

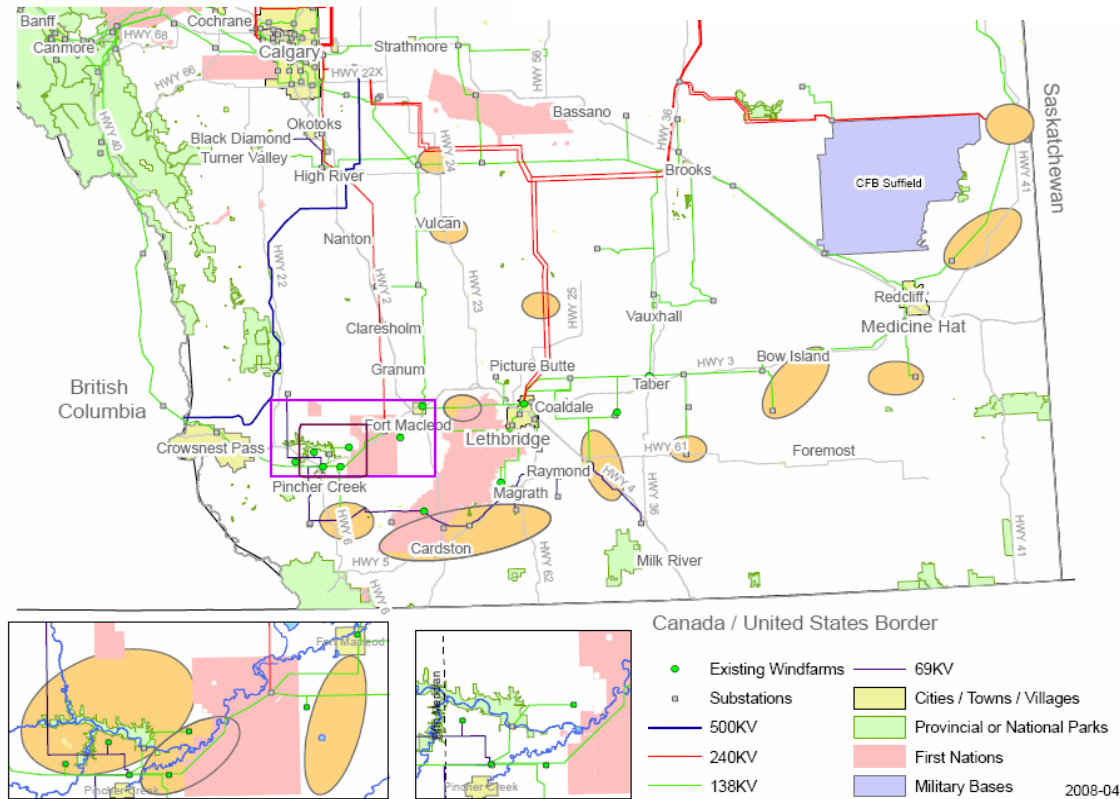
## Southern Alberta Transmission Reinforcement

For more information please contact the AESO at 1.888.866.2959,  
[www.aeso.ca](http://www.aeso.ca) or [stakeholder.relations@aeso.ca](mailto:stakeholder.relations@aeso.ca)

### Who is the AESO?

The Alberta Interconnected Electric System (AIES), our province's transmission system or "grid," is planned and operated by the Alberta Electric System Operator (AESO). This network of higher-voltage transmission lines, towers and equipment carries ("transmits") electricity from generators to large industrial customers as well as lower-voltage systems that distribute it to cities, towns and rural areas. Our job is to maintain safe, reliable and economic operations on the provincial transmission grid.

### Southern Alberta Wind Interest Map



The map above shows areas, in orange, where wind power developments have been proposed; these areas are otherwise known as planning zones.

### Why Transmission system reinforcement is needed for Southern Alberta?

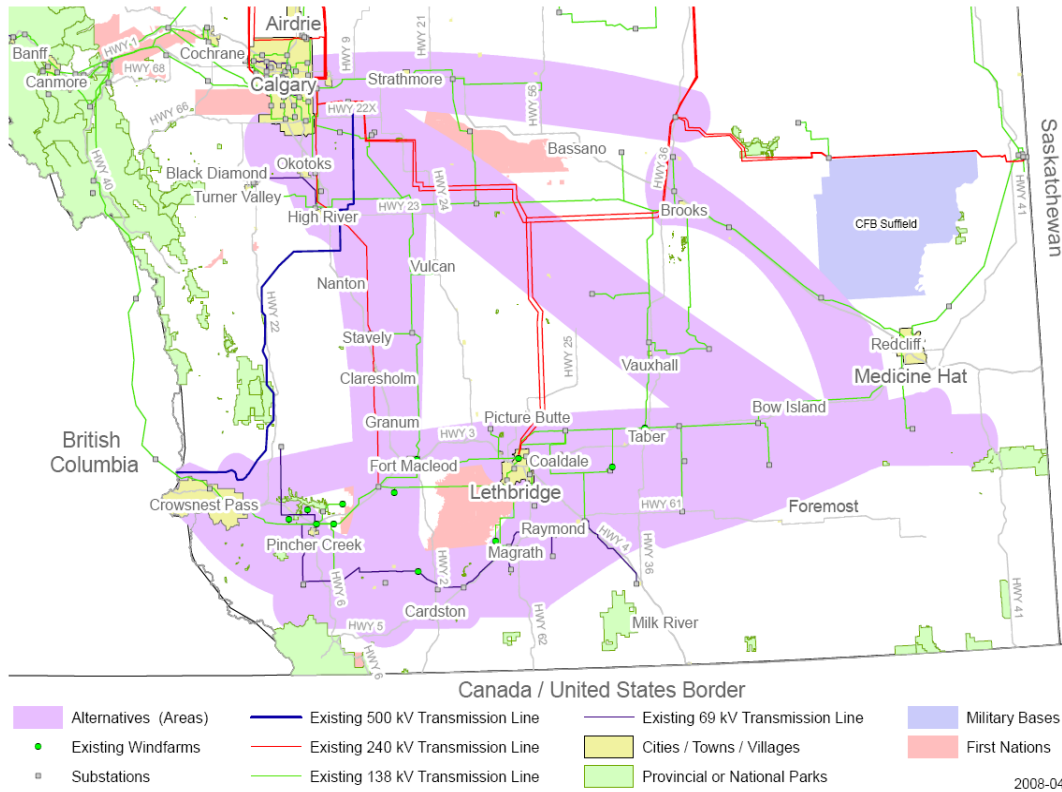
Interest in wind development in southern Alberta is increasing. We are now planning the transmission system to interconnect new wind farms; however, since the existing transmission system in the south is at capacity (i.e., the system cannot carry additional electricity), system reinforcement is needed to move new wind generated power to areas that need it.

### What's happening right now?

The AESO has received applications for wind power development of over 10,000 mega-watts (MW) in Alberta, with more than 7,000 MW distributed across southern Alberta. The AESO, however, anticipates the total wind generation that will likely develop as ranging between 2000 MW to 3900 MW over the next 10 years. (This range includes 523 MW of wind generation currently installed.) The existing transmission system in southern Alberta has very little capacity to connect new wind generation. Therefore, the AESO has developed transmission development alternatives to integrate the anticipated wind generation development in southern Alberta. These alternatives consist of 240 kV AC (2 alternatives), 500 kV AC and HVDC transmission systems. These transmission system alternatives were developed to not only interconnect new generation but also to provide additional, reliable bulk system capacity from the generation sites to the areas where power is needed.

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Consultation with stakeholders will help the AESO determine what alternatives are best suited for southern Alberta.



The map above shows a shaded area where the AESO has identified four alternatives for transmission system reinforcement.

**Where will the new lines be proposed?**

So far, our planning study has produced four main alternatives to address the challenges facing the transmission system in southern Alberta. After gathering stakeholder insights on our alternatives, our study will identify areas where transmission lines and other related facilities could be added to improve the system.

Consultation with stakeholders will identify a preferred solution for strengthening the system; the preferred solution will form part of our Need Information Document (NID) which we will submit to the Alberta Utilities Commission (AUC) later this year. We will also submit individual Abbreviated Needs Information Documents (ANIDs) to the AUC to connect wind projects that successfully meet AESO interconnection milestones.

Should the AUC approve our Need applications, we will assign the larger system reinforcement and each new interconnection to Transmission Facility Owner AltaLink, to build the additional transmission facilities required. Before AltaLink can begin constructing these facilities, it must develop a Facilities application and submit this document to the AUC for approval. Further consultation with stakeholders will form a crucial component of this application process.

*The AESO is committed to protecting your personal privacy in accordance with Alberta's Personal Information Protection Act. Any personal information collected by the AESO with regard to this project may be used to provide you with further information about the project, may be disclosed to the Alberta Utilities Commission (and as a result, may become public), and may also be disclosed to the eligible Transmission Facility Owner(s). If you have any questions about how the AESO will use and disclose your personal information collected with regard to this project, please contact us at 888.866.2959 or at [stakeholder.relations@aeso.ca](mailto:stakeholder.relations@aeso.ca)*