Alberta Electric System Operator
3000, 240 4 Avenue SW
Calgary, AB • T2P 4H4
aeso.ca

AESO Congestion Portal - Frequently Asked Questions (FAQ)

What is the purpose of the congestion portal?

The portal provides congestion data and geographic context to support market participants in making informed decisions about the size and location of their connection project.

How often will the congestion results be updated?

The congestion results will be updated quarterly. In the event of major changes to the system, we may update the results as needed to reflect these changes.

When does congestion occur?

Congestion occurs when the transmission system cannot accommodate all in-merit generation, because the resulting power flows would contravene reliability standards and/or ISO rules.

How are congestion statistics calculated?

First, a congestion assessment is performed using a direct current (DC) power flow solver that incorporates existing generating units, generating units that have met the AESO's project inclusion criteria, forecasted load, and the network topology with planned transmission system projects. Second, the project's hourly production profile is modelled. Finally, congestion frequency and congested energy are calculated by assessing the change in transmission line flows resulting from the addition of the new project. For additional details, please refer to the Methodology document.

What constraints are considered in this assessment?

Congestion statistics are calculated based on Category A (N-0) thermal limits under normal system conditions. This assessment does not include Category B (N-1) contingency limits, voltage or transient stability limits, or the effects of remedial action schemes. Voltage and stability criteria are applied to selected transmission corridors to reflect overall system operating limits.

What assumptions are used to model a new project?

The new project's production profile is modelled by scaling the production profile of a generating unit with similar characteristics according to maximum capability.

Does the portal support projects with a T-tap connection?

Congestion statistics for a T-tap connection can be estimated by calculating the congestion at each end of the transmission line being tapped and then applying a weighted average of the results to derive the congestion statistics.

Will there be changes to the connection process because of this portal?

The introduction of the portal does not change the overall connection process. However, the AESO will no longer provide congestion estimates or assessments as part of the cluster assessment process. Market participants can use the portal to access congestion information.

Will the portal provide more information in the future?

The AESO plans to expand the information provided in the portal as required, and if feasible. The enhancements will be prioritized based on feedback, industry need and AESO resources.

Who should I contact if I have further questions or comments?

Please contact us at customer.connections@aeso.ca.