FAQ: Hutchison Battery Energy Storage Facility

As part of ongoing community engagement, Enfinite has prepared answers to Frequently Asked Questions (FAQ) about the Hutchison Battery Energy Storage Facility project.

Enfinite is committed to transparency, and to working with the communities in which we operate. Enfinite believes in responsive engagement with landowners and community members interested in the project to help share accurate information and address concerns.

Who is Enfinite? Is it a foreign company?

We are a North American leader in energy storage and the largest battery storage operator in Alberta. Headquartered in Calgary, we are 100% Canadian owned and funded. Enfinite specializes in developing and operating energy storage solutions with a focus on providing reliability and stability to Alberta's power grid and the communities it serves. Our projects are making a difference. For example, during the cold snap in January 2024, our nine operating storage facilities provided a total of 240MWs to help shore up Alberta's grid during the alert periods when other forms of generation weren't able to provide electricity. Our solutions helped to stabilize the electricity system and avoid blackouts in Alberta.

What are the main elements of the project?

Enfinite is proposing to build a 100-Megawatt battery energy storage facility in Cypress County. This project involves creating a lithium-ion battery storage facility to store electricity. The stored energy will be released into the Alberta grid when supplies of available electricity are low[1] – as they were in January 2024.

This project aims to make Alberta's energy grid more reliable by reducing the need for power from other provinces when there's not enough electricity generated in Alberta. It will also help regulate the grid's frequency, which protects grid infrastructure which is paid for by Albertans' electricity bills. Enfinite's nine existing battery facilities in Alberta can respond to grid operator directives in less than 250 milliseconds, providing quick support for the provincial electrical system.

[1] Electricity will be released to the Alberta Interconnected Electric System (AIES) through the AltaLink Foothills 237S Substation (237S Substation).

Why was the proposed location selected?

Choosing a location for the battery energy storage facility was a rigorous process. Enfinite considered various factors including the shape and slope of the land, nearby environmental features, proximity to communities, and grid connectivity. The site is considered preferred because it had been previously disturbed, is near the existing substation, which reduces the need for long transmission lines, and the proposed transmission line layout would be adjacent to existing infrastructure such as roads and existing powerlines further mitigating more disturbance.

Why is this project needed?

We've seen past winters, during grid alerts, that Alberta's electricity grid needs more capacity. This project helps make Alberta's electricity system more stable and reliable by storing electricity and dispensing it when the system needs it.

What is the size of the storage facility?

The project will occupy less than 5 acres on a 160-acre parcel of land. We deliberately selected a site for minimal impact on residents and other properties and to minimize the amount of new transmission infrastructure that would need to be built (and which Albertans pay for through transmission and distribution fees on their power bills).

What safety measures are in place to protect residents in the area?

We have been operating battery energy storage facilities in Alberta for years without a single safety incident, so we expect minimal chance that an unsafe event will occur at this project site. We have taken care to provide above-world-class safety precautions for this and our other sites:

- Batteries will be stored in contained, leak-proof, stand-alone modules.
- We have prioritized extensive fire testing of our units.
- And we have doubled the required distance between modules to prevent fire spreading in the rare case it occurs.

How is Enfinite protecting against the risk of fire?

The likelihood of a fire at our facility is exceptionally low. However, as Albertans ourselves, we know all too well how devastating fires can be to homes and livelihoods.

That's why we're going above and beyond to ensure the safety and security of the facility. Some of our measures include:

- 24/7 monitoring of the facility by real people, including two other third parties.
- Built-in, automatic fire control that meets or exceeds national and international standards.
- Working with local fire departments to ensure that they are equipped to respond in the very rare instance that an emergency takes place.

If there is a fire, what is Enfinite's emergency plan?

In the highly unlikely event of a fire, local fire departments are equipped and trained to manage the situation swiftly and effectively with standard response equipment. We are committed to continuing to work with local first responders to ensure that if a fire does occur the risks to surrounding residents, communities, and livestock are minimal and that they have the tools to manage it.

What is the risk of materials leaking into ground water?

Due to the nature of the batteries being a closed system, it is not anticipated there will be any potential leaching of materials into the ground water or soil.[2]

What standards and regulations govern the Hutchison Battery Energy Storage Facility?

Enfinite will have to apply to the Alberta Utilities Commission, and they will be the regulatory body that makes the decision for project approval. In considering the application, the AUC will review if other regulatory bodies have been properly consulted and their regulations have been met as part of the application.

Enfinite will follow the codes and standards under UL9540 (Energy Storage System Requirements), NFPA 70 (National Electrical Code), NFPA 855 (Standard for the Installation of Stationary Energy Storage Systems: 2020 Edition), and international fire codes.

Enfinite seeks to exceed industry standards and adheres to all relevant regulations and safety codes.

[2] The units include built-in catch trays which will have a capacity 1.5 times the volume of cooling liquids used by the unit, and we have made other allowances to further reduce risk.

How big is the Hutchison site, and how many megawatts will it generate?

The Hutchison Battery Energy Storage Facility will occupy less than 5 acres of land and will be capable of providing 200-Megawatthours (MWh) of electricity. This means at grid maximum capacity and demand; the battery could provide 100 MWs of electricity for up to two (2) hours.

How will the site be secured during operation?

Site safety and security are front of mind for Enfinite.

The site will have secured fencing, motion sensing cameras, and proper lighting on the facility. Enfinite will also be able to monitor the site 24/7 with infrared cameras, motion sensors, and temperature monitors.

For further inquiries or concerns, please email HutchisonBESF@enfinite.com. We value community input and are committed to transparency throughout the project.