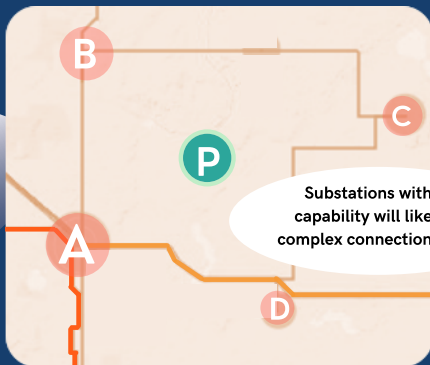


TRANSMISSION CAPABILITY MAP

A GUIDE IN IDENTIFYING POTENTIAL LOCATIONS TO INTEGRATE GENERATION

Substations with capability greater than my project are favorable locations to consider

The bigger the bubble, the larger the capability...



Substations with little capability will likely be a complex connection request



Assumptions

Historical merit order, load and interchange



Installed Transmission System as Dec 31, 2021

- All elements in service
- Transmission equipments (>=69 kV) monitored



The map provides directional information as one of the inputs to support market participants' connection decisions



The capability value is not guaranteed. Comparing the project size to the capability signals the level of complexity expected in the connection process.



The connection process is the official process to facilitate system access service on Alberta's transmission system

Methodology

- Substations are evaluated independently (*not additive*)
- DC power flow analysis
- Hourly market simulation with economic generation dispatch
- Optimization techniques to determine capability without congestion

Results

- Provide substation capabilities in Central East and South Planning regions
- Size of bubbles indicate the relative magnitude of substation capability
- Capability is provided by bus and is selected to align with planning practices