

# IESO Staff Recommendation to Panel on Exemption Application (General)

All information submitted in this process will be used by the *IESO* solely in support of its obligations under the "Electricity Act, 1998", the "Ontario Energy Board Act, 1998", the *market rules* and associated policies, standards and procedures and its licence. All submitted information will be assigned the appropriate confidentiality level upon receipt.

Terms and acronyms used in this Form that are italicized have the meanings ascribed thereto in Chapter 11 of the *market rules*.

## PART 1 - GENERAL INFORMATION

Market Participant Name: Algoma Steel Inc.		
Location/Site: Sault Ste. Marie		
Exemption Application ID: 1365		
Description of Exemption Requested:		
Algoma Steel Inc. ("Algoma") requests an exemption from Market Rule Chapter 9, s.2.4A.2, whereby its new electric arc furnace non-dispatchable load facilities (collectively, "EAF") may be settled in a manner whereby the generation from the Lake Superior Power self-scheduling generation facilities (collectively, "LSP") is used to offset the EAF loads, such that the facilities are settled collectively on a 'net' basis.		
Date Exemption Application Received: August 23, 2024		
Date all relevant application information supplied by exemption applicant: <b>September 27, 2024</b>		
Management Approvals Obtained: X Yes No		
Are there any outstanding disputes, compliance actions, or pending <i>market rule</i> amendments involving the subject matter of this <i>exemption application</i> ?   Yes No		
Are there any outstanding disputes, compliance actions, or pending $market\ rule$ amendments involving the $exemption\ applicant$ ? $\square$ Yes $\square$ No		
Section of the Exemption Application and Assessment Procedure under which the <i>exemption</i> application is made:		
<ul> <li>Section 1.4 "Application for Exemption – General"</li> </ul>		

## PART 1 – GENERAL INFORMATION

Market Rule(s) or related Market Manual(s) from which exemption is requested (copy of Market Rule(s) or Market Manual(s) attached): Market Rule Chapter 9 s.2.4A.2.		
Third Party Submissions Received: Yes No		
Supplemental Assessment Information Attached: Yes No		
Related Historical Exemption Application(s) or Related Exemption Application(s) in Process:		
☐ Yes ☐ No		
Note: If YES, list history of exemption applications:		
Role of exemption applicant in the market as it relates to this exemption application: consumer, generator.		

#### PART 2 - RECOMMENDATION

#### Recommendation:

*IESO* Staff recommend that the *exemption* be granted, with limited exceptions, given that it would result in the most appropriate *settlement* treatment in these circumstances, in compliance with the Criteria for Exemption set out in section 1.4.2 of Market Manual 2.2, and would avoid a scenario whereby the *exemption applicant* is required to pay significant amounts to use its own electricity and equipment, to the benefit of other *market participants* and consumers, as further set out in Part 3 of this form below.

## Criteria Used in Assessment of General Exemption Applications (Section 1.4.2 of Exemption Application and Assessment Procedure):

(If X appears in a box, the criterion is applicable to this exemption application and is evaluated in Part 3 - Details of Assessment; if X does not appear in a box, the criterion is not applicable to this exemption application.)

Whether the exemption that is the subject-matter of the exemption application would, if granted, materially:

•	impact the ability of the IESO to direct the operations and maintain the reliability of	
	the IESO-controlled grid;	$\boxtimes$

#### See below in Part 3

•	impact the ability of the <i>IESO</i> to ensure non-discriminatory access to the
	IESO-controlled grid;

• affect the ability of the IESO to operate the IESO-administered markets in a		
	competitive, and reliable manner;	$\times$

#### See below in Part 3

• increase costs of market participants; or

#### See below in Part 3

• increase costs of the IESO;

#### See below in Part 3

Whether the exemption that is the subject-matter of the exemption application would, if granted, give the exemption applicant an undue preference in the IESO-administered markets;

#### See below in Part 3

## PART 2 - RECOMMENDATION

Whether the cost or delay to the exemption applicant of complying with the obligation or standard to which the exemption application relates is reasonable, having regard to the nature of the obligation or standard, the nature of the exemption application and the anticipated impact of noncompliance by the exemption applicant in terms of the elements referred to above;		
See below in Part 3		
The adequacy of the exemption plan submitted by the exemption applicant;	$\boxtimes$	
See below in Part 3		
Where the exemption applicant is the IESO, the identification of the benefit to market partic of compliance with the obligation or standard relative to the financial and other resources r to achieve compliance within such deadlines as may be applicable;		
Where the exemption applicant is the IESO, the manner in which it proposes to operate in the IESO-administered markets or direct the operations and maintain the reliability of the IESO-controlled grid during the period in which the exemption would be in effect;	ne	
Whether the facility or equipment that is the subject-matter of the exemption application:		
<ul> <li>was in service or was returned to service on the date on which the obligation or standard to which the exemption application relates came into force;</li> </ul>	$\boxtimes$	
See below in Part 3		
<ul> <li>was ordered by the exemption applicant on or prior to the date on which the obligation or standard to which the exemption application relates came into force; or</li> </ul>	on	
was in the process of construction on or prior to the date on which the obligation or standard to which the exemption application relates came into force; and		
The capability of the owner of the <i>facility</i> to operate the <i>facility</i> consistent with the terms of the proposed <i>exemption</i> .	$\boxtimes$	
See below in Part 3		

#### 1. Exemption Request:

Algoma requests an exemption from Market Rule Chapter 9, s.2.4A.2, whereby the generation from LSP may be used to offset the EAF loads, such that each of the *registered facilities* comprising LSP and EAF are *settled* collectively on a 'net' basis.

## 2. Background:

Algoma operates a group of closely-located *registered facilities* in the *IESO-administered market* (collectively, the "**Steel Mill**"), which after the construction of the EAF will include:

PATRICK ST Transmission Station ("TS")

• PATRICKSTEEL-LT.T6\_LF (non-dispatchable LOAD) ("Patrick St. TS")

#### **ASI TUBE TS**

• ASITUBE-LT.T1\_LF (non-dispatchable LOAD) ("ASI Tube TS")

LAKE SUPERIOR POWER Cogeneration Station (CGS) / EAF Customer Transmission Station (CTS)

- LAKESUPERIOR-LT.GTG2 (self-scheduling GEN, up to 42.5 MW) ("LSP GTG2")
- LAKESUPERIOR-LT.GTG1 (self-scheduling GEN, up to 42.5 MW) ("LSP GTG1")
- LAKESUPERIOR-LT.STG1 (self-scheduling GEN, up to 25 MW) ("LSP STG")
- EAF-LT.LOAD1 (non-dispatchable LOAD, up to 140MW) (EAF, as defined above)

The EAF will share the same primary civic address (105 West Street) and be located within the geographical boundary of the Steel Mill, and share common connections with LSP to the *transmission system*.

EAF will connect to LSP CGS via one new 0.6 km underground 115 kV cable. The LSP CGS bus connects to Hydro One Inc.'s ("H1 transmitter") Clergue TS through Cogen 1 and Cogen 2 115 kV circuits, which are owned by Algoma.

Refer to Appendix A-1 for illustration of the Steel Mill under normal operating conditions, without an exemption, in accordance with the Market Rules (including Chapter 9 s.2.4A.2).

The system impact assessment ("SIA") for EAF (public version), which is attached to the exemption application as Attachment #3 of that document, requires that:

(a) the LSP generators be directly connected to the IESO-controlled grid<sup>1</sup>; and

-

<sup>&</sup>lt;sup>1</sup> SIA – Appendix A: General Requirements, paragraph 15.

(b) operation of the EAF requires Algoma to operate the LSP generators to support EAF (the "SIA Requirement")<sup>2</sup>.

To satisfy the SIA Requirement, electrons will flow between LSP and EAF via common high-voltage busses and a circuit owned by Algoma, which are collectively defined herein and in Algoma's exemption application as the "Bus". The Bus is owned by Algoma and located wholly on its real property, and consequently, Algoma is responsible for maintaining the Bus at its own cost. All aspects of LSP, EAF and the Bus will be owned by Algoma.

#### 3. Market Rule Requirements:

The *IESO market rules* do not contemplate the combination, for purposes of registration or settlement, of generation facilities and load facilities.

As to registration, generators and loads cannot be aggregated together as a single *registered facility* in accordance with Market Rule Chapter 7, s.2.3.

As to settlement, settlement amounts must be determined by reference to a delivery point associated with a single registered facility in accordance with Market Rule Chapter 9, s.2.4A.2:

2.4A.2 for the purposes of the determination of the *settlement amounts* referred to in sections 3, 4 and 5, all references to an *RWM*, an *RWM* m or a *registered facility* k/m shall be deemed to be a reference to the *delivery point* associated with:

2.4A.2.1 the *RWM*; or

2.4A.2.2 the RWM or RWMs associated with the registered facility,

as the case may be.

Absent relief from Market Rule Chapter 9, s.2.4A.2, therefore, Algoma would be required to settle each of the registered facilities that comprise EAF and LSP separately at their own respective delivery points on a 'gross' (i.e., not 'net') basis.

Note: RWM refers to registered wholesale meter as defined in Market Rule Chapter 11.

#### 4. Assessment:

## A) Overview of Recommendation

*IESO* Staff recommend that the *exemption* be granted, with limited exceptions (as will be discussed in Part 3-4(D) of this form below under the heading "Modes of Operation"), given that it would result in the most appropriate *settlement* treatment in these circumstances, in compliance with the Criteria for Exemption set out in section 1.4.2 of Market Manual 2.2, and

\_

<sup>&</sup>lt;sup>2</sup> SIA - Project Description.

would avoid a scenario whereby the exemption applicant is required to pay significant amounts to use its own electricity and equipment, to the benefit of other market participants and consumers, for the reasons that follow.

As the Bus is within *IESO*'s operational control as system operator, the Bus is defined under the *market rules*<sup>3</sup> as being part of the *IESO-controlled grid* notwithstanding that Algoma owns the Bus, maintains the Bus (at its cost) and directs its day-to-day operations. Accordingly, by operation of the *market rules*, Algoma must pay uplift and Global Adjustment (GA) charges on the electricity it consumes via the Bus (the "Charges"), including electricity conveyed directly from LSP to EAF via only the Bus in satisfaction of the SIA Requirement. The Charges would be used by the *IESO* to, primarily, fund the operation and maintain the reliability of the wider *IESO-controlled grid* – not including the Bus, which is owned and maintained by Algoma at its cost and wholly located on its real property.

Absent the exemption sought, as illustrated in Appendix A-1 of this form, Market Rule Chapter 9, s.2.4A.2 would require that Algoma settle each of the registered facilities that comprise EAF and LSP separately at their own respective delivery points on a 'gross' (i.e., not 'net') basis. This means the Charges would be applied on Algoma's gross energy usage, including all electricity conveyed directly from LSP to EAF via only the Bus. As set out in Part 3-4(C) of this form below under the heading "Financial Impact", the Charges attendant to this arrangement would be significant.

Absent relief from Market Rule Chapter 9, s.2.4A.2, Algoma would be required to do the following in order to operate EAF:

- use electricity generated at LSP, at Algoma's cost;
- use the Bus to convey that electricity to EAF, at Algoma's cost; and
- pay significant Charges for that use of the Bus.

In other words, if the *exemption* is not granted, Algoma would be required to 'buy back' its own electricity via its own Bus, to the benefit of other users of the *IESO-controlled grid*.

The exemption to Market Rule Chapter 9, section 2.4A.2 would permit the sharing of delivery points by all of the registered facilities comprising LSP and EAF, thereby, allowing Algoma to pay settlement amounts for each given metering interval that are derived based on the collective difference (i.e., the 'net') between the injections from LSP and the withdrawals from EAF. In the view of IESO Staff, this would represent the most appropriate settlement treatment, in the circumstances, while satisfying the Criteria for Exemption set out in section 1.4.2 of Market Manual 2, Part 2.2 (as further described in Part 3-4(E) of this form below under the heading "Review of Applicable Criteria for Exemption").

<sup>&</sup>lt;sup>3</sup> IESO Market Rules Chapter 11.

#### B) Settlement Treatment without and with Exemption

To assist the Exemption Panel in assessing the exemption application, IESO Staff will now describe the settlement treatment that Algoma would expect to receive without and with the exemption. The financial impact of the exemption being granted is addressed in Part 3-4(C) of this form below under the heading "Financial Impact".

## Settlement Treatment without Exemption (refer to Appendix A-1 for illustration)

## **Registration Summary:**

- 4 registered facilities 3 self-scheduling generation facilities (LSP) and 1 aggregated non-dispatchable load (EAF)
- 4 delivery points 3 self-scheduling generation facilities (LSP) and 1 non-dispatchable load (EAF)

#### Self-Schedules:

self-schedules submitted for each self-scheduling generation facility at LSP CGS

#### Settlement:

determined at each of the 4 delivery points (each associated with one of the 4 registered facilities)

## Settlement Treatment with Exemption (refer to Appendix A-2 for illustration)

#### **Registration Summary:**

- 4 registered facilities 3 self-scheduling generation facilities (LSP) and 1 aggregated non-dispatchable load (EAF)
- 2 delivery points 1 self-scheduling generation facility (LSP) and 1 non-dispatchable load (EAF)

#### Self-Schedules:

self-schedules submitted for each self-scheduling generation facility at LSP CGS

#### Settlement:

- determined at the 2 delivery points participating together
- the generator *delivery point* will correspond to all of the "aggregated" *registered* facilities. This *delivery point* will be the subject of *settlement* charges when there is a net injection in a 5-minute *metering interval*
- the load *delivery point* will also correspond to all of the "aggregated" *registered* facilities. This *delivery point* will be the subject of *settlement* charges when there is a net withdrawal in a 5-minute *metering interval*.

Please note, the term "aggregated" here refers to the operational (*settlement*) context provisioned by the proposed *exemption* and not in the registration context as per Chapter 7 of the *market rules*.

## C) Financial Impact

*IESO* Staff have reviewed the *exemption applicant's* submission of financial analysis (Attachment 2 – Financial Analysis, part of the *Exemption Application*) and are satisfied as to the general accuracy of these calculations.

*IESO* Staff generally concur with the *exemption applicant* that, if the *exemption application* were granted, there would be a cost differential of approximately \$35 million, the vast majority of which is attributed to Global Adjustment and the balance attributed to uplifts.

*IESO* Staff's assessment is subject to certain assumptions that could change over time, and is meant to provide an approximate indicator of value for purposes of assessing the *exemption* application.

## D) Modes of Operation

If the *exemption* were granted, Algoma could operate the Steel Mill *facilities* in two distinct modes (referred to herein as "Normal" modes, as distinct from the "Contingency" modes discussed below), which are described herein as "Mode 1" and "Mode 2" and summarized in the following table.

#### **Normal Modes**

Mode of Operation	Name	Description	Exemption Application Reference	Appendix A Illustration Reference
Mode 1	Normal – EAF Operation	LSP and EAF settled together on 'net' basis	Paragraph 14	A-2
Mode 2	Normal – Backfeed	LSP backfeeds Patrick St. TS	Paragraph 15	A-3

In Normal Mode 1, the *exemption* applies to the *settlement* treatment of LSP and EAF (i.e., the *registered facilities* contained therein would be *settled* on a 'net' basis as set out above).

In Normal Mode 2, EAF and LSP are disconnected from the *IESO-controlled grid* and therefore, the *exemption* does not apply.

These modes are now described in further detail.

## **Mode 1 – Normal-EAF Operation**

## Exemption relief: applies

Refer to Appendix A-2 for illustration.

- EAF and LSP connected to *IESO-controlled grid* via Cogen 1 and Cogen 2 lines (switches 1502 and 1509 at Cogen 1 and Cogen 2 are closed).
- The generation from LSP will be conveyed to EAF, via the Bus, to offset the EAF loads, and receive the 'net' settlement treatment contemplated by the exemption, based on the measurements at the respective delivery points.
- Any incremental withdrawals or injections of electricity into the IESO-controlled grid
   (excluding electricity conveyed from LSP to EAF via only the Bus) will be settled in the
   ordinary course of settlement (withdrawals will be subject to Charges, injections will be
   settled at the applicable market price). For certainty, the exemption would only be
   applicable to the flow of electricity from LSP to EAF via only the Bus.
- Note: as the exemption contemplates that EAF and LSP be settled on a 'net' basis, Algoma will not receive 'gross' settlement treatment (or similar treatment in other IESO programs<sup>4</sup>) for any particular registered facility(s) during periods where Mode 1 applies.

#### Mode 2 - Normal-Backfeed

## Exemption relief: does not apply (or exemption not granted)

Refer to Appendix A-3 for illustration.

- In accordance with the SIA<sup>5</sup>, EAF and LSP disconnected from *IESO-controlled grid* (switches 1502 and 1509 at Cogen 1 and Cogen 2 are open).
- Once the LSP/Patrick St. TS breaker is closed, the generation from LSP may be utilized
  to offset the Steel Mill load supplied from Patrick St. TS via the low voltage circuit (34.5
  kV). At this point LSP is effectively 'behind the meter' of the Steel Mill load supplied
  from Patrick St. TS.
- Similar to Mode 1, to the extent that the Steel Mill load supplied from Patrick St. TS is being offset by generation from LSP, Algoma should not expect 'gross' settlement treatment (or similar treatment in other *IESO* programs<sup>6</sup>) of the Steel Mill load to the extent of such offset.

Page 10 of 20 Public IMO-FORM-1406 v.5.0

<sup>&</sup>lt;sup>4</sup> See footnote 6, *infra*.

<sup>&</sup>lt;sup>5</sup> SIA – Project Description.

<sup>&</sup>lt;sup>6</sup> IESO Staff have noted this for Algoma staff, in particular, as it relates to the Capacity Auction context, as acknowledged in Paragraph 21 of Algoma's exemption application. For further clarity: if the EAF is registered as a

## **Contingency Modes**

In its exemption application, the exemption applicant identified certain contingency modes of operation that may arise rarely in time-limited operational circumstances (equipment failure, equipment maintenance); these contingency modes are assessed by *IESO* Staff below. To the extent other contingency scenarios may arise, the principles and recommendations in this *IESO* Staff Recommendation would need to be reviewed and adjusted accordingly.

The Contingency Modes are variants of Mode 1 and *IESO* Staff recommendations for Mode 1 apply unless otherwise indicated (in particular, for Contingency Mode 3).

Note: these comments relate only to the operational (settlement) context provisioned by the proposed exemption, and not in a reliability context (or other context) as may be addressed in the SIA and market rules, among other things.

Contingency Mode 3<sup>7</sup> – Maintenance-Breaker (breaker 1505 open)

Exemption relief: does not apply to the energy supplied or taken from LSP GTG2

Refer to Appendix A-4 for illustration.

- EAF and LSP connected to *IESO-controlled grid* via Cogen 1 and Cogen 2 lines (switches 1502 and 1509 at Cogen 1 and Cogen 2 are closed).
- As a result of equipment failure or equipment maintenance, breaker 1505 would be opened.
- LSP GTG2 would not convey electricity to EAF, via solely the Bus during Contingency Mode 3, and for this reason *IESO* Staff recommend that the *exemption* does not apply to the *energy* supplied or taken from LSP GTG2 in this mode.
- The exemption would still apply to EAF, LSP GTG1 and LSP STG1 in this mode.
- Algoma does not propose to implement this mode of operation unless it receives prior approval from the *IESO* and the H1 transmitter<sup>8</sup>.
- Upon approval of the *exemption*, to operate in Contingency Mode 3, Algoma is obligated to update and maintain their *meter* registration status accordingly. This will enable the appropriate *settlement* treatment during this mode of operation which does not include the application of the *exemption* to *energy* supplied or taken from LSP GTG2.

physical HDR resource, consumption of the EAF that is supplied from LSP will not be considered as part of the calculation of its baseline consumption determined for the purposes of participating in the capacity market.

<sup>&</sup>lt;sup>7</sup> Exemption Application, Paragraph 16(c).

<sup>&</sup>lt;sup>8</sup> Exemption Application, Paragraph 16(c).

## Contingency Mode 49 - Maintenance-Cogen (switch 1502 or 1509 open)

## Exemption relief: exemption applies

- In the event of an outage to either Cogen 1 or Cogen 2:
  - EAF and LSP connected to *IESO-controlled grid* via Cogen 1 line (switch 1502 is closed) and Cogen 2 is taken out of service (switch 1509 is opened); or
  - EAF and LSP connected to *IESO-controlled grid* via Cogen 2 line (switch 1509 is closed) and Cogen 1 is taken out of service (switch 1502 is opened).

The exemption is not affected (applies to EAF, LSP GTG1, LSP GTG2 and LSP STG1) in this mode.

## E) Review of Applicable Criteria for Exemption

Whether the exemption would impact the ability of the *IESO* to direct the operations and maintain the *reliability* of the *IESO*-controlled grid.

The SIA concludes that the proposed connection of EAF is expected to have no material adverse impact on the reliability of the *integrated power system*, provided that all requirements in the SIA are implemented. The granting of Algoma's exemption application would not deviate from those SIA requirements in any material respect.

Whether the exemption would affect the ability of the *IESO* to operate the *IESO-administered* markets in an efficient, competitive, and reliable manner or increase costs to market participants.

*IESO* Staff have not identified any material impact on the efficiency, competitiveness or reliability of the *IESO-administered markets* or increased costs to *market participants* (or consumers) were the *exemption* to be granted.

With respect to the Charges, as noted in Part 3-4(C) of this form above, the cost differential, were the exemption to be granted is comprised of GA and uplifts, with the vast majority attributable to GA.

GA is derived from the difference between the total payments made to certain contracted or regulated generators, conservation programs, and any offsetting market revenues (the "**Total Cost Base**"); and paid as a component of the total commodity cost for electricity by all *market participants* and consumers in Ontario (the "**Total Cost Base Distribution**").

Neither the participation of EAF in the *IESO-administered markets*, nor the granting of the *exemption*, would increase the Total Cost Base.

\_

<sup>&</sup>lt;sup>9</sup> Exemption Application, Paragraph 16(a) and 16(b).

With respect to the Total Cost Base Distribution, operation of EAF with the exemption in-place would result in a neutral (zero) impact on the costs that are currently paid by market participants and consumers to the extent that EAF receives its supply of electricity from LSP via only the Bus. To the extent that EAF takes its supply otherwise from the IESO-controlled grid, it will have to pay Charges on that supply in the ordinary course, which would decrease the Total Cost Base Distribution payable by other market participants and consumers.

A similar dynamic exists with respect to uplifts, whereby having the exemption in-place would result in neutral (zero) impact on the Total Cost Base Distribution for uplifts that would be paid by *market participants* and consumers as it relates to electricity supplied by LSP to EAF via only the Bus.

Whether the exemption would increase costs to IESO.

The settlement treatment contemplated by the exemption would not significantly increase the IESO's costs. While the exemption would impose some small amount of administrative burden on IESO Staff, there is no need to update IESO's tools or systems to accommodate the exemption.

Whether the exemption that is the subject-matter of the exemption application would, if granted, give the exemption applicant undue preference in the IESO-administered markets.

The granting of this *exemption* will not give Algoma undue preference in the *IESO-administered* markets, but rather, represents the most appropriate *settlement* treatment in these specific circumstances.

The GA funds that are collected as part of the total commodity cost for electricity by all *market* participants and consumers in Ontario (the "total GA collected") are used to cover the cost of building new electricity infrastructure, maintaining and refurbishing existing generation resources and the cost of delivering certain energy conservation programs in the Province. If the exemption is not granted, Algoma will be required to contribute a significant amount of funds to the total GA collected on account of electricity conveyed directly from LSP to EAF via only the Bus, in satisfaction of the SIA Requirement. Algoma's contribution would be to the benefit of the *IESO-controlled grid*, and not to the Bus, that Algoma owns and maintains at its own cost.

It is therefore other *market participants* and consumers that would receive an undue preference, being the inverse of the cost differential described in Part 3-4(C) of this form above, if the *exemption* were not granted and Algoma were required to pay Charges on a 'gross' basis on electricity conveyed from LSP to EAF via the Bus. By imposing 'cost neutrality' as described above (to the extent EAF receives it's supply of electricity from LSP via only the Bus), the

exemption would avoid this undue result.

Whether the cost or delay to the exemption applicant of complying with the obligation or standard to which the exemption application relates is reasonable, having regard to the nature of the obligation or standard, the nature of the exemption application and the anticipated impact of non-compliance by the exemption applicant in terms of the elements referred to above.

It would not be reasonable for Algoma to incur the Charges in the absence of the exemption, for the same reasons that Algoma would not receive an undue preference if the exemption were granted as set out above.

The adequacy of the exemption plan submitted by the exemption applicant.

*IESO* Staff have determined that Algoma's *exemption* plan, as further described in Part 3-4(D) of this form above (Modes of Operation), is adequate, as set out there.

Whether the facility or equipment that is the subject-matter of the exemption application was in service or was returned to service on the date on which the obligation or standard to which the exemption application relates came into force.

As noted in the exemption application:

Paragraph 37 – "Algoma recognizes that the regime under Section 2.4A.2 of Chapter 9
predates the operation of the facilities subject to the Exemption... However, the
considerations provided by Market Manual 2.2, s.4.2 are criteria that the IESO must
holistically consider, and they do not constitute a list of cumulative requirements which
must each be met. On balance, the factors overwhelmingly militate in favour of granting
the proposed exemption."

*IESO* Staff agree that on balance, the factors militate in favour of granting the proposed exemption.

The capability of the owner of the facility to operate the facility consistent with the terms of the proposed exemption.

As noted in the exemption application:

• Paragraph 38 - "Algoma will be capable of operating the EAF and LSP in accordance with requirements provided in the SIA."

IESO Staff are not aware of any basis to disagree with this statement.

## PART 4 - TERMS AND CONDITIONS

Effective Date of Exemption  (or event causing exemption to become effective)	In-service date of the EAFs, or as soon thereafter as possible.
<ul> <li>Date of Expiration of Exemption</li> <li>If greater than 5 years, the Panel must be satisfied that the circumstances justify a later date.</li> <li>Circumstances which will cause the exemption to immediately expire.</li> </ul>	The exemption will remain in effect concurrently until the inservice date of the project known as the Northeast Bulk System Reinforcement, as declared by IESO.  Northeast Bulk Planning Initiatives (ieso.ca)
Market Rule(s) or related Market Manual(s) from which the Exemption is granted.	Market Rule Chapter 9, section 2.4A.2  IESO Staff request that the Panel include the following language in its Reasons when referencing this Market Rule:  If the above market rule is amended as part of the Market Renewal Program (MRP), the exemption shall apply to the market rule(s) which provide the same obligations.
Restrictions on the manner of operation and/or additional obligations to be met during the term of the Exemption, if any.	The restriction to Contingency Mode 3 described in Part 3-4(D) of this form above.
Monitoring Information Required Information required to be provided by the exemption applicant for	For Contingency Mode 3, Algoma is obligated to update and maintain their <i>meter</i> registration status accordingly. This will enable the appropriate <i>settlement</i> treatment during this mode of operation which does not include the application of the <i>exemption</i> to <i>energy</i> supplied or taken from LSP

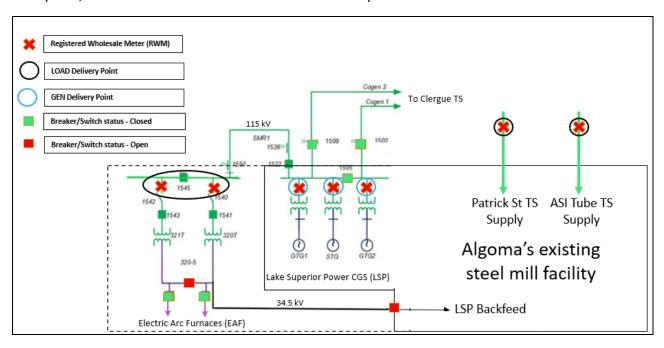
## PART 4 - TERMS AND CONDITIONS

monitoring by the <i>IESO</i> .	GTG2.
Payment of Costs	N/A.
Processing costs (when introduced)	While the exemption addresses the determination of settlement amounts, it does not contemplate the withholding or repayment of settlement amounts.
Incremental exemption costs	
Settlement amounts to be withheld or repaid.	
<ul> <li>Pate on which the exemption will be reconsidered (if applicable).</li> <li>Circumstances under which the exemption will be reconsidered (if applicable) other than unforeseen future change in circumstances.</li> </ul>	Any new SIA related to LSP or EAF (if any) would likely trigger the reconsideration of the exemption.
List the terms and conditions that need to be met to allow for a transfer of this exemption to be approved by IESO staff.	The transferability of this <i>exemption</i> will require Exemption Panel approval.
Other:	N/A

## APPENDIX A - CONFIGURATION OF STEEL MILL UNDER DIFFERENT MODES OF OPERATION

## **Appendix A-1: Normal Operating Conditions without Exemption**

The following is an illustration of the Steel Mill under normal operating conditions, without an exemption, which is in accordance with Market Rule Chapter 9 s.2.4A.2.



The settlement equations for LSP and EAF are as follows:

 $DP_{GEN\_GTG1} = (Meter_{GTG1})$ 

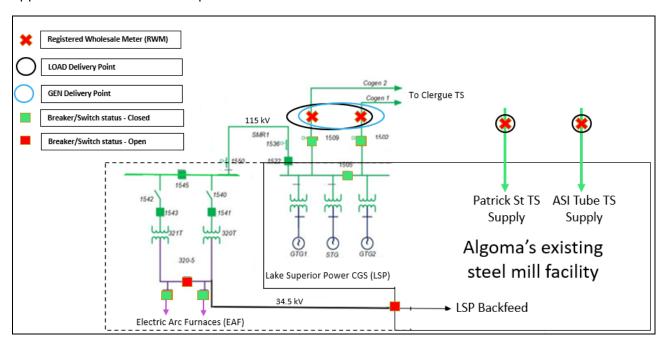
 $DP_{GEN\_STG} = (Meter_{STG})$ 

 $DP_{GEN\_GTG2} = (Meter_{GTG2})$ 

 $DP_{LOAD\_EAF} = (Meter_{EAF\_T1} + Meter_{EAF\_T2})$ 

## Appendix A-2: Mode 1 - Normal-EAF Operation

The following is an illustration of the Steel Mill under normal EAF operation and exemption relief applies from Market Rule Chapter 9 s.2.4A.2.



The settlement equations for LSP and EAF are as follows:

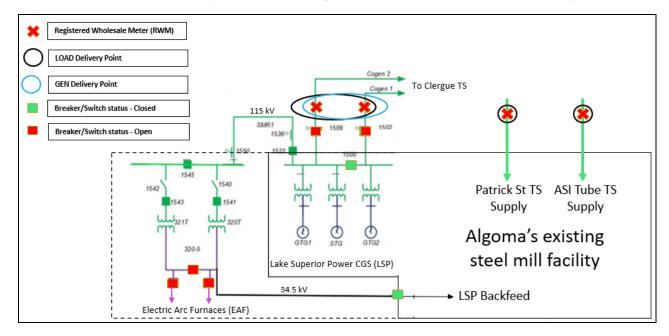
 $DP_{GEN} = (Meter_{COGEN1} + Meter_{COGEN2})$  [Net Injection at the metering interval]

DP<sub>LOAD</sub> = (Meter<sub>COGEN1</sub> + Meter<sub>COGEN2</sub>) [Net Withdrawal at the *metering interval*]

## Appendix A-3: Mode 2 - Normal-Backfeed Operation

The following is an illustration of the Steel Mill when the generation from LSP will be utilized to offset the Steel Mill load supplied from Patrick St. TS.

The exemption does not apply (or exemption not granted, consisted with current practice).



The settlement equations for LSP and EAF are as follows:

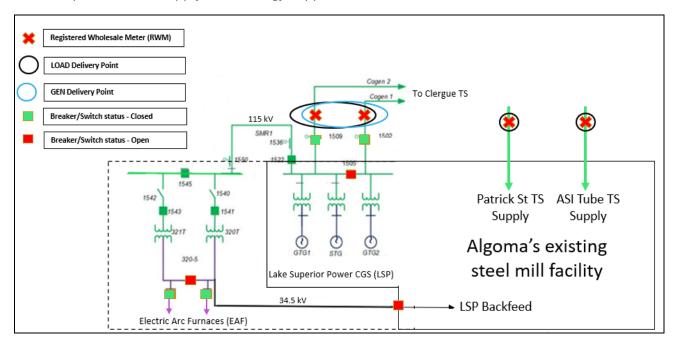
DP<sub>GEN</sub> = (Meter<sub>COGEN1</sub> + Meter<sub>COGEN2</sub>) [Net Injection at the *metering interval*]

 $DP_{LOAD} = (Meter_{COGEN1} + Meter_{COGEN2})$  [Net Withdrawal at the metering interval]

## Appendix A-4: Contingency Mode 3 - Maintenance-Breaker (breaker 1505 open)

The following is an illustration of the Steel Mill when there is an equipment failure or equipment maintenance that requires breaker 1505 to be opened.

The exemption does not apply to the energy supplied or taken from LSP GTG2.



The settlement equations for LSP and EAF are as follows:

DP<sub>GEN</sub> = (Meter<sub>COGEN2</sub>) [Net Injection at the *metering interval*]

DP<sub>LOAD</sub> = (Meter<sub>COGEN2</sub>) [Net Withdrawal at the *metering interval*]

 $DP_{GEN\_GTG2} = (Meter_{COGEN1})$