



2024 | FortisAlberta

Bill 22

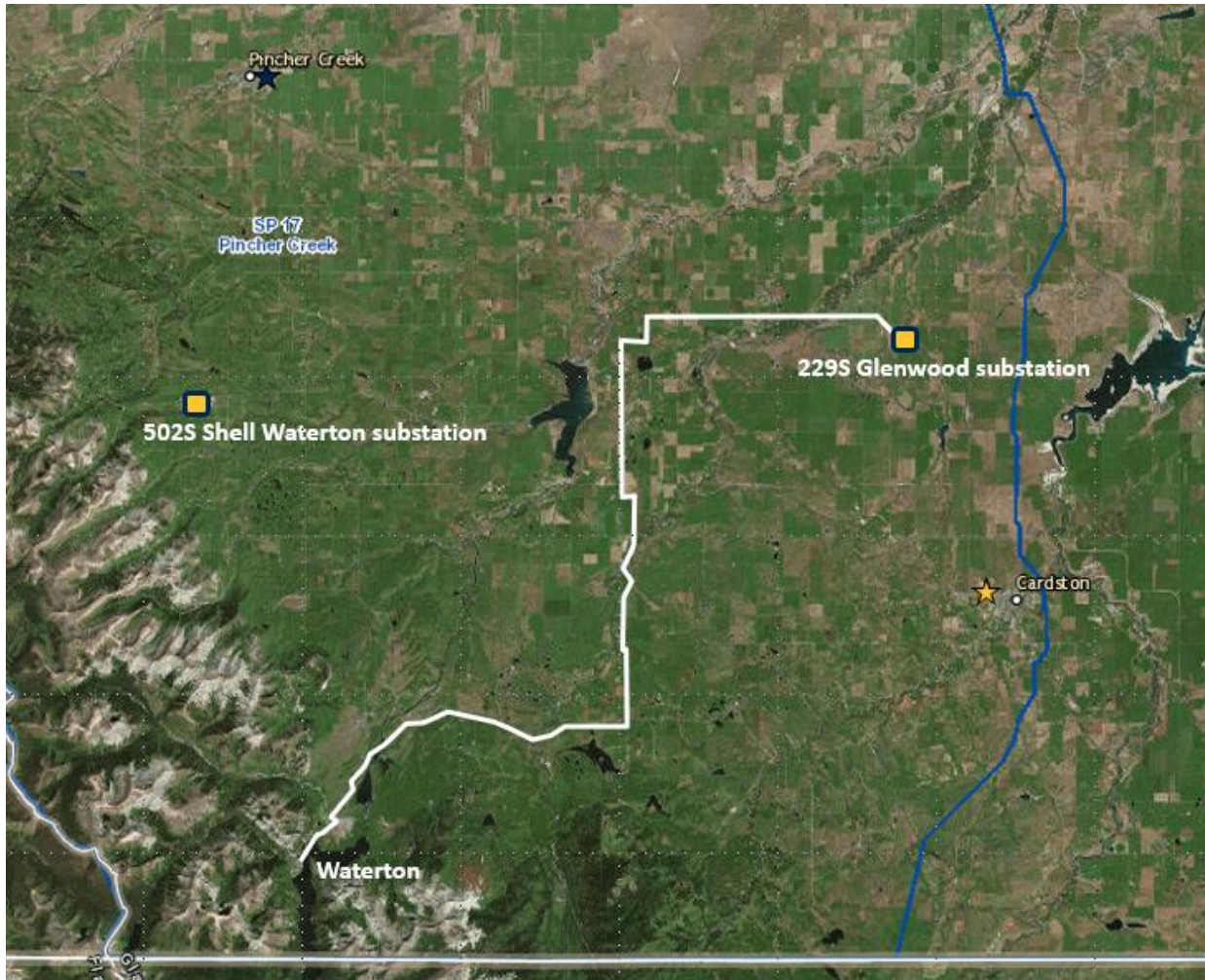
FORTIS
ALBERTA

FortisAlberta Facts

- » We provide safe and reliable electricity to more than a half-million residential, commercial and industrial customer sites across central and southern Alberta
- » We own and operate approximately 129,000 kilometres of power lines, more than 1.1 million power poles, representing approximately 60 per cent of Alberta's electric distribution network
- » We deliver approximately 17,000 gigawatt hours of electricity annually, of that, 15 per cent is generated by renewable sources directly connected to our system
- » We operate in 240 communities across the province, employing more than 1,300 Albertans



Deployed Assets - Waterton BESS



Must supply approximately 1MW of load

Must be available whenever there is a line outage

Must be able to sustain microgrid for several hours

Must adhere to strict parameters for line and frequency control

Image: mywaterton.ca

EMISSIONS
REDUCTION
ALBERTA



ALBERTA
INNOVATES



FORTIS
ALBERTA

FORTIS
ALBERTA



Natural Resources
Canada

Ressources naturelles
Canada

Deployed Assets - Lessons Learned



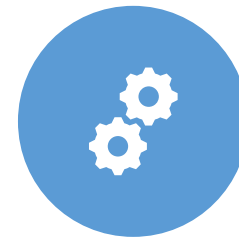
PROCUREMENT
REQUIREMENTS



SYSTEM
ARCHITECTURE



PROTECTION &
CONTROL



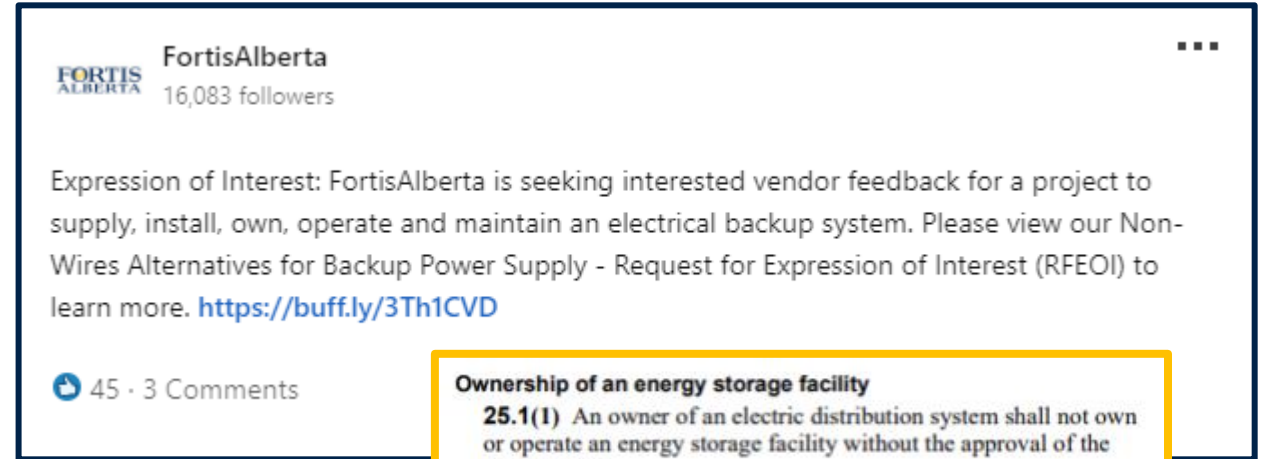
TRANSITIONING
LOGIC



COMMISSIONING
AND START-UP

Ongoing Work - Request for Expression of Interest

- » RFEOI went out in October 2022
- » Solicit 3rd Party Feedback
- » Comments would be used to help develop RFP to incorporate 3rd party comments
- » RFP development delayed due to:
 - » Contractual requirements which are potentially complicated
 - » Legislation and accompanying regulations were not yet in force
 - » Ongoing consultation for AUC Rule-007



FORTIS ALBERTA FortisAlberta
16,083 followers

Expression of Interest: FortisAlberta is seeking interested vendor feedback for a project to supply, install, own, operate and maintain an electrical backup system. Please view our Non-Wires Alternatives for Backup Power Supply - Request for Expression of Interest (RFEOI) to learn more. <https://buff.ly/3Th1CVD>

👍 45 · 3 Comments

Ownership of an energy storage facility

- 25.1(1)** An owner of an electric distribution system shall not own or operate an energy storage facility without the approval of the Commission.
- (2)** Approval under this section shall not be given unless the Commission is satisfied that the owner is not able to competitively procure non-wires services.
- (3)** Notwithstanding subsection (2), the Commission may approve an application for approval, having regard to the public interest and any economic alternatives available to the owner, if
- (a) there is only one provider of a non-wires service available,
 - (b) competitively procuring non-wires services is not economic, or
 - (c) the proposed use of an energy storage facility would provide superior safety and reliability to the electric distribution system.

Future BESS Deployment



When and
where?

FortisAlberta
and BESS?

Affordability

Finding the Right Balance

Diversity of Feeders Diversity of Solutions

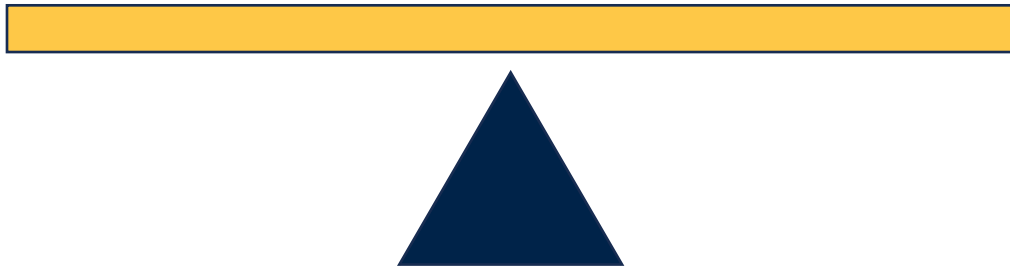


Table 3. Number of Representative Feeders by DFO

DFO	Total Number of Representative Feeders
ATCO	6
ENMAX	2
EPCOR	5
FORTIS	8
LETHBRIDGE	1
MEDICINE HAT	1
RED DEER	0
Total	23

In contrast, FORTIS has the highest number of representative feeders (8). FORTIS' distribution system has both the highest number of feeders and greater variability in feeder properties, ranging from short feeders with high load density to very long, low load density feeders with higher distribution feeder operating voltages (i.e., 25 kV).⁷

Source: Alberta Utilities Commission report, Net-Zero Analysis of Alberta's Electricity Distribution System

