

# South and West of Edmonton

## Transmission System Development

### Why is development needed?

In 2011, the Alberta Electric System Operator (AESO) identified the need to reinforce the transmission system south and west of Edmonton to meet the growing demand for electricity from residential, commercial and industrial growth in the area. Transmission system developments are required to ensure the system has sufficient capacity to meet this forecasted growth.

The AESO is required to file an application with the Alberta Utilities Commission (AUC) for approval of the need for transmission development. The AESO filed the South and West Edmonton Area Transmission Reinforcement Needs Identification Document (NID) with the AUC on December 14, 2012, by Application No. 1609123. In preparing the NID, information was mailed to stakeholders in newsletters sent throughout the area from 2011 to 2013. Also, the AESO sought stakeholder input at ten open houses from 2011 to 2012.

The AUC held a public hearing on the AESO's NID application on March 3, 2014. The AUC's decision is expected in spring 2014.



The map indicates the approximate area where the need for transmission development has been identified. The transmission facilities owner will propose specific substation sites and transmission line routes that may be located inside or outside the area shown.

### WHO IS THE AESO?

Alberta's transmission system, sometimes referred to as the Alberta Interconnected Electric System (AIES), is planned and operated by the AESO. The transmission system comprises the high-voltage lines, towers and equipment (generally 69 kV and above) that transmit electricity from generators to lower voltage systems that distribute electricity to cities, towns, rural areas and large industrial customers.

The AESO's role is to maintain safe, reliable and economic operation of the AIES. The AESO's planning responsibility includes determining the need for transmission system development and the manner in which that need is met. The AESO is also mandated to facilitate the interconnection of qualified market participants to the AIES. The AESO is regulated by the AUC and must apply to the AUC for approval of its NID.

### HOW IS ALTALINK MANAGEMENT LTD. INVOLVED?

AltaLink Management Ltd. (AltaLink) is the transmission facilities owner (TFO) in the area south and west of Edmonton. While the AESO is responsible for identifying that transmission system development is

needed, AltaLink is responsible for detailed siting and routing, constructing, operating and maintaining the associated transmission facilities. The AESO has directed AltaLink to provide information to stakeholders on this need and to file a facility proposal application with the AUC which will include a detailed description and location of the proposed transmission development.

### South and West of Edmonton Transmission Developments

The proposed transmission system developments include:

- A new 240/138 kV substation just north of Leduc
- A new 240/138 kV substation south of Stony Plain
- New 138 kV and 240 kV transmission lines around Stony Plain and Spruce Grove, and south and east of Edmonton
- Potential modifications to the Acheson 305S, Cooking Lake 522S, Leduc 325S, Nisku 149S and Stony Plain 434S substations.

### We want to hear from you

The AESO appreciates your feedback, both on the need for transmission system development and our proposed transmission plans. Your comments are encouraged. If you have any questions or suggestions, please contact:

**Megan Harris**

AESO Stakeholder Relations

EMAIL: [stakeholder.relations@aeso.ca](mailto:stakeholder.relations@aeso.ca)

PHONE: 1-888-866-2959

ADDRESS:

2500, 330 – 5th Avenue SW  
Calgary, Alberta T2P 0L4