

Date:	11 December 2017
Ministry:	Energy
Name of Act:	Electricity Act, 1998
Name of Regulation:	O. Reg. 429/04 (Adjustments under Section 25.33 of the Act)

Section 1: Proposal and Context

- A 2014 report by the Ontario Energy Board's Energy Storage Working Group identified a series of barriers to the integration of energy storage in Ontario. One of those barriers was the application of the Global Adjustment (GA) to certain energy storage facilities. Independent research has also found that the application of GA to energy storage is a significant barrier to their deployment in Ontario.
- The Ministry of Energy (the Ministry) has examined this issue and found that, under certain scenarios, energy storage providers would pay GA for the power used to charge the storage system, and that end-users would also pay GA for the power when it is injected back into the grid. This results in double-counting of GA, and results in unfair treatment of certain energy storage providers that are connected to the grid.
- Accordingly, the Ministry is proposing amendments to O. Reg. 429/04 (Adjustments under Section 25.33 of the Act) made under the *Electricity Act, 1998*. The purpose of these amendments is to define energy storage within the regulation for present and future applications, and change the application of GA for Class B energy storage facilities, the amendments will move the application of GA from a gross consumption to a net consumption basis.

Section 2: Approach and Intended Outcomes

- These regulatory amendments provide a definition for energy storage, and affect the application of GA on a net basis for Class B energy storage facilities. The intention of this amendment is to address market barriers to the fair participation of energy storage in Ontario's electricity markets.
- Energy storage is a unique asset within electricity markets; sometimes it consumes electricity like a load, other times it releases electricity into the grid, like a generator.

- Within the regulation, there are two types of electricity consumers in Ontario: Class A and Class B. Class A entities (generally larger facilities) are charged GA based on their share of provincial demand during the five days during the year when provincial electricity demand is the highest – the five “peaks.” Class B entities pay GA rate on a volumetric basis based on a monthly rate.
- Class A energy storage facilities can avoid GA charges by avoiding charging during the provincial peaks. This makes economic sense – charging when market prices are low, and discharging when demand is high. Class B energy storage facilities cannot avoid the GA in this way. Energy storage facilities over 1MWh can opt into Class A, but they can also elect to remain Class B.
- Class B facilities are charged on a gross basis and are not reimbursed for GA on electricity discharged into the grid. For example, an energy storage facility may withdraw 1.25MWh of electricity from the grid and reinject 1MWh of that energy. The facility would pay GA on 1.25MW.
- The end user of this electricity also pays GA on their consumption. Using the previous example, the end user would pay GA on 1MWh. This amounts to a “double counting” of the GA on the electricity that an energy storage facility discharges – the GA on that 1MWh is collected twice.
- By charging GA on a net basis, the Ministry recognizes the unique properties of energy storage, while addressing the double counting issue.
- To be eligible for netting of GA, energy storage facilities must be “stand-alone,” or “in-front-of-the-meter,” not connected to another load. Those facilities connected to a load act like a generator for the purposes of offsetting demand.
- This outcome can only be met through amendments to O. Reg. 429/04, as this regulation defines the applicability of GA to different classes in Ontario’s electricity markets.

The purpose of Section 3 is to identify stakeholders that will be affected by the regulatory proposal, and briefly describe the anticipated impact (whether a cost or a benefit). These factors will be considered in the determination of whether a full RIA is required.

Section 3: Affected Stakeholders	Yes	No
Individuals (specific groups or consumers)	☒	☐
Costs incurred by local distribution companies (LDCs) to facilitate the connection, billing, and other services to a customer may be		

put into existing rates, like most expenditures made by LDCs to facilitate the distribution of electricity. Any expenditures are subject to the Ontario Energy Board's oversight through the rate application process to ensure economic prudence and cost-effectiveness. The Independent Electricity System Operator (IESO) and Ontario Energy Board (OEB) would incur limited administrative costs in updating market rules, processes, and ensuring the infrastructure is in place to charge GA on a net basis. These costs would be recovered through existing rates charged to customers during the normal course of business that finance the operation of Ontario's energy sector.		
Businesses	☒	☐
Some facilities may choose to participate in IESO markets for energy services. Fees charged by the IESO are a relatively small portion of a market participant's costs, which include participant registration fees, facility registration fees, and system impact assessment fees.		
Non-profit Groups	☐	☒
Communities	☐	☒
Governments	☐	☒

The purpose of Section 4 is to identify and describe the types of impacts anticipated as a result of the regulatory proposal. These factors will be considered in the determination of whether a full RIA is required.

Section 4: Type of Impact	Yes	No
Health and Safety	☐	☒
Environment	☐	☒
Social Impacts	☐	☒
Trade	☐	☒
Economy	☒	☐
This proposal may facilitate job creation by creating an environment that makes investment in energy storage solutions more attractive.		
Other	☐	☒

The purpose of Section 5 is to estimate the direct costs for external stakeholders to comply with the regulatory proposal. If direct compliance costs are expected to exceed \$2 million per year, a full regulatory impact analysis will be required. Other factors (as

described in Sections 3 and 4 above) will also be reviewed in the determination of whether a full RIA is required.

Section 5: Costs	Yes	No
Are direct compliance costs likely to exceed \$2 million per year?	☐	☒
Is a full RIA required?	☐	☒

Contacts

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