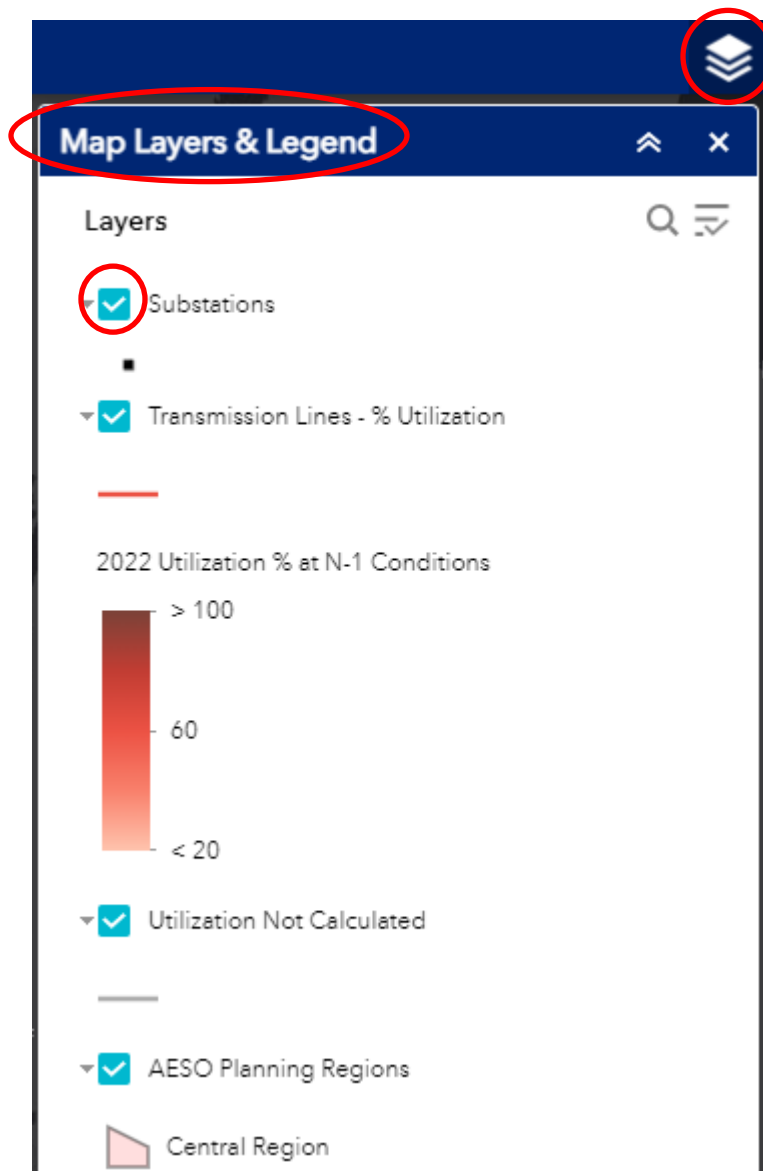# AESO Utilization Map User Guide

## Map Overview

The AESO Transmission Utilization Map is an online interactive tool that provides a visual, geographic illustration of transmission utilization – the estimated utilized capacity for each line as a percentage of the line's thermal rating. The map illustrates the 2022 utilization for 240 kV and 500 kV transmission lines. For any questions regarding usage of the map please contact maps@aeso.ca.
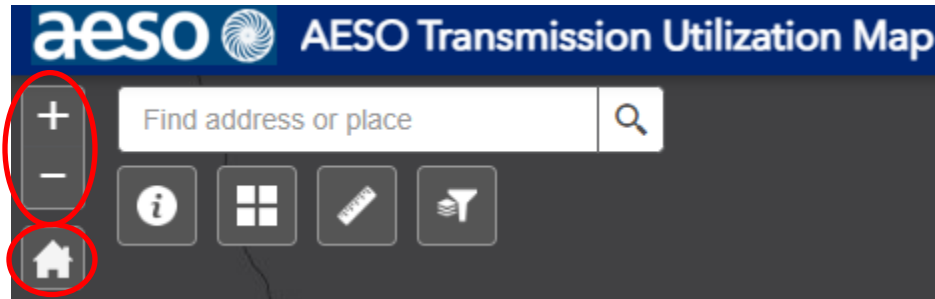
## Map Basics

### Layers & Legend

The map layers are shown within the Layers & Legend panel on the right-hand side of the map and can be checked/unchecked to toggle visibility:

**Alberta Electric System Operator**

📍 Calgary Place, 2500, 330 - 5th Avenue SW Calgary, AB T2P 0L4

📞 Phone: 403-539-2450 | Fax: 403-539-2949

**www.aeso.ca**

🐦 @theaeso

## Navigation

Navigate within the map by clicking and dragging across the screen. Zoom in/out using the mouse wheel or the +/- buttons in the top left of the map. At any time return to the default map view by clicking the Home button:
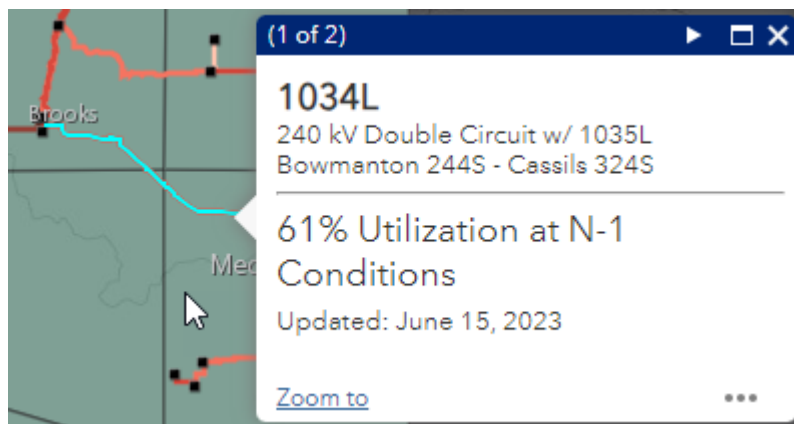


## Transmission Line Utilization

The white-red colour scale on each transmission line provides a high-level illustrative view of the 2022 utilization on that line. A darker red indicates higher utilization and vice-versa:



## Line Utilization Pop-Ups

To view more specific utilization information on a line, click on that line and a pop-up will appear:
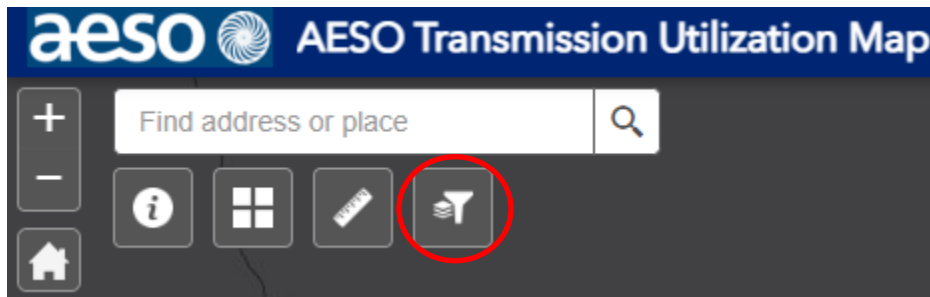
## Map Tools

### *Location Search*

Search for a specific address or location in the search bar at the top-left of the map:
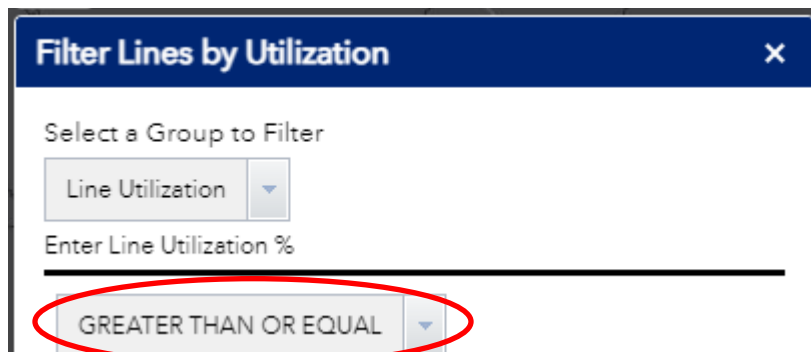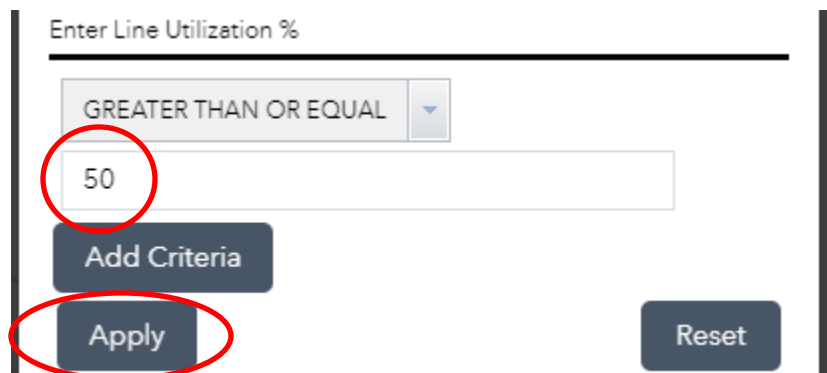


### *Filter Transmission Lines Display*

The Filter tool allows the map user to only show lines based on percentage of utilization and is accessed with the funnel button at the top-left of the map:
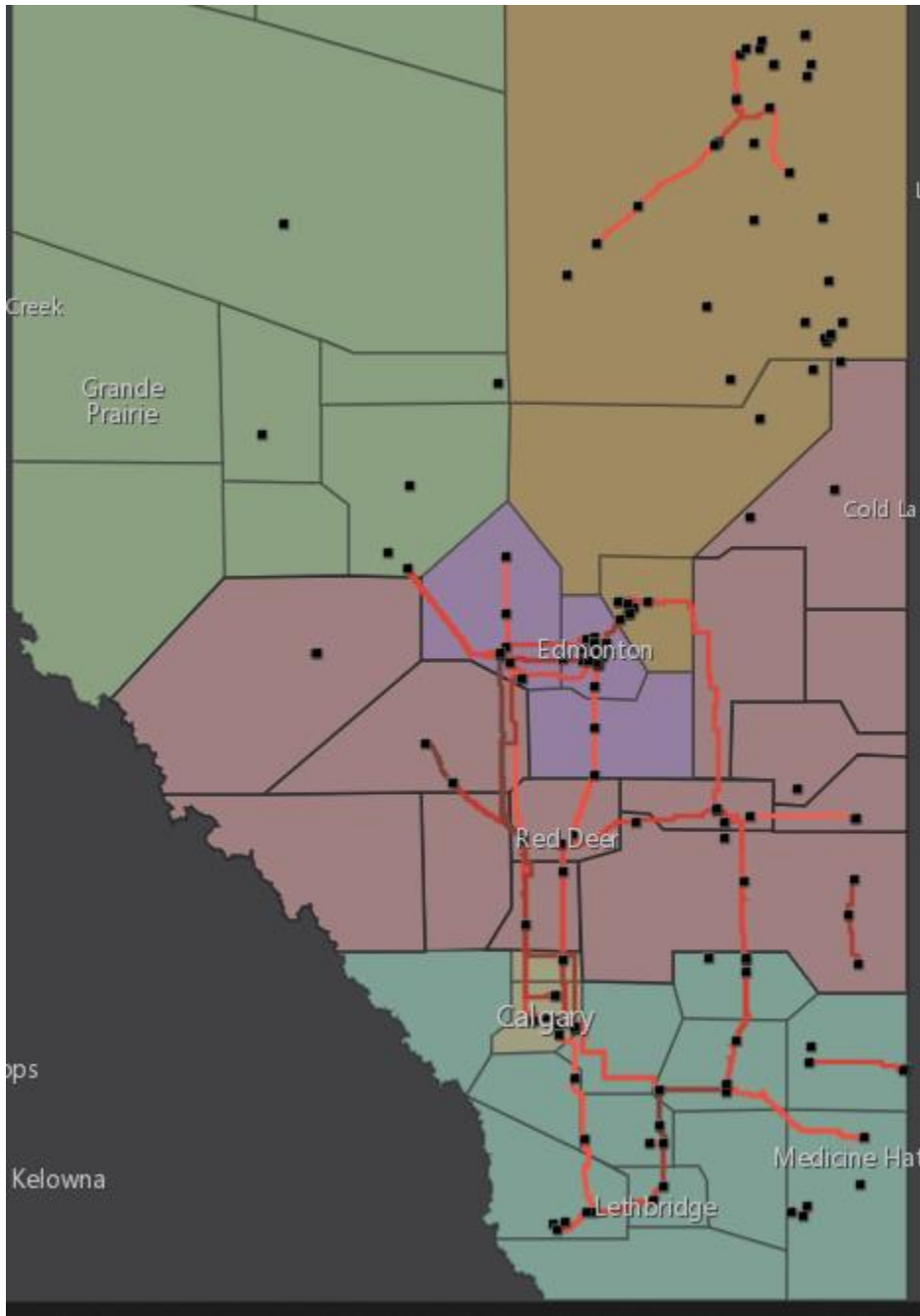


To filter the lines layer, click the filter button then select the desired mathematical operator.  The default operator will be GREATER THAN OR EQUAL:



Next, enter the value to be filtered for and click the Apply button:

When a filter is applied the map will only display features that meet the filter criteria. The filter below displays only lines with a utilization percentage of 50% or above:
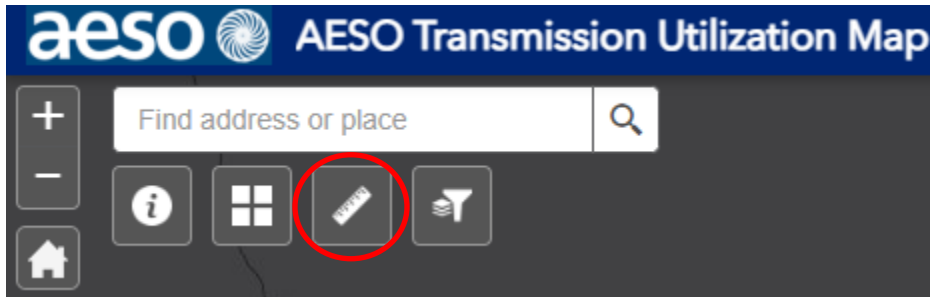


Filters will remain in place in the map until the Filter Reset button is clicked.
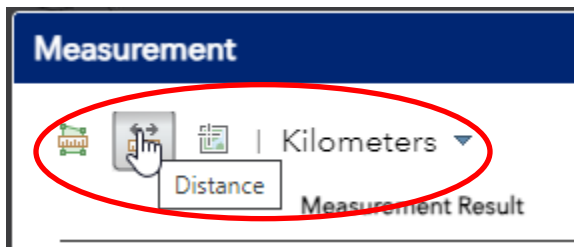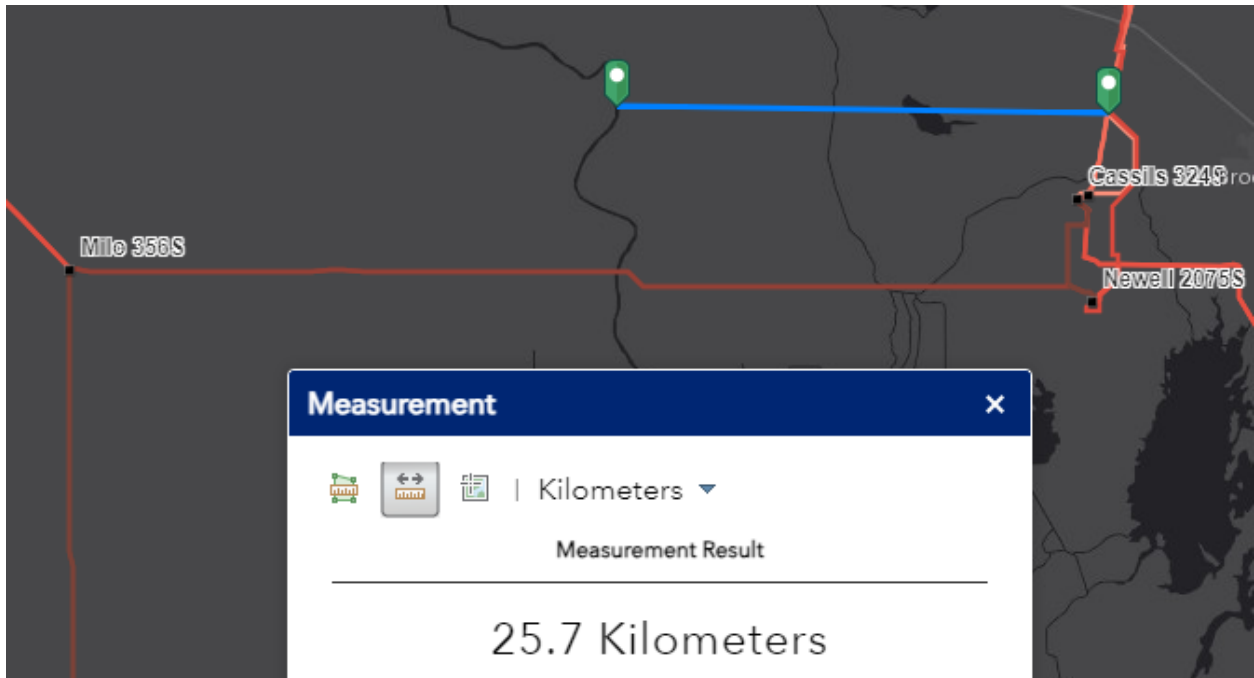
## Measure Tool

The measure tool allows for geographic measurements of distance or area and is accessed with the ruler button at the top-left of the map:



Select whether to measure Distance or Area and the desired unit of measurement:
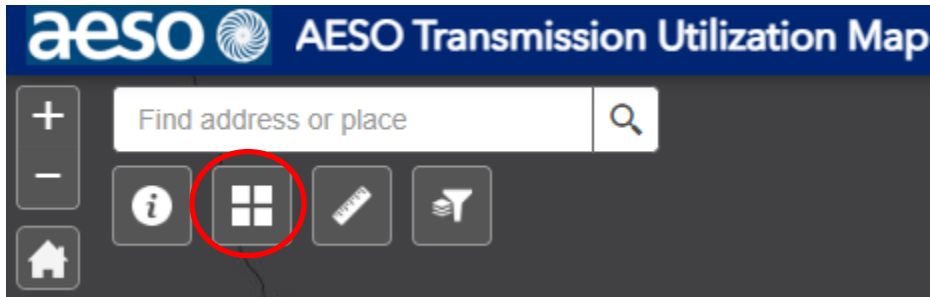


Click on the map to begin the measurement and to add subsequent points to the area polygon or distance line.  Double-click to complete the measurement.   A typical use for this tool would be measuring the distance from a geographic location to a line, such as in the example below:



## Change Basemap Background

The Basemap Gallery tool allows the user to change the background of the map and is accessed with the grid button at the top of the map:



A wide array of Basemaps is available, including detailed satellite imagery. Different basemaps will focus more heavily on different features within the map. Users can choose the basemap that best suits their purpose: