MINUTES OF PUBLIC COMMUNITY ENGAGEMENT

Township of Mulmur Public Meeting

Location: Mulmur Town Hall, 758070 2 Line E, Mulmur, ON L9V 0G8

Time: 6:30 - 8:00 pm, November 14th, 2022

Long-Term Reliability Project Name: ARAR_57

Site Address: 938504 Airport Rd, Township of Mulmur, ON L9V 0M1

Facility: Battery Energy Storage Systems (BESS)

Size: 1.01-megawatt/4.04-megawatt hour

Proponent's Name: 1000234763 Ontario Inc. (affiliate of Solar Flow-Through Funds)

Attendance:

- 2 community members
- Proponent – 1000234763 Ontario Inc., representative:
    - John Kozak, COO
- Proponent's Contractor, SolarBank Corporation (previously, Abundant Solar Energy Inc.)
    - Tracy Zheng, CAO
    - Matt McGregor, Director of Policy and Planning
    - Harun Buyukkocabas, Senior Engineering Project Manager

6:35 PM: meeting called to order.

Presentation by Proponent & SolarBank commenced.

Meeting discussions are summarized below:

- Background on the IESO's procurement of Expedited Long-Term Reliability Services (E-LT 1) including:
    - Ontario's forecasted electricity reliability issues
    - Procurement details regarding Independent Electricity System Operator's (IESO) LT1 RFP and E-LT1 RFP procurement targets and approximate timelines
    - Brief discussion regarding Project requirements and capacity to deliver
- Introduction of Proponent and Solar Flow Through Funds (SFF), including:
    - Background and experience
    - Completed and operating projects in Ontario
    - Executive team and experience
    - Battery Energy Storage Systems (BESS), generally
    - Confirmation that Proponent's BESS projects passed IESO's Request for Qualification process
    - Proponent's plan to participate in the IESO's E-LT1 RFP and submit various BESS proposals in response to the IESO's RFP
- Introduction on Proponent's Contractor, SolarBank Corporation (previously, Abundant Solar Energy Inc.)
    - Company background
    - Introduction to SolarBank's executive team's development experience, specifically in Ontario
    - SolarBank's completed projects and pipelines in North America, including Ontario.
- Introduction to Battery Energy Storage Systems (BESS)
    - Discussed BESS details, including nameplate capacity, project name and address, technology, safety, illustrative diagrams, location, and key components.
    - A scale map showing the boundaries of the Bess Project site, location of the Connection Point and the Connection Line, location of the existing solar project and other considerations such as Project boundaries, existing structures and natural visual screen
    - Discussed soil class and zoning of the Project site

    - Introduced fire suppression details
    - Brief discussion about the BESS charging and discharging mechanism ie it will be independently connected to the grid, not charging from the existing solar project
- Benefits to the Community if the E-LT1 Contract is granted by IESO to the Proponent
    - Enhances grid reliability; helps meet urgent need for electricity capacity
    - Other local community benefits such as local hiring opportunities for construction and O&M
- Proposal Timeline Summary
    - Deliverability Test, Public Meeting, Municipal Support Resolution (MSR) explained, and dates with municipal council meeting provided.
    - Future timelines explained, from proposal submission, IESO announces selected proposals, permitting and development, to goal of approved Projects becoming operational in 2025.
- Explained the purpose of the MSR at the Proposal submission stage is to enable the Proponent to receive Rated Criteria points under the E-LT1 RFP, and not exempted the Proponent for any permitting. Full applicable permitting will follow after IESO grants the E-LT1 Contract
- Presented Public Engagement Plan
- Proponent and SolarBank contact information provided with open invitation to contact either Proponent or SolarBank for further information

Community attendees were encouraged to ask questions anytime during and after the Project presentation. Questions were asked throughout the presentation. Questions asked and answered are summarized below:

- Q: How does the demand curve work in relation to the solar PV system and the BESS?
    - McGregor: The solar PV system currently in place supports the electricity grid by producing energy during the day. The BESS will further support the grid by discharging during peak times, usually during the day and into the evening. The BESS will be charged overnight when there is low demand for electricity.
- Is the BESS charging from the Solar?
    - Kozak: No. The BESS will be independently connecting to the Grid. The BESS will be charged directly from the electricity grid overnight when demand is low, and

discharge back into the grid at peak demand times. It is simply co-located on the same property as the solar facility.

- Q: What is the length of battery life for this system?
    - Kozak: The contract for this system is for 22 years. After this, the batteries will be decommissioned, and recycled as much as possible.
- Q: What is the manufacturing process for the battery components?
    - Kozak: The batteries will be manufactured, assembled, and tested off site by the manufacturer. The batteries will then be brought to the site fully containerized, where the BESS will be installed on a concrete pad and electrical interconnection work will commence. The entire construction period should not take more than a few weeks.
- What would happen at the end of the Contract term?
    - Kozak: If IESO has a new program available at the end of the Contract term, the Proponent may attempt to participate. This would need the approval of the landlord, IESO and the Town. Alternatively, the BESS will be removed at our cost, and the Project site will be returned to its original condition at the end of the contract period.
- Will the materials for the BESS be recycled at the end of the Contract term?
    - Kozak: Yes, at end of the Contract term, Solar Flow-Through will have a decommissioning plan in place to ensure that as many BESS components are recycled as possible.
- How much of materials will be recyclable?
    - Buyukkocabas: The battery cells can be recycled and refurbished, including high value industrial metals like cobalt, lead, iron, lithium, and aluminum. When recycled, these metals can reduce new battery construction costs by 10-30%. All other components are metal and plastic which are also recyclable. From data posted by the companies working on Battery recycling, up to 95% of BESS materials are recyclable.
- What will be the noise level from the BESS once operational?
    - Buyukkocabas: The batteries themselves do not generate a significant amount of noise. The inverters, transformers, and heating ventilation and air conditioning

(HVAC) equipment associated with the BESS will generate some noise, like any other rooftop HVAC and pad mount transformer in your neighborhood.

- A 1-5MVA transformer will typically output 40-70dB of noise when standing less than 10 meters from the facility, and is always in operation, however, the noise emitted will vary depending on how much load it is experiencing at any given time. The BESS will not operate 24/7.
- Noise levels decay with distance so it will not be the same as standing next to the unit vs standing 10 meters away from the unit. For each doubling of distance, the sound level will decay by approximately 6 dB.
- We considered the noise level in the preliminary Site Plan. The BESS sits 163 meters away from the closest structure and around 100 meters away from Airport Road which is a major road with traffic. Therefore, the noise from the BESS should not be a concern in the current site location.

- How do you manage the risk of fire for the BESS?
  - Buyukkocabas: The BESS comes equipped with onboard Fire Suppression Systems in each component container. The BESS is also climate controlled and ventilated to ensure components maintain a constant temperature year-round per National Fire Protection Association (NFPA) 855 and Underwriter's Laboratory (UL) 9540A guidelines. NFPA 855 provides guidelines for fire protection measures in stationary energy storage units and the Fire Suppression System is tested in accordance with UL9540A guidelines.
  - Fire suppression system uses standard fire extinguishing chemicals to suppress fire. The battery containers are equipped with sensors to detect heat, smoke and gas, and there are built-in sensors measuring voltage at each rack. If the voltages are off balance, or smoke/heat/gas is detected beyond a threshold the necessary emergency system(s) will engage to mitigate further risk, and depending on the severity of the risk (ie voltage imbalance vs overheating) the system will take appropriate action such as alerting the monitoring system , turning cell, a rack or even the whole system off, or as severe as engaging the Fire Suppression System.
  - 24/7 remote monitoring to ensure normal system functioning. The system can be automatically or remotely shut down and will notify the local operation and

maintenance team immediately. The technician will be dispatched to the site for inspection or correction as required.

    - In an extremely low possibility, if the fire still occurs, the BESS is fully containerized. We will work with the fire department to develop a first responders plan outlining the procedure in case of fire. This will be put in place prior to the commissioning of the system to ensure they are prepared for emergencies.

- What is the physical size of the system?
    - Kozak: The entire system, including all setbacks and spacing, is expected to take up less than 0.3 acres of land.
- Why did you pick up this location for BESS?
    - Kozak: BESS will be located at the same property as the Solar projects, as we are familiar with the site, the zoning, soil types and topography, the township/municipality, the landlord and the connection point to the grid because of the Solar project development in the past.
- Have you done any environmental study or permitting?
    - Zheng: Currently the Project is in the early stage of development, and the Proponent is working on the Proposal preparation and submission. Once IESO Contract is granted to the Project, the Proponent will start the all the necessary studies and permitting process. We will fully comply with IESO's Contract and permitting requirements such as Site Plan Approval, Zoning By-law and so on set by the Township of Mulmur.
- Q: What are the benefits to the local community?
    - Zheng: The main benefit is that the reliability of grid will be enhanced after the BESS is installed, reducing the electricity flickering and brown outs. Other benefits include job creation. If we are granted the contract from IESO, we will do our best to hire as many local workers as possible, such as electricians and trades people. This includes long term contracts to local electrician and technicians for maintenance and operations to ensure safe and reliable operation. There will also be short term contracts to hire locals as much as possible for construction.

- Does the developer work on residential PV systems?
    - Zheng: Unfortunately, the SolarBank does not work on residential PV systems.

8:00 PM: End of Questions. Meeting adjourned.