



# Enfinite eReserve7/8 Battery Energy Storage Facility

## What is it and why is it being proposed?

Enfinite is proposing the construction and operation of a 40-Megawatt (MW) battery energy storage facility (BESF) consisting of eReserve7 (20 MW) and eReserve8 (20 MW) located at NW-08-069-08 W6M in the Municipal District of Greenview (the “Project”). The Project will consist of a lithium-ion BESF to store electricity for discharge into the local distribution system.

The Project will be on previously disturbed, privately owned land directly north of the ATCO-owned Wapiti 823S Substation, approximately four (4) kilometers west of the community of Wapiti, Alberta. The Project facility will connect to two (2) existing ATCO 25 kV distribution lines located south from the proposed site. Enfinite is working with ATCO to coordinate the distribution connection of the Project to the existing system.

## Why battery storage?

Using battery storage supports the reliability of the local distribution network. Battery storage holds energy generated today, then releases that energy to the distribution system during peak demand when consumers need power the most.

## What do battery modules look like?

Battery modules are most commonly neutral in color and are comparable in shape to a shipping container. Visual impacts have multiple ways to be mitigated and will be discussed with community members and implemented where applicable. Photos of existing battery storage facilities provided in this newsletter are anticipated to look similar in appearance to this Project.

## How will it work?

Connected to existing alternating current (AC) distribution lines, the eReserve7/8 BESF will be used to take electricity from the distribution system when demand is low and stored as direct current (DC) within the battery modules. When the demand is high, the power will be inverted back to AC and deployed back into the local distribution system.

# What will make up the battery storage facility?

Through ongoing design work, Enfinite requires temporary and permanent space of approximately 3.5 acres to construct and operate the facility. The following Project components will be within the Project footprint of 114 m x 124 m (374 ft x 407 ft) with some of these components within a fenced perimeter:

- 22 battery modules with inverters
- 12 transformers
- 2 grounding transformers
- 2 switchgear and control buildings (with associated protection and controls equipment)
- Thermal cameras
- Motion cameras
- Underground fibre optic
- Outdoor lights
- Parking area

The batteries will be stored in contained, leak-proof, stand-alone modules and will be set apart from adjacent modules to allow for potential installation of new modules once existing modules have decreased in their capacity due to use.

Temporary workspace and a temporary access road will be used to construct the Project. For operations, a permanent gravel access road will be installed off of Provincial Highway 666.

## How long do the batteries last?

Battery modules have an anticipated lifespan of approximately 20 years. Additional operation can be expected past this lifecycle with proper maintenance and battery replacements as required. At the end of the modules lifespan, Enfinite will follow the manufacturer's recycling guidelines.

## Who approves the Project?

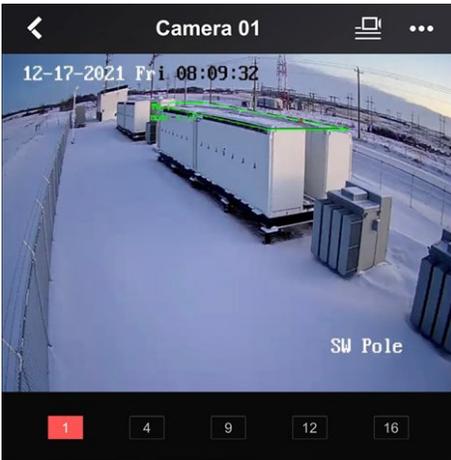
The Project will be submitted for regulatory review and approval in the upcoming months to the Alberta Utilities Commission (AUC). Information regarding the AUC review process and how you can participate can be found in their brochure "*Participating in the AUC's independent review process to consider facility applications*" at [www.auc.ab.ca](http://www.auc.ab.ca).

## How was the site selected?

To determine the site, various constraints were reviewed and considered, including, terrain, land features, proximity to a substation, landowner willingness, and existing electrical capacity. These factors assisted in narrowing the area under consideration and determining the location for the Project.



## Are battery energy storage facilities safe?



Lithium-ion batteries are used in everyday items, such as mobile phones and electric cars, and are the dominant storage technology today.

Enfinite has taken measures to manage and mitigate the risks to facility equipment, and to the surrounding area. The facility will be enclosed within a well-lit fenced area. Each battery module will be monitored by infrared cameras and temperature monitors/alarms, in real-time (see images to the left), for any fire, health, and safety risks. If an alarm is triggered at a battery site, facility operators are notified immediately, and local emergency response providers are notified to implement the emergency response plan (ERP). The ongoing use of these thermal and motion cameras on-site will allow Enfinite to remotely monitor the Project and pre-emptively identify any safety issues that may arise.

As part of Enfinite's ERP, the Project will follow safety and applicable regulations and will be compliant with applicable safety codes and standards.

Enfinite will be engaging with local fire and response resources to prepare a site specific ERP that satisfies the regulatory requirements and implements safety measures to minimize potential safety risks associated with the facility. A working copy of the site-specific ERP will accompany the AUC application and be made available to the public at the time of filing.



## Are these facilities loud?

Enfinite will model noise levels to develop a Project that is compliant with *AUC Rule 012: Noise Control*. It is anticipated there will be limited noise from the facility and the results of a Noise Impact Assessment will be submitted at time filing with the AUC.



## Will the facility need continual lighting?

Lighting is required from a site safety perspective (Alberta Electrical Utility Code – 8-222). Enfinite will work with local residents to understand any potential concerns and can discuss potential mitigation options such as light-shielding or lower light profiles.



## What environmental aspects are considered?

Enfinite will submit an environmental evaluation and environmental protection plan as part of the Battery Facility Application that considers potential impacts and potential mitigation measures to environmental features. The environmental evaluation consists of a desktop review and site visit(s), as applicable, and will be summarized for the AUC who is the regulatory decision maker for the Project.



# What is the Project timeline?

*\*subject to change*



## Who is Enfinite?

Let's power progress together. Originally launched as WCSB Power in 2018, Enfinite specializes in developing robust energy storage solutions that bring greater reliability, viability, and sustainability to the power grid and its stakeholders.

Enfinite is committed to the long-term success of our projects, and the continued stability and affordability of power within the communities we impact through our involvement as both a project owner and operator.

For more information on Enfinite, visit our website at [www.enfinite.com](http://www.enfinite.com).

## What does Enfinite want from you?

Feedback from the community will help our team to understand and minimize potential impacts to people and the environment. Any information or feedback you can provide will be considered in the Project's decision-making processes. Sharing your feedback and knowledge of the area will help Enfinite make informed decisions as the Project moves forward.

**Questions or comments about the Project? Contact us!**

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