

## Canada's Electricity Grid Will Need Substantial Changes to Help Achieve Net Zero in 2035

Reports and studies indicate Canada will need to improve its power generation and distribution systems if it's to meet both the rising demand for electricity, driven partly by the uptake of electric vehicles (EVs), and the 2035 climate goals.

Changes/modifications will be required to every aspect of the provincial and territorial power generation and distribution systems to reliably meet the projected demand.

The federal government has set a deadline of 2035 for achieving net-zero electricity generation. To meet this target, power generation capacity will have to double or triple by 2050, to displace existing fossil fuel generation and meet growing demand. There is also the suggestion that as much as 75 per cent of that additional power will need to come from wind and solar.

Canada's electricity systems will also need more battery storage and be nimble enough to adjust to peaks in demand as both vehicles and many home heating systems switch to electric. Reports suggest there are systems in this country that are not equipped to manage that increased demand, as well as the timing of that demand, and that could create some real issues. An example was provided of an urban resident who wanted to upgrade to a faster charger for their Electric Vehicle (EV) but their neighbourhood wouldn't be able to accommodate the extra load if their and other households also upgraded. The same challenge can apply rurally.

A Canadian Climate Institute report suggests the federal government should adopt a "broad policy framework" within which provinces and territories would operate. Other options are to possibly consider strengthening the price on carbon for the sector and ban the construction of gas-fired power plants. Simultaneously the report calls for all levels of government to not burden ratepayers with the costs of helping the sector meet net-zero, saying that governments should defray those costs.

In 2020, Natural Resources Canada hired an external consulting firm to study the EV readiness of the Canadian grid. The study found at the wholesale/transmission system level, the best practices adopted by utilities and systems operators included piloting time-differentiated rates to influence charging behaviour and boosting visibility of EVs in their service territory.

Additionally, the study concludes that utilities should be looking for ways to acquire and improve their ability to forecast EV charging loads, refine their load profile, and that at the grid distribution system level, Canadian utilities and systems operators need to study and employ various load management solutions. The study also recommends that "utilities should undertake a thorough review of their distribution system design practices and possibly change the standard design rules in preparation for a higher load per customer due to EV charging."



### For Power Troubles:

Battle River Power Coop (our distribution system operator)  
Toll-free: 1-877-428-3972

### For RRO Billing and Account Inquiries:

Battle River Power Coop | Box 1420 Camrose, Alberta T4V 1X3  
Toll-free: 1-877-428-3972  
E-mail: [brpc@brpower.coop](mailto:brpc@brpower.coop) | Website: [www.brpower.coop](http://www.brpower.coop)

### For REA Inquiries, New Service and Service Change Requests:

Contact West Wetaskiwin REA, RR #1  
Station Main, Wetaskiwin, Alberta T9A 1W8  
Tel: 780-335-9378 (WEST)  
E-mail: [westwet@telus.net](mailto:westwet@telus.net) | Website: [www.westwetaskiwinrea.com](http://www.westwetaskiwinrea.com)

For service requests: go to [www.westwetaskiwinrea.com/new-or-changes-to-services.html](http://www.westwetaskiwinrea.com/new-or-changes-to-services.html)

# West Wetaskiwin Scholarship Application Deadline is **August 1, 2022**

**Don't delay, apply now!**

Annually, the West Wetaskiwin REA offers 2 (two) scholarships to children of members (in good standing) for the amount of \$1000.00 each.

The selection of scholarship recipients is open to students in either diploma or degree granting programs. The applicant must be entering their first year of post-secondary study in a designated program and be a high school graduate of the current, or at most, previous calendar year.

Other considerations include the applicant's involvement in their community, academic achievement, and financial need. The applicant must also submit an essay-style letter outlining details supporting the aforementioned considerations.

The Scholarship Application Form, complete with instructions and checklist for necessary documentation, is located on our website: [www.westwetaskiwinrea](http://www.westwetaskiwinrea) <Power Points>.

Applications, with supporting documentation, may be mailed to

West Wetaskiwin REA,  
RR#1, Main,  
Wetaskiwin, AB  
T9A 1W8

or emailed to  
[westwet@telus.net](mailto:westwet@telus.net).

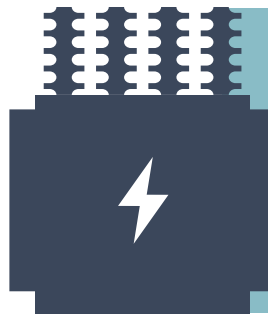


**Completed applications must be received,  
via mail or email, no later than midnight on  
August 1st.**

**Regulated  
Rate  
Option**



The Regulated Rate Option (RRO) may increase or decrease from month to month as it is priced on the open market and subject to many factors relating to supply and demand. It is not a 'regulated' rate, rather is a default rate. If you do not have a contract with an electricity retailer, then you are on the RRO. For May 2022, the RRO is priced at \$0.11572 per kWh, reflected on your enclosed orange bill. For June 2022, the Battle River Power Coop monthly RRO billing rate is \$0.13531.



## Is My Transformer the Right Size for My Needs?

Transformers convert energy from the source to the power required by the load. The size of a transformer needed to manage your home, farm or business electrical needs is determined by the kVA of the load, or amount of electricity that you need.

A circuit breaker is an electrical switch designed to protect an electrical circuit from damage caused by overcurrent/overload or short circuit. Its basic function is to interrupt current flow after protective relays detect a fault.

To use transformers and circuit breakers effectively, you need to know how much power a particular transformer can provide, and that the safety mechanism in place to protect you in the event of a possible overload will do the job.

If an undersized electrical system is under stress it will trip a circuit breaker. If a system is consistently under stress and the transformer is frequently overloaded the net result of even small, incremental increases in loading capacity over time is a weakened insulation system.

We encourage members to review their electricity requirements and ensure that your system, in particular your transformer, can handle your electrical needs including start-up of heavy electrical machinery. Alternatively if you installed a larger transformer in anticipation of extra use and that has not occurred, you should consider downsizing and saving money. Sizing a transformer to accurately meet your needs can be done by consulting a qualified electrician. They can assess your total load as it relates to transformer size and compare your electrical needs against your circuit breaker panel's capacity to safely meet your electrical demands.

**Members are free to purchase electricity services from a retailer of their choice. For a list of retailers, visit [ucahelps.alberta.ca](http://ucahelps.alberta.ca) or call 310-4822 (toll free in Alberta).**