

In this document, stakeholders will find details of the process the AESO will follow to update Generator Unit Owners Contribution (“GUOC”) Rates that will become effective in January of the following year as part of the AESO’s annual ISO tariff rates update. The AESO would like to inform stakeholders of the new GUOC Rate update process, which it plans to implement in conjunction with the 2023 ISO tariff rates update application that the AESO will file for approval by the Alberta Utilities Commission (“AUC”) later in 2022.

Background

The GUOC is a refundable payment made by the owner of a generating unit or aggregated generation facility (“GFO”) to the AESO. The purpose of the GUOC is to provide a long-term siting signal to generators to site in areas that would be most beneficial to load. The authority and requirements for the GUOC are set out section 29 of the *Transmission Regulation*. Subsection 29(2) of the *Transmission Regulation* identifies the GUOC Rates payable by a GFO as the sum of the following:

- (a) for upgrades to existing transmission facilities, a charge of \$10 000/MW;
- (b) a charge of not more than \$40 000/MW, as provided in the ISO tariff, payable by owners of generating units that locate in an area of the transmission system where generation exceeds load, and the amount of the charge is to be determined based on the location of the generating unit relative to load.

The GUOC must be paid before commencement of construction of the facilities required to connect a generating unit or aggregated generation facility, and is refundable to the GFO subject to the satisfactory operation of the generating unit determined under section 505.2 of the ISO rules, *Performance Criteria for Refund of Generating Unit Owner’s Contribution*.¹ The GUOC must be stable and predictable; calculated in a simple and transparent manner; based on generating unit size; vary based on the generation location relative to load in Alberta; and be determined and payable in accordance with the ISO rules and the ISO tariff.²

In AUC Decision 22942 D02-2019, regarding the AESO’s 2018 ISO tariff application, the AUC approved the AESO’s proposal to include GUOC Rates in the ISO tariff (whereas they had previously been included in a separate document posted on the AESO’s website), and to revise the way the GUOC Rates are determined. Previously, GUOC Rates were calculated by the AESO using forecast regional peak load, future regional net generation based on signed Construction Commitment Agreements (“CCA”), a generation surplus calculation using the forecast regional peak load and future regional net generation, and distance between major regional load centers and dominant path adjustments to determine direction of generation flow.

In the proceeding leading to AUC Decision 22942-D02-2019, the AESO identified concerns with this method and proposed instead to use a qualitative assessment to determine GUOC Rates based on engineering studies (including long-term planning, system connection and Needs Identification Document studies). The AESO considered these engineering studies to provide a much more robust approximation of generation flows compared to the AESO’s previous methodology.

The AESO will be implementing this new, approved approach to the determination of GUOC Rates beginning with the AESO’s 2023 ISO tariff rates update application, which the AESO intends to file for

¹ Subsections 29(3) and (4) of the *Transmission Regulation*.

² Subsection 29(3) of the *Transmission Regulation*

approval with the AUC later in 2022. Additionally, as detailed further below, the AESO has developed a GUOC Rates update process to provide market participants with clarity, as part of the AESO's Connection Process, regarding the updated GUOC Rates that will apply to generation projects.

New Process to Update GUOC Rates Annually

Beginning in 2022 and for each subsequent year, the AESO intends to update GUOC Rates as follows:

1. Determination of Proposed GUOC Rates – April to June

The AESO will determine proposed updates to GUOC Rates (in accordance with the *Transmission Regulation* and any applicable AUC Decisions and approvals) for the following calendar year.

2. Posting of Proposed GUOC Rates – July

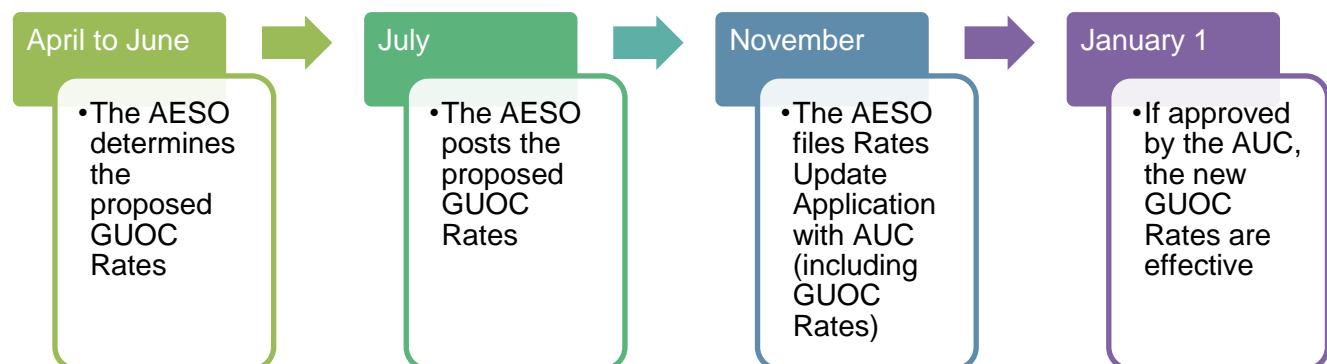
The AESO will post the proposed updates to GUOC Rates on the [GUOC Estimate Calculator](#) page on the AESO website to give market participants advance notice of the GUOC Rates that the AESO will propose to take effect in January of the following year.

3. ISO Tariff Update Application – November

The AESO files its annual ISO tariff rates update application, which includes the proposed GUOC Rates, with the AUC. In the application, the AESO will request an effective date of January 1 of the following year.

4. New GUOC Rates Effective – January 1

The AUC will issue a decision and, if approved, the new GUOC Rates will become effective on January 1st.



Determination of GUOC Rates

For 2023, the AESO intends to maintain regional GUOC Rates but, as discussed above, will determine GUOC rates using a qualitative assessment based on engineering studies. The AESO has developed the

following principles for setting GUOC Rates by region, which are intended to clarify the AESO's methodology and to bring consistency to the qualitative assessment:

- (a) \$10,000/MW, payable by all GFOs regardless of location in the province for upgrades to existing transmission facilities; plus
- (b) A charge of not more than \$40,000/MW payable by all GFOs based on the location of the GFO considering the following:
 - \$0/MW: generation development in the region can help defer load driven transmission development
 - \$10,000/MW: the region has significant existing or near-term generation integration capability*
 - \$20,000/MW: the region has limited existing or near-term generation integration capability and limited development interest
 - \$30,000/MW: the region has limited existing or near-term generation integration capability and significant development interest
 - \$40,000/MW: the region does not have existing or near-term generation integration capability

* Generation integration capability is strongly related to the total generation and load in the region. Typically, generation integration capability is higher in regions where load is higher. Therefore, there is an implicit relationship between generation integration capability and proximity to load. As a result, setting GUOC Rates based on existing and near-term generation integration will incent generation to locate in areas of the transmission system where load exceeds generation.

Applicability of GUOC Rates to Projects

According to the process above, new GUOC Rates are expected to take effect at the beginning of each calendar year. In accordance with the ISO tariff:

- for connection projects, a GFO that has provided GUOC evidence³ within the current calendar year (i.e. prior to December 31st) will have the current year's GUOC Rates applied;
- for BTF or Contract Projects, a GFO that has provided GUOC payment within the current calendar year (i.e. prior to December 31st) will have the current year's GUOC Rates applied.

If GUOC evidence or payment as described above is provided on or after January 1st of the following year, the following year's GUOC Rates will be applied and so on in subsequent years.

The earliest the AESO will accept the GUOC evidence or payment, is when the following criteria are met:

- The project has passed Gate 2 of the Connection, BTF, or Contract Process;
- The generator owner has filed its power plant application with the AUC, if applicable; and
- The AESO has issued an executed Functional Specification, if applicable.

³ In accordance with subsection 3.6(8) of the ISO tariff, the market participant must provide the AESO with evidence satisfactory to the AESO that the GFO has sufficient funds available to pay the GUOC for the project. For the purposes of this requirement, the AESO will accept financial security provided by the GFO or the market participant on behalf of the GFO that meets the requirements of [Section 103.3](#) of the ISO rules, *Financial Security Requirements*.

The latest the GUOC evidence can be provided is prior to signing the SAS agreement, in accordance with section 3.6(8) of the ISO tariff. The latest the GUOC payment can be provided is 30 days after the SAS agreement becomes effective, in accordance with section 3.6(9) of the ISO tariff.

In accordance with section 3.7 of the ISO tariff, a SAS Agreement becomes effective:

- upon issuance of permit and license for a Connection project; or
- the day it is executed for a Behind the Fence or Contract project.

A listing of historical GUOC Rates is included in Appendix A.

If you have comments or questions regarding this process, please contact AESO at tariffdesign@aeso.ca.

Appendix A

Effective Dates	GUOC Rates by Region							
	Northwest	Northeast	Edmonton	Central	East	Calgary	South	
Pre 2006	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2006-2007	\$ 10,000	\$ 50,000	\$ 31,300	\$ 10,000	\$ 20,200	\$ 10,000	\$ 20,100	
2008-2009	\$ 10,000	\$ 50,000	\$ 32,500	NA	NA	\$ 10,000	\$ 28,100	
2010-2011	\$ 10,000	\$ 50,000	\$ 32,500	\$ 22,400	NA	\$ 10,000	\$ 25,000	
2012-2013	\$ 10,000	\$ 50,000	\$ 32,500	\$ 22,400	NA	\$ 10,000	\$ 25,000	
2014-2020	\$ 10,000	\$ 50,000	\$ 32,500	\$ 22,400	NA	\$ 10,000	\$ 25,000	
2021-2022	\$ 10,000	\$ 20,000	\$ 30,000	\$ 50,000	NA	\$ 40,000	\$ 20,000	

*GUOC Rates provided include the \$10,000 minimum payment plus the additional amount (no more than \$40,000 based on location) as identified in section 29 of the *Transmission Regulation*.