

Meeting Minutes

Public Community Meeting: Tuesday, December 13, 2022 Proposed Battery Energy Storage System – York Energy Centre, Township of King (This meeting was held on-line)

Session 1

The meeting began at 5:35pm. Jay Shukin noted that the purpose of the meeting was to provide information on a proposed Battery Energy Storage System (“BESS”) of up to 120 megawatts (“MW”) for the York Energy Centre (“YEC”). This will be the first of two sessions on the Project, the second being held at 7:00pm for those unable to attend this earlier session.

A territorial acknowledgement was given, noting the traditional territory of the Wendat, the Haudenosaunee and the Anishinaabe peoples and the treaty lands of the Mississaugas of the Credit.

The Capital Power project team was introduced:

- Wil Danek (project lead)
- Bill Mercer (plant manager of the York Energy Centre)
- Sandy Fleming (engineering lead)
- Jacob Fountain (engineering)
- Lawrence Nasen (environmental)
- Kara Hearne (SLR Consulting).

Also joining the meeting, but not introduced, was Sean McKerroll (Manulife), Jennifer Whittard (SLR) and Stef Normand (SLR).

Jay welcomed Councillor Avia Eek, Township of King.

Background was provided on Manulife and Capital Power, which co-own the York Energy Centre (YEC).

Wil Danek provided background on Project related matters:

- The Project comes in response to the growing demand for electricity in Ontario.
- The Independent Electricity System Operator is seeking 4,000 MW of new capacity to address the anticipated shortfall. Capital Power anticipates bidding the Project into this process.
- Information was provided on BESS systems and the benefits these systems can provide to the grid.

Wil then provided background on the Project proposed for YEC:

- Project will be located within the lands owned by YEC, on a site immediately north of the existing facility. Footprint: 1.5 hectares (4 acres).
- The BESS would provide up to 120 MW for a maximum of four (4) hours.

- Trees/shrubs would be planted to create a visual barrier. An enclosure wall would be built to address noise.
- No air emissions will result from the Project.

A site map/aerial photo was presented showing the proposed facility location, the proposed transformer, the point of interconnection and the existing transmission line.

The environmental approval process was discussed. It's expected that approvals will be required from both the provincial government and local government/authorities.

The anticipated timeline was discussed. IESO requires the project to be in commercial operation by May 2025.

Contact information for Capital Power was provided should stakeholders have further questions about the Project.

Question and Answers

Question from meeting participant: Is the project scalable? Can it be adapted for solar and wind energy?

Answer: The scalability of the batteries themselves is quite good – the modules come sea can size and the more you stack the larger the capabilities are for energy output. Constraints to the scalability are the size of the site and deliverability to the electrical grid, but within these boundaries the battery modules can be scaled up or down.

In terms of adapting the BESS to accommodate solar and wind power, BESS facilities can complement renewable resources as they are capable of storing both wind and solar energy and discharging it to the grid at times of need.

Question from meeting participant: What is the life of the batteries and how will they be disposed of afterward?

Answer: Twenty years is the expected duration/lifespan of the batteries, but this timeframe is dependent on how heavily the batteries are used and the amount of energy they discharge to the grid each time.

In terms of disposal, there are numerous recycling options for the batteries. They can be removed from the containers and provided to recycling organizations that will take apart the batteries and extract the existing components, including the key metals for repurposing into new batteries and appliances or to be used in different applications.

Question from meeting participant: In terms of noise mitigation, what is the source of the noise production, is it an electric hum or is it from cooling fans?

Answer: The BESS will produce noise both from the transformers (when they are in use) as well as the HVAC system inside of the battery containers, which are required for thermal management of the batteries. Cooling fans will turn off and on depending on heating and cooling needs inside the containers.

Work to determine noise mitigation is still in the preliminary stages however it is anticipated that the primary mitigation measure will be the installation of a sound barrier. It is expected that the noise barrier wall may be approximately five metres high and would enclose the entire BESS unit (batteries, inverters and transformers).

The YEC site's operating approval has permissible daytime and nighttime sound limits, and it is Capital Power's objective to get the BESS below these levels at all times. The facility operates within the acceptable range required by the facility's existing permit requirements, and there will be no noticeable change in noise levels to adjacent receptors.

Question from meeting participant: Pleased to know that the BESS development will not be any louder than the existing facility. During previous visits to YEC, there was no noticeable sounds coming from the plant. What will be the frequency of the additional noise when the BESS is in operation?

Answer: When the BESS is in use (i.e., charging and discharging) these will be the peak times of noise emissions. When batteries are not running there will be very little noise coming from the BESS itself.

Question from meeting participant: Given the site's proximity to watercourses, recommend Capital Power considers implementing Low Impact Development (LID) measures to address on-site stormwater management (as an alternative to constructing stormwater retention ponds). The Lake Simcoe Regional Conservation Authority has an LID expert that could provide more information.

Overall, I am happy to see coniferous trees being included in the site design to increase canopy cover and provide a visual shield from the BESS. So far, YEC has been an incredible community partner that takes public input seriously. Thank you.

Question from meeting participant: If Darlington takes on a mini nuclear expansion will there be need to scale the BESS facility up over time – in the short term?

Answer: It is not anticipated for the nuclear expansion (small modular reactor somewhere in the 200 - 400MW range) at Darlington to have a direct impact on how the BESS at YEC operates in the short term. In the long term, as other facilities get built out and become larger, there may be an impact to how the BESS operates as the system supply mix changes the needs of the BESS facility.

One of the great attributes about batteries is real time stabilization of the grid. In places where the voltage goes up and down batteries have the ability to regulate that quite quickly. That's not what this BESS would be used for initially, but the system is capable of it if the needs change in the future. Batteries are very well situated in an electric grid with nuclear generation because nuclear power likes to run at the same level of generation at all times of day. So, a BESS could store excess nuclear power at night and discharge it during a time of day when it's needed.

Comment from meeting participant: Currently there are unknowns regarding energy supply in King Township. Many of the industrial properties are concerned about having a guaranteed source of affordable power in the future, so as this process moves along, it's important to have people well informed of the project and what Capital Power is doing.

Question from meeting participant: The land proposed for the BESS hasn't been used for agriculture for a long time, but will it be subject to the Greenbelt lands legislation?

Answer: The land is in the protected countryside so we will be looking at the requirements within the Greenbelt Plan and working with the Township as we proceed through the regulatory process (if the project is approved by IESO) to ensure compliance with all relevant local and provincial policies.

Comment from meeting participant: Going electric is a smart choice to increase environmental responsibility with our carbon footprints. Greatest concern from an adjacent property owner perspective is the noise impacts, but Capital Power has addressed these concerns. When both generating facilities are running there is a hum that can be heard but knowing the BESS won't make it louder is a good sign. Overall, it's a great project.

Comment from meeting participant: The building of the YEC facility was at first seen negatively within the community but now it has my support. Happy to see the BESS project isn't taking any active agricultural lands and that Capital Power is being thoughtful to the community and adjacent landowners.

Jay closed off the meeting, noting again where questions could be addressed.

The meeting closed at approximately 6:15pm.

Session 2 at 7:00pm

The 7:00pm session of the public community meeting opened with no new attendees from the earlier. The project team remained on the meeting site until 7:30pm. No new attendees joined the meeting.