

Proposed Waddell Substation near Conklin, Alberta

ATCO Electric is planning to build a new substation called "Waddell 907S" at StatoilHydro's Leismer site in northeast Alberta. The new substation will connect with a proposed 144 kilovolt (kV) transmission line to be built by AltaLink from AltaLink's existing Leismer substation about 31 kilometres (km) to the southeast. (Details about the proposed transmission line are being provided in separate communication from AltaLink.)

Project Need

The new substation is needed to provide power to StatoilHydro's oil sands development. The need was identified by Alberta's independent transmission authority, the Alberta Electric System Operator (AESO). The Alberta Utilities Commission approved the need in March 2008.

Substation Location and Description

- The new substation will be located in NE 2, Tp. 79, Rge. 10-W4M, about 36 km northwest of Conklin.
- The substation will be on StatoilHydro's 67-hectare Leismer production site, within Lac La Biche County. The site is presently a Crown lease held by StatoilHydro.
- The new substation will include a 144-25 kV transformer, circuit breakers, a control building and related electrical and communications equipment, on a gravel pad within a fenced area of about 39 by 58 metres (see site plan).
- The substation property will be 150 by 150 metres, to include area for incoming lines and future expansion.



Typical 144-25 kV Substation

Impacts to Neighbours and the Environment

- Major site activities will include surveying, preparing the site, installing foundations (steel piles or concrete footings), and installing the control building, structures and equipment.
- Access will be by existing roads. No new clearing is needed as the substation will be on a cleared plant site. Activities will be carried out following government environmental protection guidelines (C&R/IL/95-2).
- Once built, the facilities will require occasional light traffic and activity for routine inspection and maintenance (typically weekly), and rare access by heavy equipment for larger repairs (every few years).

Timing

- ATCO Electric will be submitting a Permit and Licence Application to the Alberta Utilities Commission in **early September**, and will seek any other agency approvals as needed. Construction is planned to occur between **November 2008 and June 2009**, for start-up by **July 1, 2009**.

If you have any questions or concerns about the planned activity, please contact:

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Note: timing, layout and other details may vary slightly with final plans.

Transmission substations like this one connect the transmission lines (69 kilovolts [kV] and higher) to the distribution system (25 kV and lower) to serve the local area. **ATCO Electric** owns and operates the transmission and distribution systems that deliver electricity to customers in northern and east-central Alberta. For power emergencies call us at 1-800-668-5506. For general enquiries about power lines or meters call us at 1-800-668-2248. For questions about hook-ups or your bill, please contact your energy retailer (see the phone number on your bill). If you have any questions regarding the process for applications to the Alberta Utilities Commission, please contact the Commission at 780-427-4903.

