Public Community Meeting Minutes

Project: Sparrow Storage Project
Location: Neustadt Community Hall
Meeting Date: October 30th, 2023
Nameplate Capacity: 100MW Battery Energy Storage
Proponent: Shift Solar Inc.

Summary

A Public meeting was hosted by Shift Solar to present information on the proposed Sparrow Storage project and give members of the public an opportunity to provide comments, concerns and ask questions.

The Community Hall was open at 5:30pm for folks to arrive, grab a coffee or snack and find a seat. Shift was available for questions as well. At or around 6pm, Shift presented a PowerPoint (slides to follow), that provided project name, legal name of the proponent and contact information, nameplate capacity, type of technology, info about Shift, information about the IESO procurement, information about energy storage, the project proposed location and connection including a scale map, and a project timeline.

Following the presentation, Shift opened the floor for Q&As (notes by Stantec to follow).

Notification

Notice of the Public Community Meeting was provided through the following mechanisms:

- Email to Chief Administrative Officer of the municipality attention Laura Johnston as well as Clerk Jamie Eckenswiller
- Registered mail notices to property owners of land adjacent to the boundaries of the project site
- Standard mail notices to property owners within 1km of the project site
- Email to other regulatory agencies and stakeholders identified as having potential interest
- Although the project is not located on indigenous lands, Email notice was sent to Saugeen Ojibway First Nation
- Newspaper ad in the Hanover Post posted October 26th, 2023.

Attendance

There were 9 people in attendance.

Stantec

Memo

To:	Mike Brugge Shift Solar	From:	Domnique Zeldin and Justine Lunt Stantec Consulting Ltd.
Project/File:	160901047	Date:	November 8, 2023

Reference: Sparrow Storage Open House Q&A Summary

PRESENTATION DATE: October 30, 2023

PRESENTATION BY: Mike Brugge, Grant Johns, Mario De Aguero, Benoit Pinot de Villechenon.

PRESENTATION START TIME: 6:00 pm

Q AND A START TIME: 6:13 pm **END TIME:** 6:36 pm

Question: The 911 Address on the notice is wrong, will this be fixed?
Answer: The Project team will clarify the parcel description to find an alternative way too describe it.
Supplemental Detail: The parcel does not have a 911 address. It is the 169 acre parcel directly west of Sulphur Spring Conservation Area on Grey Rd 28/Concession Rd 18. The map of the site can be found in the attached presentation. The Legal Description is PT LT 2-3 CON 18 NORMANBY AS IN R376331; S/T R376331; S/T INTEREST IN GS77182 MUNICIPALITY OF WEST GREY

Question: Is the 15 acres strictly for storage containers, there are no plans for solar panels?
Answer: No solar panels, just battery storage containers.

Question: How many containers will you have?
Answer: For the Sparrow Storage Project the current proposal will require less than 100 containers on the site.

Question: What is the red line on the mapping showing?
Answer: The redline is showing the connection to the transmission line.

Question: Is there room for growth?
Answer: No, we don't think the transmission line has much more capacity.

Question: Does it go to Hanover?
Answer: Yes, it feeds into the Hanover transmission substation.

Question: Along the red line in the mapping, is it buried?
Answer: No, likely an overhead transmission line.

Question: What side of the road would the connection lines be on?
Answer: Not yet decided.

Question: So the entrance would be off of concession 18?
Answer: Still too early to say conclusively, but that is the proposed plan right now yes.

Question: How do you arrive at these locations?

Reference: Sparrow Storage Open House Q&A Summary

Answer: We look where there is capacity on the transmission system, and then look for flat cleared land that is close to connection point as to avoid new environmental disruptions. We also prefer to be close to a population center where the power is needed, that has a skilled workforce and has good road access for deliveries during construction.

Question: Landowners believe it is floodplain, is that not an issue for the Project?
Answer: This project would have to go through all the same permitting processes as landowners would. We have checked the Saugeen Valley Conservation Authority regulated areas and will plan on having pre-consultation with them shortly.

Question: There is also indigenous settlement adjacent to the property, would studies have to be done?
Answer: Yes, we would have to do studies, including archeological assessments as part of the provincial permitting.

Question: Are there any other locations where this could be moved?
Answer: No, not at this time. If this location doesn't work, it would just not be completed.

Question: Is Valard involved at all?
Answer: No, not at this time.

Question: How long do you lease the land for?
Answer: The IESO contract is for 20 years, so 20 years. The containers will be second purposed afterwards, and when site is decommissioned, all gets removed and the site gets returned to original condition.

Question: Would you have a chance to extend?
Answer: Unlikely due to the life span of the batteries.

Question: Is there anything like leakage, or environment scariness to any of this?
Answer: No, very little liquid elements to lithium-ion batteries and it is contained within each cell. There is some fire risk, and smoke is potentially harmful, but there are plans in place to mitigate that and make sure that doesn't occur. Fire safety has greatly increased over time for these projects.

Question: Any residual humming or anything from the batteries?
Answer: There is some noise from the fans that are cooling the containers and form electrical equipment such as transformers and inverters, noise assessments will be done for the site as part of the provincial permitting. The requirement is 40 decibels at closest receptor/residence. For perspective, that is the sound of a library.

Question: Do you get funding from the government?
Answer: The process is a competitive procurement through ISEO, they would contract with us for the services provided, but no funding.

Question: What kind of buffer for site lines?
Answer: We do our best to conceal the facility from residents, usually fences, sometimes sound walls, and landscaping and trees.

Question: Are these the first storage for Ontario?
Answer: No, there are other projects in Ontario, much smaller in scale. Currently, there is a large project (250MW) being built.

Question: And these seem to be feasible?

Reference: Sparrow Storage Open House Q&A Summary

Answer: Yes, the technology is not new. IESO is happy with the rapid response of the storage system from their earlier pilot projects and has set up this procurement to specifically award these types of projects.

Question: Are you going to be content with it just being battery storage, and that's all it's going to be?
Answer: The bid we are proposing to the IESO is strictly storage.

Question: Will there be on-site monitoring?
Answer: Not a daily thing, but there is routine maintenance that needs to be done for the site to keep it running reliably.

Question: How big is the parcel you are renting?
Answer: about 150 acres give or take?
Supplemental Detail: 169.9 acres.

Question: When will the project start?
Answer: If the project is awarded, construction is planned for 2026 and operations in early 2027.

Question: Why weren't you proposing to connect to the line closer to the site?
Answer: Because it's a distribution line, not capable of supporting a project this big.

Sparrow Storage - Community Engagement Meeting

shift

WELCOME

Community Engagement Meeting

Welcome, please sign in and provide your contact information if you would like to receive project updates. If you have any questions, there will be a formal Q&A period after the presentation. We will be available until 7:30pm for more private discussions or comments.

Project Name:	Sparrow Storage
Date:	October 30th, 2023
Legal Name of the Proponent:	Shift Solar Inc.
Nameplate Capacity:	100MW
Technology:	LFP Storage

TODAY'S MEETING

Overview of the Meeting

- Land Acknowledgement
- About Shift Solar
- IESO Procurements
- Why Energy Storage?
- Sparrow Storage Project
- Project Timelines
- Q&A

BEFORE WE START

LAND ACKNOWLEDGEMENT

We would like to begin by acknowledging that we are meeting on the traditional lands and treaty territory of the Saugeen Ojibway nation which includes the Chippewas of Nawash Unceded First Nation and the Chippewas of Saugeen First Nation. We also recognize the Metis, whose ancestors shared this land and these waters. We extend our gratitude to all Anishinaabe and Metis people, and their descendants - past, present and future, who continue to care for and inhabit these lands and tend these waters.

SPARROW STORAGE

ABOUT US

Catalyzing a more sustainable future

Shift Solar Inc. is an Ontario-based solar and energy storage developer with clients in Canada and the United States. Our goal is to expedite the adoption of green energy initiatives and support the shift to sustainable energy infrastructure.

With a development motto of “do the greatest good,” the Shift team is committed to the communities we work in and thus, are focused on engaging with stakeholders.

SYNERGY

A Collaborative Partnership

The local expertise of Shift in project development, combined with Neoen's extensive international experience in developing, building, and operating storage projects, will ensure the creation of a responsible, sustainable, and high-quality project.

Together we will oversee the LT1 RFP and permitting stages.

Subsequently, Neoen will assume sole responsibility for the planning, construction, and long-term operation of the energy storage project

shift

NEOEN

ABOUT US

Neoen is dedicated to the energy transition…

Founded in 2008, Neoen is the leading French independent producer of renewable energy and a major player on the world stage.

Our mission: we design and implement the means to produce the most competitive renewable electricity, sustainably and on a large scale.

Our total capacity in operation or under construction is currently close to 7 GW and we are aiming for more than 10 GW by end 2025, with the ambition to reach 20 GW by 2030.

EXTENSIVE EXPERIENCE

We have surpassed 1 GW of storage

EUROPE

Yllikkälä Power Reserve (2020)

30 MW / 30 MWh

Azur (2019), Pod tredan (2022), Antugnac (2022)

22 MW / 22 MWh

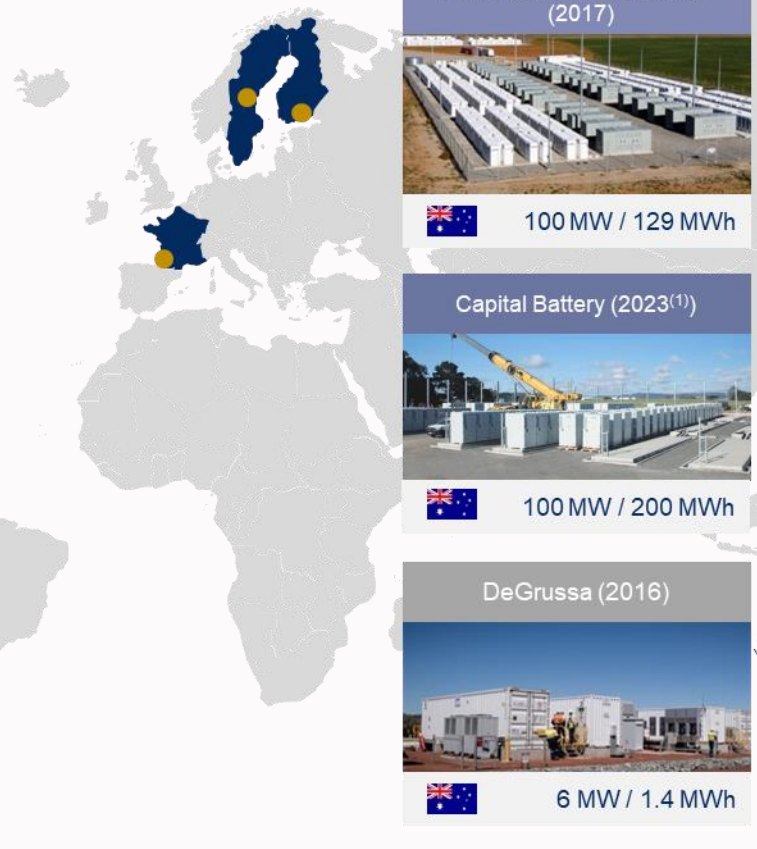
Storen Power Reserve (2024[1])

40 MW / 40 MWh

AMERICAS

Albireo (2020), Antares (2022)

14 MW / 10 MWh



AUSTRALIA

Hornsdale Power Reserve (2017)

100 MW / 129 MWh

Hornsdale Power Reserve Extension (2020)

50 MW / 64.5 MWh

Victorian Big Battery (2021)

300 MW / 450 MWh

Capital Battery (2023[1])

100 MW / 200 MWh

Western Downs Storage (2024[1])

200 MW / 400 MWh

Blyth Battery (2025[1])

200 MW / 400 MWh

DeGrussa (2016)

6 MW / 1.4 MWh

Bulgana (2020)

20 MW / 34 MWh

Behind the meter

Stand alone

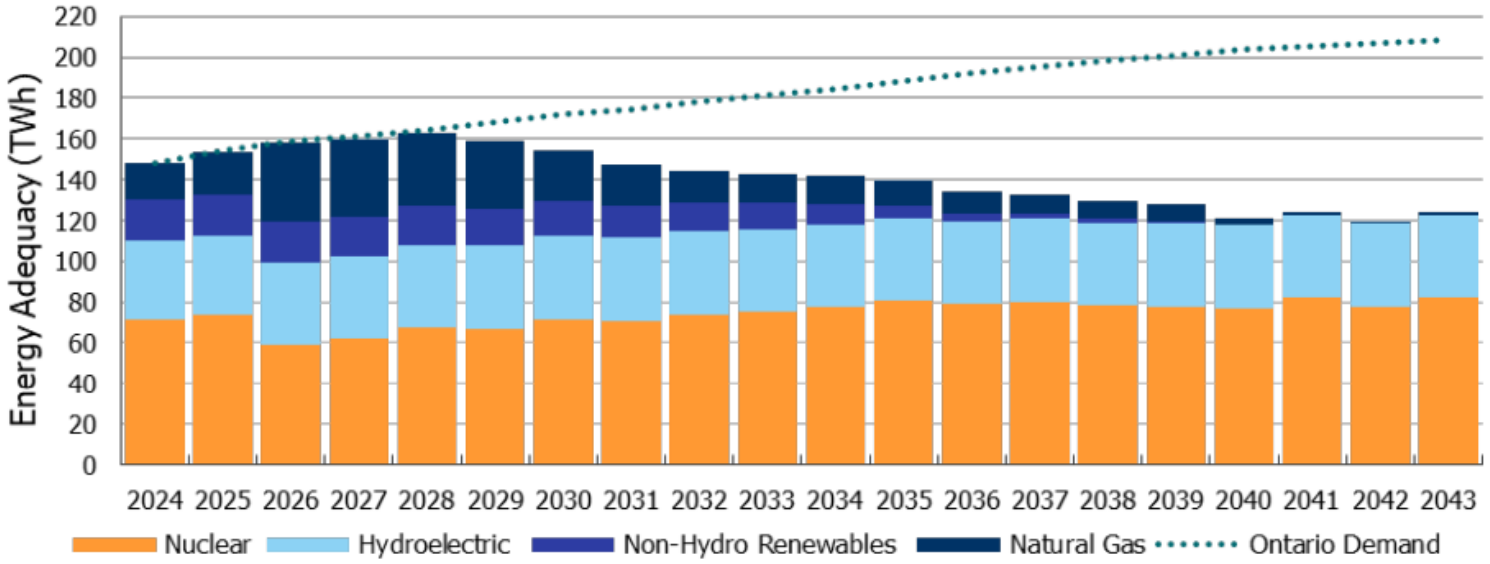
THE NEED FOR NEW STRATEGIES

Ontario is on the brink of an energy crisis

In their planning outlooks, the IESO predicts an energy and capacity shortfall as soon as 2026.

- Between 2025 and 2027, Ontario needs 4,000 MW of new supply
- The gap between demand and generation is expected to expand for 20 years
- Multiple storage projects have been awarded under the E-LT1 procurement and there will be an additional 1,600 MW worth of projects awarded under this LT1 procurement.

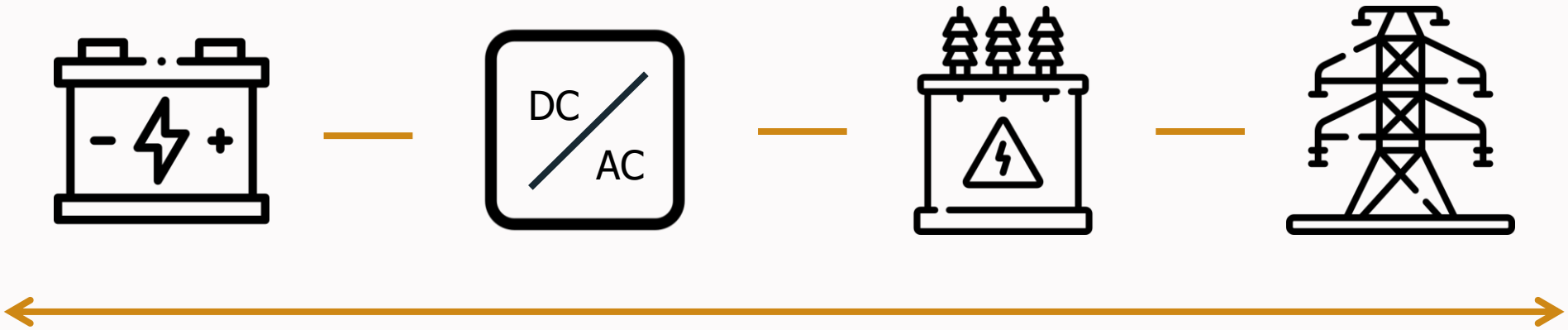
Figure 21 | Energy Adequacy Outlook (Case 1)



www.ieso.ca/en/Sector-Participants/Planning-and-Forecasting/Annual-Planning-Outlook

THE TECHY BITS

Here’s how energy storage works



Flow of Power

Battery Energy Storage Systems (BESS), are power plants that enable energy from the electrical grid, to be stored and then released when customers need power most. Typically in Ontario, storage is charged during the night when nuclear base load and wind power is producing more energy than the demand. Lithium-ion batteries, which are used in mobile phones and electric cars, are currently the most-used storage technology for large scale energy storage projects.

THE TECHY BITS

Here’s how energy storage looks

Construction

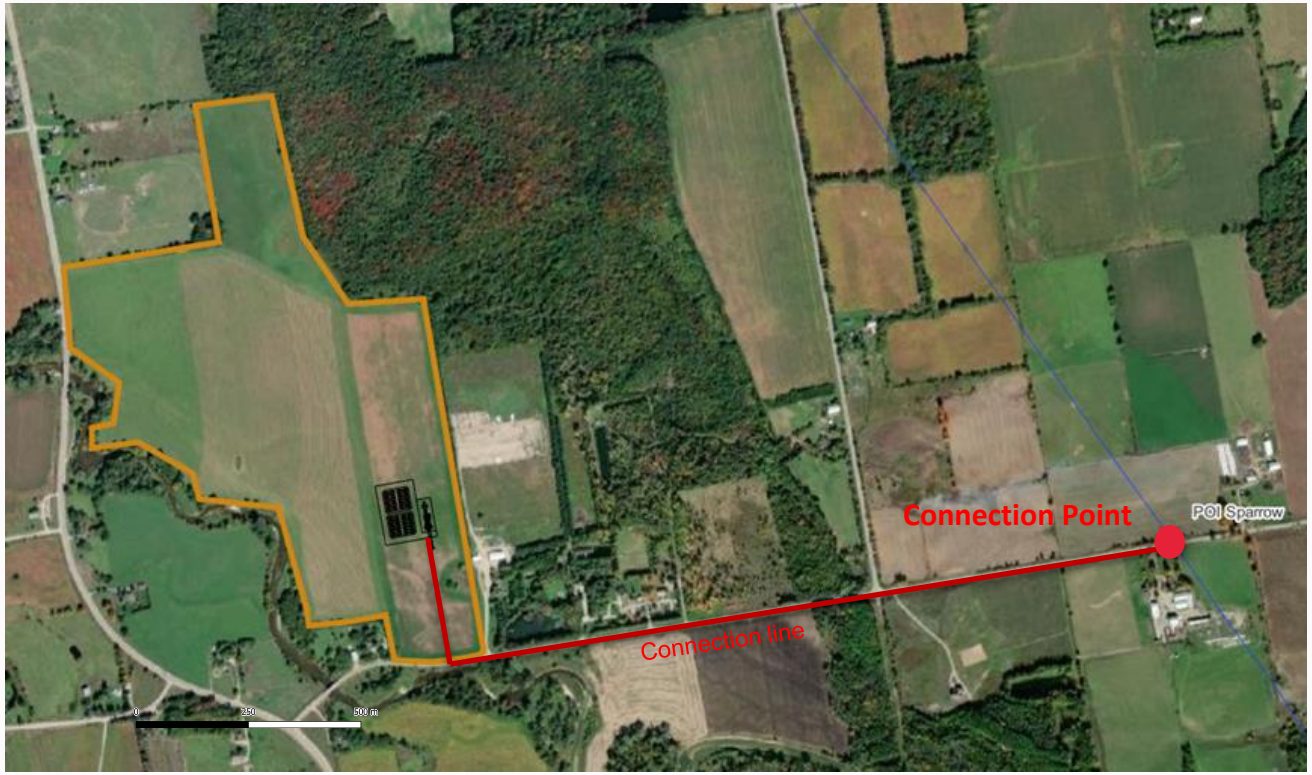
A site consists of containerized batteries, inverters, medium voltage transformers, gravel internal access roads, buried collector and communication cabling, a small transmission substation, potential garage and operations and maintenance building.

Containerization

Each 20 ft containers holds up to 6MWh of battery “stacks” connected with DC cables to a main protective device. Also included are communication cables, HVAC and fire safety equipment.

Fire Safety

Each container is equipped with fire alarms and detection as well as fire suppression. Battery management systems can monitor battery cell temperatures and allow for mitigation through disconnection and HVAC controls.



THE SOLUTION

Save it for a rainy day

This project is proposed to be a 100 MW battery energy storage system with 4 hours of capacity (400 MWh) connected to the 115kV transmission lines. It will sit on roughly 15 acres of land. Each charge of this battery can power 400 households for an entire month.

Location: Northeast Corner of Grey Road 10 and Grey Road 28

Why was this location chosen:

- Close to growing populous to provide power locally
- Close to distribution and major transmission lines for easy interconnection
- Land that is flat and cleared to cause no new environmental disruptions
- Long major roadway for ease of delivery during construction
- Limited residences affected and can be visually concealed

SPARROW STORAGE

THE PERKS

Here’s how your community can benefit

- Grid Modernization for Greater Reliability
- Emission Reduction
- Economic Development
- Conserving Fresh Water Resources
- Supporting Community Growth

Project Timeline

NEXT STEPS

LT1 RFP 2023 -2024

- December 2023 – bid into RFP.
- IESO reviews bids and selects winners.
- May 2024 – Contracts are awarded

Permitting 2024-2025

- 12-18 Months for HONI and IESO studies.
- 6-12 Months for MTF Class EA studies.
- 6 Months for local permitting and zoning amendments.

Planning 2025-2026

- HONI starts interconnection construction.
- Procurement of major material and equipment.
- Contractor selection.

Construction 2026-2027

- Site access, earthworks, fencing and foundations
- Electrical and mechanical equipment installation.
- Commissioning, site clean-up and landscaping.

Operations 2027

- 20-year operations period.
- Limited on-site personnel. Off-site monitoring.
- Decommissioning and site restoration.

Questions?

MAILING ADDRESS

A-56 Mill Street East, Unit 183
Acton, Ontario
CANADA
L7J 1H3

OUR WEBSITE

https://www.shiftsolar.ca/sparrow-storage

AVAILABILITY

Monday – Friday
8:00 – 5:00 PM EST

GET IN TOUCH

info@shiftsolar.ca