

## **MINUTES OF PUBLIC COMMUNITY ENGAGEMENT**

### **Township of Armour Public Meeting**

**Location: Katrine Community Centre, Armour, ON P0A 1L0**

**Time: 7-8:30 pm, November 2<sup>nd</sup>, 2022**

**Long-Term Reliability Project Name: 903**

**Site Address: 221 Peggs Mountain Rd, Burk's Falls, Armour, ON P0A 1C0**

**Facility: Battery Energy Storage Systems (BESS)**

**Size: 4.99-megawatt/19.96-megawatt hour**

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

#### **Attendance:**

- 3 community members
- Proponent's Contractor, SolarBank Corporation (previously, Abundant Solar Energy Inc.)
  - Tracy Zheng, CAO
  - Richard Lu, CEO
  - Matt McGregor, Director of Policy and Planning
  - Harun Buyukkocabas, Senior Engineering Project Manager
  - Mila Simon, Project Coordinator

7:10PM: meeting called to order.

Presentation by Proponent & SolarBank commenced.

Meeting discussions are summarized below:

- Presentation and background on the IESO's procurement of Expedited Long-Term Reliability Services (E-LT 1) including:
  - o Ontario's forecasted electricity reliability issues
  - o Procurement details regarding Independent Electricity System Operator's (IESO) LT1 RFP and E-LT1 RFP procurement targets and approximate timelines
  - o Brief discussion regarding Project requirements and capacity to deliver
- Introduction of Proponent and Solar Flow Through Funds (SFF), including:
  - o Background and experience
  - o Completed and operating projects in Ontario
  - o Executive team and experience
  - o Battery Energy Storage Systems (BESS), generally
  - o Confirmation that Proponent's BESS projects passed IESO's Request for Qualification process
  - o 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.)
  - o Company background
  - o Introduction to SolarBank's executive team's development experience, specifically in Ontario
  - o SolarBank's completed projects and pipelines in North America, including Ontario.
- Introduction to Battery Energy Storage Systems (BESS)
  - o Discussed BESS details, including nameplate capacity, project name and address, technology, safety, illustrative diagrams, location, and key components.
  - o 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 and existing structures and visual screen
  - o 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: Have you heard back from any of the neighbours regarding the proposal?
  - Simon: No, we have not received any correspondence from community members regarding these proposals.
- Q: What will be the safety measures of this facility?
  - Lu: Each BESS will have a fire suppression system installed that would prevent and mitigate any risk of a thermal event. The proponent and developer would also work with the fire department to create a First Responders Plan.

- Q: Will the BESS be charging from the solar?
  - RL: No, 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: Will the Ontario grid be strong enough to charge the BESS overnight, when there are electric vehicles charging at the same time?
  - Lu: As of right now, we are not aware of any prediction that electric vehicle charging demand will negatively impact the charging of the BESS.
- Q: Are you competing against any other proponents?
  - Lu: We are currently unaware of any other BESS proposed in Armour. IESO's RFP procurement is a competitive process, and we will be competing with other proponents proposing projects around Ontario.
- Q: Why did you pick this location for the BESS?
  - Lu: The BESS will be located on the same property as an existing Solar project. This is because we are familiar with the site, the zoning, soil types, topography, the township/municipality, the landlord and the connection point to the grid because of our previous experience developing the Solar project development in the past.
- Q: The BESS will be located on the hill. Will it be visible to the neighbors?
  - Lu: The current Project site is located behind a row of existing mature trees. Those trees will serve as Visual Screening for the BESS. The neighbors should not see the BESS.
- Q: How do you ensure the safety of the BESS in case anyone approaches the system?
  - Lu: All BESS components including all necessary batteries, inverters, fire suppression and extinguishment, and HVAC systems are fully containerized and sit on a concrete pad. It will be locked to prevent any unauthorized access. The site will be fenced off and locked for further security.
  - The BESS is monitored 24/7 and can shut off remotely should any safety concerns arise.

- Q: 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 the neighborhood.
  - A 5MVA transformer will typically output 50-70dB 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. Our BESS is not operating at 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. The rate of reduction is approximately 6 dB for each doubling of distance from the system. We considered the noise level in the preliminary Site Plan. The BESS sits 226 meters from Peggs Mountain Road which is a major road with traffic. There are no existing structures close by. Therefore, the noise from the BESS should not be a concern in the current site location.
- Q: How is the BESS going to operate and be maintained?
  - Buyukkocabas: Preventative Maintenance occurs on a regular basis, usually semi-annually, to check on the overall condition of the BESS and ensure ongoing compliance and performance. The BESS is 24/7 remote monitored to ensure normal system functioning. This system is monitored for performance and safety continuously and integrated with the IESO command center to perform the dispatch functions required by the IESO.
  - The system can automatically or remotely shut down if there is any danger posed and immediately notify the local maintenance team. The local maintenance technicians will be dispatched to the Site should Corrective Maintenance be required.
- Q: Have you done any environmental assessment studies?
  - Zheng: Currently the Project is under early stage of development, and Proponent is working on the Proposal preparation and submission. If an IESO Contract is granted to the Project, the Proponent will start all the necessary studies including environmental study and the permitting process. We will fully comply with all studies

required by the IESO's Contract and the permitting requirements of the township of Armour.

- Q: What is the probability of fire being created from these large batteries?
  - Buyukkocabas: The probability of a fire starting is very low. The cells themselves are safe as they are the same type of batteries used in everyday electronics, such as cell phones (lithium-ion technology).
  
- Q: 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.
  
- Q: Could you elaborate with details about the benefits to the local communities?

- Lu: The main benefit is that the reliability of grid will be enhanced after the BESS is installed. 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.

8:30 PM: End of Questions. Meeting adjourned.