the volume and type of additional traffic associated with the construction phase activities, we'll likely have to sign a road impact agreement with the municipality.
50.			✓	I think there were artifacts discovered onsite previously.	Yes, RES was involved in the development of the Talbot Wind Farm and its interconnection to the Spence Switching Station, so we are aware that archaeologists have previously found cultural/historical artefacts there. Further archaeological study is planned to ensure no impacts to archaeological or cultural heritage resources.
51.	✓			Copper wire has been stolen in the past from the transformer station next door.	Thank you for advising us of this. During project operations, the site will be fully enclosed with security fencing and any grounding wire will be buried. Further, it's not anticipated that copper wire or other components will be situated beyond the (fenced) Project site perimeter. During the project construction phase, RES will have security personnel and monitoring equipment on site to avoid any tampering, theft, or vandalism.
52.	✓			Hunters and four-wheelers regularly trespass on the Hydro One property next door and make a mess.	The perimeter of the entire BESS facility, including the sub-station area, will be fully fenced off for security purposes. However, the above-ground connection line corridor to the Longwood Transformer Station point of interconnection will likely not be fenced.

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Engineering Design Considerations					
53.	✓	✓	✓	How long do the batteries last?	The batteries will have a useful life of 22 years or more, but like your cellphone battery, may eventually lose their ability to efficiently hold a charge as they get older. However, to compensate for the normal degradation of battery performance over the life of the project, RES will apply an ‘overbuild’ or augmentation strategy that will permit the Project to continue meeting its obligations to the IESO over the E-LT1 contract term.
54.			✓	What are the batteries made of?	The batteries will likely use a lithium-ion technology which includes lithium, iron, and phosphate.
55.	✓			Where are you getting the batteries from?	The batteries are often manufactured in China or Korea, but the completed BESS will be certified for use in Canada.
56.	✓	✓	✓	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 lots of people and businesses working on the recycling of lithium and we’re hopeful that by the end of this project’s life we will be able to recycle 100% of the facility.
57.	✓			Is there enough lithium to power all these projects?	We do not expect the availability of lithium to present a significant constraint to this Project.
58.	✓			Are there drip-pans or something similar to catch anything that may drip from the battery?	No, the batteries do not specifically contain drip trays. Rather, each battery module 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.
59.	✓		✓	What will the foundation be made of?	The foundation design is yet to be determined, but it’s likely that the batteries will sit on concrete pile foundations. This determination is subject to ongoing engineering and design work.
60.			✓	How deep will the piles be? You might have problems with the aquifer.	The foundation depth is yet to be determined based on ground conditions, but it’s unlikely that the pilings would be very deep. Ongoing geotechnical and hydrological studies will inform the most suitable engineering design requirements.

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61.	✓		✓	Is vibration a concern?	No, geotechnical studies will be conducted to determine how to best engineer the foundation design to avoid vibrations during construction. No vibrations are anticipated during operations.
62.	✓			Will there be something to protect the batteries from electric strikes (lightning)?	Yes, the BESS, including the associated sub-station and above-ground connection line, will be appropriately grounded and outfitted with lightning protection systems.
63.	✓			Have you thought about using a geothermal system to keep the batteries cool?	The use of geothermal energy for battery cooling is an interesting idea and could technically be possible; however, it's not yet practical given that manufacturers are currently designing and building-in the battery cooling system as part of each individual module or container. Underground geothermal cooling also presents issues from a maintenance perspective.
64.	✓			What kind of transformers are you going to use?	The specific type of transformer is yet to be determined and will depend on the manufacturer selected, final Project size (in MW), and high-side voltage (in kV) at the point of interconnection with the Ontario transmission system.
65.	✓	✓		Is this a proven technology? What have previous studies found over time?	While the BESS technology is absolutely proven, large-scale BESS facilities of the magnitude proposed by RES are relatively new to Canada, mainly because we've had the luxury of relying on hydroelectricity and nuclear technology for baseload, and gas-fired turbines for peaking demand. As the world shifts to adopting more and more renewable energy, the case for utility-scale BESSs becomes increasingly persuasive and economic. These large-scale BESS projects are well-known in other parts of the world, especially California, Texas, and Australia. In addition, permitting requirements in Ontario are much stricter than in the U.S. Despite these much more challenging permitting standards, RES completed the construction of the 10MW/30MWh BESS facility situated at the Mount Dennis station of the Eglinton Crosstown Light Rail Transit Line (ECLRT), in partnership with Toronto Hydro. The ECLRT project is being safely operated in close proximity to high-density residential units, pedestrian, and vehicle traffic.
66.	✓	✓		Have you developed other similar projects?	In Ontario, RES previously developed and completed the construction of a BESS project in Strathroy, Ontario providing approximately 4 MW of storage capacity. The project (known as 'Amphora') was completed in 2014 and operated for the provision of ancillary services to the IESO until recently.

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Cost Considerations					
67.	✓	✓	✓	How much will this cost?	The anticipated cost of developing and constructing this Project will be substantial and borne solely by RES. The exact cost is yet to be determined, but even an approximate cost cannot yet be shared due to the competitive nature of the IESO's procurement process.
68.	✓	✓	✓	What do you mean by a Local Vibrancy Fund?	The financial commitment that RES is making to the municipality or a designated local organization will need to be negotiated through discussions with the municipality. This fund is one way RES plans to ensure that the Project creates long-term and material net benefits to the local community, in addition to any property tax revenues.
69.	✓	✓	✓	What might be the biggest cost to the municipality?	<p>The potential need to draw on firefighting and emergency response services is likely to be the only real <i>potential</i> cost to the municipality during the Project's operations phase. In this regard, RES will work with the local fire departments to ensure they have the necessary training and equipment in the unlikely event that they'll need to respond to a battery fire.</p> <p>Another municipal concern might arise from road use during the construction phase of the Project. In this instance, RES is committed to working with the relevant local authority to negotiate and conclude an acceptable road use agreement, especially where the intensive use of roads not designed for heavy traffic is anticipated and no alternative compensation mechanism is in place. RES is open to hearing and discussing these and any additional concerns the municipality might have with the Project.</p>
70.	✓			Who's liable if the property is inundated with water?	The liability will be borne entirely by RES or the owner of the infrastructure through their insurance provider. However, geotechnical and hydrological studies will be undertaken to mitigate any potential risks to the host property and adjacent properties through careful siting and/or engineering design.
71.	✓			How will I be compensated?	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.

#	Project Relevance			Question/Comment	Response
	Barley	Soy	Wheat		
Operations and Maintenance					
72.	✓	✓	✓	How often do people have to attend the site?	The BESS will be mostly autonomous but there will be periodic on-site presence and work activities. Operations & Maintenance staff will periodically visit the site on a regular maintenance schedule so as to ensure the safe and efficient operation of the facility. As there will be many enclosures on site that will need to be regularly maintained, crews will likely be on site a good part of the year.
73.	✓	✓	✓	Are all the batteries linked? How are problems going to be detected and managed?	The batteries would be linked and managed as a single unit, including various layers of system monitoring, protection, and active control. The system would be remotely monitored from a 24-hour operations centre, the location of which is yet to be determined.
74.	✓			Will a backup electric generator be required?	The BESS facility itself will not require a backup power source. However, a small backup generator may be required for facility lighting or security systems.
Communications & Consultation					
75.	✓	✓	✓	You should have advertised meeting more broadly.	Notice of this Public Community Meeting was mailed via Canada Post to all property owners within approximately 1 kilometre (km) of the Project site. In the case of Soy, notices were dropped in all the post office boxes of Oil City residents. Taken together, this notification effort far exceeds the IESO's requirement to notify only the immediately adjacent property owners. However, should the Project be awarded an IESO contract, the notification limits will likely be expanded, including advertisement of future Public Community Meetings in the local newspaper.
76.			✓	Why isn't this meeting being held in Ridgetown? Most of the residents near the site conduct their business there.	There were no suitable venues available tonight in Ridgetown, and this location is about the same distance from the Project site as it is to Ridgetown. But if we receive an IESO contract for this Project, we'll look into Ridgetown for our next public meeting. Thank you for letting us know.
77.	✓	✓	✓	Will there be more public meetings?	If we receive an IESO contract for this Project, there will be a lot more consultation. We are very early in the process and there will be plenty of time to participate and be heard. These meetings will also give RES the opportunity to improve the Project and demonstrate our commitment to having it harmoniously integrated into the community.

#	Project Relevance			Question/Comment	Response
	Barley	Soy	Wheat		
78.	✓	✓	✓	Will we be informed moving forward? How can my neighbours who weren't able to come tonight find out more?	Yes, the Project website will be updated as new information becomes available. We will soon post a copy of the display boards presented here tonight, as well as a summary of the meeting (questions and answers). Successful bidders are expected to be announced in late March 2023 [extended post-meeting until the end of April 2023] so we will further update the website at that time. If we receive an IESO contract for this Project, you will receive notice of the next Public Community Meeting, likely to be held mid-year 2023, via Canada Post. If you'd like to receive the notice via email, please provide us with your email address using one of our Feedback Forms available here tonight. Alternatively, you can email, call, or contact us through the coordinates or electronic form provided on the 'Contact Us' tab on each Project website.
79.	✓			I don't want to have to check a website to learn about what's going on. How frequently will I be contacted?	If we receive an IESO contract for this Project, as an adjacent property owner you will receive notice at all key Project milestones via Canada Post.
80.			✓	I'm colourblind and can't tell the difference between the hatching on the maps you have provided.	Thank you for letting us know. We'll try to use different hatching patterns on our maps for the next public meeting.
Miscellaneous					
81.	✓			I don't have any specific concerns. I just want it done properly.	Excellent. You can be assured that if we receive an IESO contract for this Project, the planning process, engineering design, and construction and operations will be done with industry-leading expertise and the community's best interests in mind.
82.		✓		As long as you keep the noise down, I'm all for it.	Excellent. You can be assured that if we receive an IESO contract for this Project, the planning process, engineering design, and construction and operations will be done with the community's best interests in mind.
83.		✓		It's a great idea, just do it somewhere else.	Your opposition to the initial Project location (north option) is noted. Hopefully the Project site (south option) that is further from your home and on a parcel of land no longer adjacent to your property will make you more comfortable with the proposed location.

#	Project Relevance			Question/Comment	Response
	Barley	Soy	Wheat		
84.		✓		Storing electricity makes sense, but we don't want this in Oil City.	Thank you for sharing your perspective. We'll have further opportunity to discuss and better understand your concerns, inform you about the Project as we see it being built and operated, and hopefully incorporate measures that will attenuate or even eliminate the reasons for your opposition.
85.	✓			How does the transformer station next door work?	The Longwood Transformer Station serves as a central hub for electricity distribution in the area. It "steps down" the high voltage electricity from the grid to a lower voltage that can be supplied to homes and businesses through lower voltage distribution lines.
86.		✓		Do we not still have surplus electricity in Ontario?	Yes, at times, but we are starting to run short on capacity during the periods of highest demand, and the emerging shortfall will only be made worse due to increasing demand and once other existing facilities like the Pickering Nuclear Generating Station come offline.
87.		✓		Does the Hydro One line take power into London?	The high voltage transmission line we're proposing to connect to transmits electricity between the Longwood Transformer Station outside London and the Lambton Transformer Station south of Sarnia.
88.		✓		Are you acting on behalf of the Province?	No, RES is a privately-owned renewable energy developer. We hope to contract with the IESO for this Project to help reduce the Province's reliance on natural gas and meet Ontario's growing electricity demands. The IESO is a not-for-profit corporate entity established under the <i>Electricity Act, 1998</i> , which is under the jurisdiction of the Ontario Minister of Energy.
89.			✓	Where is the power coming from? And how far will it be transmitted?	The power used to charge the batteries will be drawn from the Ontario high voltage transmission system. This transmits electricity generated from various sources, including from wind and solar facilities in the Chatham-Kent area. The stored power will then be discharged onto the existing grid and transmitted to regional load centers.
90.			✓	There's lots of deer hunting in the area, especially along the corridor north of the station.	Thanks for letting us know. That shouldn't affect the Project as the facility will be completely enclosed, likely with a fence or walled barrier around the Project perimeter.