

Gerdau Long Steel North America

December 1, 2022

Delivered by Email

Markets Committee of the IESO Board of Directors, in their capacity as the Exemption Panel Independent Electricity System Operator 1600- 120 Adelaide Street West Toronto, Ontario M5H 1T1

Re: OEB Market Surveillance Panel July 26, 2022 letter entitled "IESO Recommendations to Reconsider Existing Exemptions for Dispatchable Loads"

Gerdau Long Steel North America (Gerdau) has reviewed the Ontario Energy Board's Market Surveillance Panel letter dated July 26, 2022 regarding the IESO's initiative and recommendations to revise existing exemptions for dispatchable loads (the MSP Letter).

Gerdau welcomes the opportunity to respond to this submission and to provide important missing information regarding the claims made in the MSP Letter. Pursuant to its exemption, Gerdau has provided Operating Reserve (OR) for the past 18 years without any material issue or concern raised by the IESO. With respect, Gerdau cannot understand how the MSP could conclude that Gerdau's 2004 exemption was not intended to facilitate its compliant participation as an OR resource. Participation in the OR market was the central rationale for seeking the exemption and the MACD monitored Gerdau's performance as an OR resource during its initial compliance period in 2004-2005. Gerdau believes that critical details surrounding the development and implementation of Gerdau's exemption must be considered to understand the complete picture where the existing exemption regime clearly anticipated and included dispatchable load participation in OR. This essential background also provides relevant context regarding the IESO's ongoing exemption reconsideration process.

At the outset, Gerdau underscores its significant concern about MSP's novel interpretation that participation in the OR market is not part of our existing exemption. Gerdau requires clarity and certainty with respect to how it participates in Ontario's electricity market. We need confidence that IESO programs are subject to a common, shared understanding that can be relied upon over time and not subject to novel, prejudicial interpretations articulated many years after a program has been in effect.

Gerdau remains deeply troubled that existing dispatchable load exemptions would be subject to such fundamental misunderstandings by the MSP and change in interpretation by IESO; particularly given the fact that during the 18 years since our exemption was approved by the IESO board, at no time has Gerdau received notice of any material performance issue related to this program. Gerdau, as a significant business, employer and investor in Ontario, must be able to rely on the shared understandings and consensus which provide the foundation for it's exemption and pursuant to which Gerdau has participated as an OR resource since 2004.

The following central themes are expanded upon in detail in this letter, however a summary of key milestone events that constitute Gerdau's experience and participation in IESO's dispatchable load program include:

- 1. In the early 2000s, IESO actively solicited dispatchable batch load participation to increase OR resources to benefit the Ontario electricity market.
- 2. IESO provided direct assistance to Gerdau to develop its exemption application, which Gerdau and other dispatchable loads filed with IESO that included OR offer calculations that excludes periods of minimum consumption.
- 3. IESO's staff recommendation supported Gerdau's exemption application which included the details on how Gerdau intended to calculate energy bids (that excluded periods of minimum consumption) and includes specific Market Rule exemptions that cover both energy and OR by definition. Gerdau follows IESO direction and registers its facility for OR which IESO approves.
- 4. Gerdau bids and offers the same MW for both energy and OR consistent with its Exemption during the entire 4 month MACD "initial compliance period" in 2004-2005. MACD raised no concerns with respect to Gerdau's energy bids and/or OR offers that exclude periods of minimum consumption. MACD signs off on Gerdau's performance pursuant to our exemption and commits to notify Gerdau of any material issues in the future.
- 5. Gerdau is advised through the IESO Dispatchable Load Working Group (DLWG) that since IESO systems cannot manage mismatches between Energy bids and OR offers, all OR/Energy offers/bids should be made on a consistent MW basis. This reflects Gerdau's practice.
- 6. IESO reviews the performance of exempt dispatchable loads offering 30 minute OR and concludes these industrial loads may also offer 10 minute OR which demonstrates IESO confidence in the performance of dispatachable loads as an OR resource.
- 7. Since 2004, IESO is required as a condition of our exemption, to conduct semi-annual reviews of Gerdau's performance against its exemption requirements. Gerdau receives no notifications from IESO with respect to any issues related to its performance as a

dispatchable load, including Gerdau's OR offers despite ongoing operational communications and interactions with the IESO.

- 8. Gerdau operates in the same manner for 18 years as an OR resource. At no time is Gerdau advised that IESO has any material concern with Gerdau's performance as a dispatchable load including our OR offers.
- 9. Gerdau has bid energy, offered OR, notified and responded to IESO in the same, consistent manner for the past 18 years, including during MACD's initial 2004-2005 compliance-monitoring period.
- 10. On July 26, 2022, the MSP Letter includes the unfounded claim that Gerdau's 2004 exemption does not "exempt Gerdau from compliance in the way that Ivaco is", despite both exemptions applying to the identical Market Rules.

Accordingly, along with an overview of the historical context that resulted in the approval of the exemptions by the IESO, we also describe Gerdau's operationalization of the exemption that included IESO oversight throughout the process. Gerdau also provides specific comments on selected portions of the MSP Letter that draw directly on this historical context and in part, on IESO materials issued as part of the exemption stakeholder process.

Background and History: IESO encouraged the exemptions since dispatchable loads make excellent OR providers

From its inception, the IESO understood that the loss of discount demand service loads (which were available to dispatchable loads prior to market opening) would negatively affect system reliability. As a result, the IESO endeavored to accommodate and integrate former interruptible loads as OR providers. Recognizing the benefits of improved system reliability as well as the reduction in market costs resulting from increased competition, the IESO encouraged and facilitated Gerdau and other industrial loads to participate in the OR market.

The IESO found that dispatchable loads and the controllable nature of electric arc furnaces (EAFs) in particular make steel manufacturers excellent OR providers. A steel maker's goal is to produce the greatest amount of steel in the shortest time possible, which aligns with the IESO's objective of maximizing availability. The IESO would be able to rely on the availability of the EAF's load when called upon during a grid contingency event. However, because dispatchable loads were unable to meet all Market Rules, and because IESO de-rating tools that generators enjoyed were not available to dispatchable loads, exemptions to various Market Rules were required.

The IESO most recent acknowledgement of these facts is contained in its November 3, 2022 Response to Market Surveillance Panel Exemption Reconsideration Feedback (IESO MSP Response) which states, in part:

"As is the case for many dispatchable supply resources, the dispatch characteristics of the Exempt Loads is unique to their particular technology and enabling their participation in the operating reserve market meant addressing these unique characteristics with regard to IESO tool capabilities...The consumption pattern of the Exempt Loads is not modeled in the IESO's software – they are not able to reflect this behaviour through real-time information submissions (de-rates) to the IESO." (page3, IESO MSP Response).

In the early 2000 period, the challenge for IESO was to create an exemption that both recognized the cyclical nature of EAFs and provided the IESO with a level of confidence that the load was available to be dispatched off or controlled at minimum consumption. The exemptions were prepared with IESO staff support to accommodate the batch-load characteristics of EAFs: specifically, that within every hour there are three 5-minute intervals where the load drops to zero MW. The exemptions also detailed procedures for dispatchable loads to bid their energy, how to respond to dispatch instructions, facility registration requirements for the provision of operating reserve, and direction for dispatchable loads to notify the IESO when operating outside of its normal production cycle.

As a result, Gerdau made significant investments in its automated systems and operator training to ensure exemption protocols and procedures were followed. In fact, not long after the IESO board approved its exemption, Gerdau hosted the IESO in a tour of its Whitby steel mill to review Gerdau's in-house developed software and training procedures.

In the initial stages of participation in the OR market by Gerdau, the IESO's Market Assessment & Compliance Division (MACD) carefully scrutinized Gerdau's performance as a dispatchable load. During that 4-month initial compliance period in 2004 -2005 and on several reviews over the years that followed, the IESO did not raise any material concern regarding Gerdau's compliance with the exemption or the corresponding Market Rules or ever question the applicability of Gerdau's exemption regarding the provision of OR.

As a condition of Gerdau's exemption, the IESO was obligated to conduct semi-annual monitoring of Gerdau's participation in these programs. In particular, the IESO was required to monitor and assess Gerdau's:

- compliance with the eligibility criteria for dispatchable loads as described in the facility registration process (which specifically included OR); and
- compliance with the bidding, operating strategy and notification requirements described in this [exemption] recommendation.

Having received no concerns from the IESO, Gerdau's reasonable conclusion was that it was operating in compliance as an exempt dispatchable load.¹

Regulatory certainty and clear exemption "rules of engagement" are critical preconditions for future investments in Gerdau's Ontario facilities. We recommend that the IESO continue its mandatory semi-annual performance reviews of dispatchable loads with approved exemptions. This is essential to provide exempted dispatchable loads with confidence that the IESO (as regulator) is satisfied with the exempted entity's performance consistent with exemption requirements.

Exemption: Development and Operationalization

The exemptions were created for batch loads to grant relief from specific Market Rules including Chapter 7, 7.5.1 and 7.5.2. The three exemptions granted – to Gerdau, Ivaco and Dofasco – all referenced the identical Market Rules that would not apply to their respective EAF operations. During the early days of the Ontario electricity market, the exemption solution was chosen by the IESO as an alternative to developing a de-rate tool available to generators. In its MSP Response IESO states:

"In the long-term, the best "feasible alternative" would be for the IESO to update its tools, which would allow the Exempt Loads to participate in the same manner as more traditional generation facilities. Historically, the issues with this alternative is that it is a costly endeavour which is difficult to justify in order to facilitate the participation of four facilities" (page 3, IESO MSP Response)."

In summary, the exemptions approved by the IESO in 2004 resulted from a cooperative development process between the IESO and the dispatchable loads. When the IESO's de-rate tool is used by a generator, both the availability and compensation issues are automatically dealt with for the period of the de-rate, by interval. The dispatchable load exemptions are effectively a workaround necessitated by the ongoing IESO tool deficiency.

The 2004 exemption emulates the ability to de-rate as follows:

Availability – The dispatchable load must notify the IESO control room if not operating normally. The IESO can then take the appropriate actions to ensure reliability is not compromised. This notification process was automated, at first by telephone call that was later revised to an email notification, sent immediately when the load is not operating within its normal batch load cycle. This has been Gerdau's practice since 2004.

Compensation - The dispatchable load exemptions require that, if unavailable for a given hour, the load must remove its energy bids /OR offers as soon as possible and keep them removed until the operational issue is resolved, and normal operation is restored. It is important to note that due to current IESO system limitations, both energy bids and OR

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¹ Decision of the Independent Panel, Exemption application No. 01-1304, page 2, Monitoring Information Required.

offers cannot be changed for the current hour. Most Gerdau's delays have a duration of much less than one hour.

The IESO staff formed the Dispatchable Load Working Group (DLWG) that comprised dispatchable loads and IESO representatives. The IESO led the discussions, confirmed practices, and ensured protocols were acceptable to the IESO's control room operators. MACD's November 2nd, 2004, letter to Gerdau entitled "Compliance Activities for Gerdau Whitby Facility", instructed Gerdau to utilize the DLWG guidelines to understand how the Market Rules and exemption apply to Gerdau. There were specific discussions at the DLWG that <u>ALL</u> batch loads should offer the same MW for OR as energy bids because any difference was not being treated appropriately by the IESO dispatch tools. This is consistent with the way Gerdau has offered OR since 2004.

Gerdau's Exemption clearly included participation in the OR market

Gerdau and the other dispatchable loads with exemptions are exempt from Market Rule 7.5.1, the requirement to follow dispatch instructions within the compliance band. Dispatch instructions pursuant to Market Rule 7.5.3 includes energy, operating reserve and reactive support. While OR activations are dispatched for reliability reasons, OR activations are simply an energy dispatch instruction with an OR tag. Therefore, Gerdau's exemption clearly applies to compliance with both energy and OR dispatch instructions.

Further, the guideline for offering OR includes a requirement to bid the lowest MW expected in any interval of an hour. If the bidding instructions for energy bids (excluding the periods of minimum consumption) did not apply to Gerdau's OR offers, Gerdau would have to offer 0 MW and therefore would never have qualified as an OR resource. These two facts clearly demonstrate Gerdau's exemption applies to Gerdau's participation as an OR resource.

As stated in the IESO MSP Response:

"Due to the variable nature of the Exempt Loads' processes, they are not always at maximum consumption when they are asked to turn their scheduled operating reserve into energy by reducing their consumption. For approximately 15 minutes each hour the Exempt Loads are consuming 0 MW as they re-start their processes. When it is not consuming, an Exempt Load is not able to reduce its consumption in response to a system event" (page 3, IESO MSP Response).

Information about dispatchable loads published by IESO on its website in 2004 and 2015 are unambiguous in that dispatchable loads can offer operating reserve. In the "IESO's Quick Takes Dispatchable Loads" publication dated December 13, 2004 (posted on the IESO website and attached hereto), the IESO states that dispatchable loads can offer OR (while non-dispatchable loads cannot) and includes the following direct quotations:

"The primary reasons that loads choose to become dispatchable are:

"They can offer operating reserve and thereby receive an additional revenue stream. Depending upon how often their offer is selected and the current market clearing price, this revenue can be considerable."

This document goes on to discuss specific criteria for loads with exemptions participating in the OR market:

"An exemption from the Market Rules can be applied for if a facility cannot consistently comply with dispatch instructions within the normally required compliance range. Such an exemption will only be considered if the reason for consistent non-compliance is inherent to the nature of the facility."

"Consequently, the process and rules that apply to dispatchable facilities can be a challenge for dispatchable loads to follow. In addition to the exemption process noted above, the IESO has created a dispatchable load working group."

"Dispatchable load facilities must enter bids to purchase electricity, and, if desired, offer to supply operating reserve. Bids and offers are submitted via the web-based Market Participant Interface (MPI) tool. This is the same system used by participants to retrieve settlement statements, meter data and reports."

"The IESO simultaneously sets prices and schedules in both the energy and operating reserve markets. As a result, the dispatch of facilities is affected by the interplay of the two markets."

Under the Summary of this IESO Quick Takes Dispatchable Load publication, the IESO concludes with the following:

"If a load can adjust some portion of its consumption based on a 5-minute dispatch, it can choose to register as dispatchable within the IESO-administered markets. While requiring some additional upfront costs and ongoing effort, dispatchability has the advantages of allowing a market participant to receive an ongoing revenue stream by participating in the operating reserve market."

This IESO publication leaves no doubt that if a dispatchable load elected to participate in the OR market it could do so by obtaining an exemption approved by IESO and by registering the facility for the 10 and/or the 30-minute OR. This is precisely what Gerdau did 18 years ago.

Gerdau's exemption application was clear that its EAF would be making both energy bids and OR offers, excluding the periods of minimum consumption. The IESO determined that approval to provide OR would be dealt with in the Facility Registration process that was merely an IESO administrative filing change from the time of the Ivaco exemption. Nevertheless, this change had no impact on the scope or application of the exemptions which clearly was intended to facilitate

the provision of OR. Gerdau, in its facility registration, clearly indicated this and was approved to participate in Real Time Energy and 10 and 30 minute OR market.

It must also be remembered that when the exemption was initially granted to Ivaco, the IESO limited exempt dispatchable load participation to the 30-minute, non-spinning operating reserve (30-OR). This was done out of abundance of caution as to not put system reliability at risk. Through participation in the Dispatchable Load Working Group, Gerdau was informed that the IESO had completed a study on load performance in the 30-OR and concluded that all batch loads were now qualified to provide 10-minute non-spinning reserve to the market. This conclusion clearly indicates that the IESO was satisfied with the performance of exempted dispatchable load's provision of OR.

Gerdau became a dispatchable load to provide OR and regain the value of being able to interrupt their load during a grid contingency event. There would have been no value for Gerdau to be a dispatchable load without being an OR provider. This commercial reality remains unchanged.

The following excerpt from the 2011 Dispatchable Load Working Group operating guidelines, attached hereto, supports Gerdau's position that the exemption applies to energy bids and OR offers: "These loads may still qualify to provide OR" if they obtain an exemption.

Loads That Consume Cyclically

Some loads consume cyclically. They either do not normally consume during some parts of an hour, or they consume at a much reduced level. An arc furnace is an example of this type of load. Loads that consume cyclically may have a market rules exemption that does not require them to follow their dispatch instruction at all times. For example, the exemption might recognize their down periods. These loads may still qualify to provide OR. If such a load receives an OR activation during a period when its consumption is low as allowed by its exemption, it is still expected to accept the dispatch. To comply with its OR activation, it must then stay at or below the OR dispatch level until it receives a dispatch allowing it to consume more.

Gerdau's exemption required it to notify IESO of any production delays, to which requirement Gerdau complied. Accordingly, the IESO should not have expected Gerdau to be in a position to offer its MW in view of this notification. Gerdau's notification allowed IESO to engage alternate OR resources without compromising reliability.

We again reference the IESO's 2011 Dispatchable Load Working Group operating guidelines that states:

You must keep your dispatch data up-to-date. However, you cannot change dispatch data for the current hour. If you expect the problem that caused you to reject a dispatch instruction to continue beyond the current hour, you must change your dispatch data for future hours. For hours in the mandatory window, follow the procedure in the "Updating Bids and Offers" section above.

If you determine that you will be unable to actually activate the quantity of OR indicated in an OR schedule dispatch instruction, you must notify us:

- If the OR schedule dispatch instruction was for 10 minute OR, and your inability to follow dispatch is expected to last longer than 10 minutes.
- If the OR schedule dispatch instruction was for 30 minute OR, and your inability to follow dispatch is expected to last longer than 30 minutes.

For both energy and OR dispatch instructions, you can use automated voice messaging to notify us as long as we assessed, tested and approved the voice messaging process when you registered your facility as dispatchable. Once you have notified us, you will not need to reject any dispatch instructions you receive during the period when you are unable to follow instructions. You need to update us if there is a change to the length of time during which you will be unable to follow dispatch instructions¹³.

The following important footnote to the excerpts quoted immediately above bind together OR offers and Energy bids.

¹² A load that has an exemption allowing it to deviate from dispatch instructions for part of an hour should follow the procedures outlined in its exemption.

In the IESO staff recommendation in support of Gerdau's exemption, Part 3, "Undue preference to the IMO-administered markets", the IMO/IESO staff indicated the exemption effectively extends the treatment given to Ivaco. Ivaco's exemption refers to participation in both energy and the OR markets. The statement below confirms the intent was to provide the same opportunity and treatment to Gerdau:

"By granting this Exemption, the IMO recognises the limitations that prevent GACWSM from complying with all energy dispatch instructions and essentially extends the treatment given to similar loads (see the exemption granted to Ivaco), thus providing the applicant with no undue preference within the IMO-administered markets."

The energy dispatch rules applied to OR in a non-discriminatory manner as between exempt dispatchable loads to extend the same commercial opportunity to Gerdau that Ivaco enjoyed and to avoid discriminatory treatment amongst these exempted industrial load Market Participants.

Other Commentary regarding issues raised in the Market Surveillance Panel Letter

The MSP Letter claims that Gerdau's exemption did not apply to participation in the OR market. This simply is not correct.

As described above, Gerdau is exempt from Market Rule 7.5.1, the requirement to follow dispatch instructions within the compliance band. Dispatch instruction as per Market Rule 7.5.3 includes energy, OR and reactive support. While OR activations are dispatched for reliability reasons, OR activations are simply an energy dispatch instruction with an OR tag. Therefore, Gerdau's exemption clearly applies to compliance with both energy and OR dispatch instructions. Gerdau's exemption application and facility registration clearly states that the EAF would be making both energy bids and OR offers.

Further, the guideline for offering OR includes a requirement to bid the lowest MW expected in any interval of an hour. If the bidding instructions for energy bids (exclude the periods of minimum consumption) did not apply to Gerdau's OR offers, Gerdau would have to offer 0 MW and therefore never qualify as an OR resource. These two facts clearly demonstrate Gerdau's exemption applies to Gerdau's participation as an OR resource. But for the application of the exemption to both Energy and OR, Gerdau could never have participated in the OR market and would have been out of compliance the very first interval and near continuously so for the next 18 years. However, as indicated above, for the past 18 years IESO has raised no material concerns with Gerdau's participation in the energy and OR market pursuant to its exemption.

For the MSP to suggest that the exemptions did not provide batch loads with the opportunity to provide OR is simply unsupportable and untenable. Gerdau's record is 18-years of continuous operation under its approved exemption. With respect, Gerdau does not understand why MSP would possibly advance a novel interpretation of the scope and applicability of its exemption to claim that IESO's program excluded OR offers. Gerdau is exempt from exactly the same Market Rules as Ivaco. Therefore, on what basis could the MSP conclude that, "Gerdau is not exempt from compliance in the same way Ivaco is", given that both companies are exempt from the identical Market Rules? MSP's novel interpretation neither reflects the historical record nor the representations and actions of those IESO officials who were directly involved in the early 2000s when the exemption program for dispatchable loads was developed and implemented.

The IESO MSP Response highlights the problem, and Gerdau suggests the inherent unfairness, that results from novel interpretations of the exemption being offered many years after it was approved. On page 2 of its MSP Response IESO states: "Wading into the direct applicability of two-decade old exemptions to a new operating environment can be a matter of interpretation and potentially dispute..." Gerdau must have confidence that IESO stakeholdering processes and the tools that result therefrom, in this instance the dispatchable load exemption, are stable and can be relied upon without the fear (almost 20 years later) of novel interpretations that have the effect of unwinding foundational features of the program.

Responses to specific MSP observations

1. MSP Statement: "These documents state that the IESO staff requested these reconsiderations due to a change in circumstances, one of which, according to the documents, is the MSP report that discussed inaccessible operating reserve."

Gerdau's Response: The existing exemption allows for the dispatchable load to make Energy bids equal to a value of the average of the hour not including the three lowest intervals, sometimes referred to as "the average of the power on". As confirmed by Gerdau's exemption application, the DLWG discussions regarding matching energy bid and OR offer MWs, it is clear applying the same calculation to OR offers was the understanding by all parties at the time of the exemption. There is no other reasonable rationale why Gerdau and Dofasco both included the same understanding of the OR offer calculation in their respective exemption applications. The Independent Panel and IESO staff raised no objection or concern over Gerdau's proposed calculation of OR offers. It is critical that an analysis of inaccessible OR must not include the three zero MW intervals for each hour.

2. MSP Statement: "In 2002, a panel (referred to at the time as the "Independent Panel") considered Ivaco's application for exemption from the requirement to comply with dispatch instructions for the real-time energy market and from the requirement to notify the IESO if there is an expected material difference in operations from those dispatch instructions. "

Gerdau's Response: Agreed. In fact, all three batch loads were provided exemptions from the identical Market Rules: Chapter 7, rule 7.5.1 and 7.5.2. The intent of the exemptions (for Gerdau, Ivaco and Dofasco) were to allow highly variable batch loads to participate in a market with rules written primarily for generators. The exemptions accommodated batch loads and allowed the IESO to effectively control these operations during a grid emergency event. There was discussion at the DLWG that batch loads should bid the same MW for OR as energy, because any difference was not being treated appropriately by the IESO dispatch tools.

3. MSP Statement: "The exemption panel granted the exemptions for participation by these Exempt Loads in the energy market on the conditions recommended by IESO staff, which did not include exemptions for operating reserve offers as requested by these two Exempt Loads. As such, when they offer operating reserve, they are not exempt from compliance in the way that Ivaco is."

Gerdau's Response: As above, Gerdau and Ivaco are exempt from the identical Market Rules, including Market Rule 7.5.1, the requirement to follow dispatch instructions within the compliance band. Dispatch instructions, according to Market Rule 7.5.3, expressly includes OR. Given that an ORA is simply an energy dispatch instruction with an OR tag, Gerdau's exemption applies to compliance with both energy and OR dispatch instructions. In addition, the DLWG guideline for

offering OR includes a requirement to bid the lowest MW expected in any interval of an hour. If the bidding instructions for energy bids in Gerdau's exemption, "to exclude the periods of minimum consumption", did not apply to Gerdau's OR offers, Gerdau would have to offer 0 MW and therefore never qualify as an OR resource at all.

4. MSP Statement: "The MSP estimated that dispatchable loads received approximately \$12 million in inappropriate stand-by payments during the identified period for providing reserve that was unavailable for energy activation, noting that these instances were of concern not only for the payments themselves but for the corresponding reliability issues.

Gerdau's Response: With respect to the issue of availability, the existing exemptions require the loads to notify the IESO control room if they are not operating normally enabling the IESO to take action to ensure reliability is not compromised.

The IESO staff, at the time of exemption development, realized that although a batch load cannot deliver incremental MWs while in its normal down cycle, starting the load up during a grid contingency (versus being non dispatchable and not controlled) put the system at greater risk. This aspect of being able to control the dispatchable load was recognized as significant value to the IESO.

The IESO assessed that it can manage the short-term deviations caused by batch load variations. This was identified as a non-issue early on in the market with the IESO concluding that the amount of AGC already in place was sufficient to manage real-time deviations (no extra cost). This was the justification for adding more batch loads after the initial Ivaco exemption was approved. The positive impact of batch load resources on the OR market was also recognized by the IESO's analysis and subsequent decision to allow batch loads to expand their participation to the 10-minute, non-spinning OR market. This conclusion is not consistent with the reliability concerns raised by the MSP report.

With respect to compensation, the historical record clarifies IESO policy objectives with respect to the system benefits dispatchable loads can provide:

- i. The IESO recognized that the bids and offers of a highly variable batch load must be considered over a longer period, not on an interval basis. The view on MW's delivered must account for the intervals that exceeded what was scheduled, thereby increasing the hourly average. The IESO's direction to Gerdau at the time of the 2004 exemption was to bid the average recognizing both highs and lows, excluding the zero MW intervals in its normal cycle.
- ii. Consideration must include intervals where the IESO was notified of a production delay but where bids could not be changed for the current hour due to IESO system constraints and procedures.
- iii. Batch loads operate 75% of each hour. If Gerdau was to offer the average of the hour, including its batch load intervals, chances of over-delivery of during activation is more likely than not, especially considering each activation is ~15 minutes or less. In many

cases, the actual MW load delivered during an OR Activation would be higher than the average calculation/offer.

iv. There is a real cost to batch loads when being dispatched off, regardless of where it is operating in its batch cycle. Preventing a batch load from starting up has a cost in lost production with major economic impacts. That was why compensation for the batch intervals was acknowledged. If not for the dispatch instruction, the load would restart during a grid emergency.

The batch loads have compliantly operated under the current protocols as an IESO approved solution since de-rate tools were and continue to be unavailable to dispatchable loads.

5. MSP Statement: "If the current conditions for exemption are deficient then the more appropriate comparison is likely the situation where the exempt loads are ineligible to be dispatchable loads. This was the comparison properly applied by IESO staff and the exemption panel to evaluate the criteria for approval for the existing exemptions."

Gerdau's Response: Gerdau agrees. The comparison base case should be that the batch loads are not dispatchable. In this case, during a grid emergency the batch load would not be under the control of the IESO and would continue operations or restart at anytime and unknowingly make the system reliability situation worse. This historical context led to including batch loads in the market and the rationale supporting the existing exemptions,² including the exclusion of the three batch load intervals from energy bids and OR offers.

6. MSP Statement: "Providing an undue preference or competitive advantage to the Exempt Loads could lead to short-term inefficient dispatch and over the long run, less efficient investment in operating reserve capability, and would be inconsistent with the efficient and fair operation of a competitive market."

Gerdau's Response: The current exemptions have improved the marketplace by allowing competitive dispatchable loads to offer into the OR market. Market efficiency improves by adding a highly responsive OR resources. As the IESO stated in its MSP Response "costs to ratepayers would increase, all else being equal, due to the immediate reduction in OR offered and replacement with higher cost resources". Dispatchable loads, are typically price takers in the OR market thereby lowering the overall market price.

7. MSP Statement: "Fourth, the IESO staff recommendation proposes to exempt the Exempt Loads from the pending non-accessibility charge (if approved by the IESO Board of Directors). As noted above, the pending market rule amendment would allow the IESO to automatically

² As IESO stated in its MSP Response, "the IESO would lose the ability to direct the operation of the Exempt Loads (approximately 200 MW) during times of system need, reducing the ability of the IESO to balance supply and demand in response to unforeseen events on the IESO-controlled grid."

clawback operating reserve payments from market participants when they fail to maintain adequate unused generation (or load reduction) capacity when scheduled for operating reserve. Exempting the Exempt Loads from the charge would provide them with an undue preference or competitive advantage over other operating reserve providers that will be subject to the charge in the sense that the Exempt Loads would receive a higher payment for an inferior product."

Gerdau's Response: In the reconsideration proposed by the IESO, compensation for the batch load will exactly match the MWs delivered by the load over a 6-month period. The proposal is to limit the exempted load's OR offer to the average MWs actually delivered for every hour in which an OR offer was in place. The IESO is trying to address both availability and compensation. The Hourly Energy Consumption (HEC) helps with both in the following ways:

Availability – The load can only offer what it has been historically delivering. In this way, it is self-adjusting and self-policing. The notification provisions in the existing exemption would still apply and loads would be required to remove offers when their load is not available.

Compensation – Since the availability reflects historical actual consumption, all compensation reflects only what is delivered. From an offer perspective, the HEC incents the load to remove offers as quickly as possible. Anytime the load offers OR and is not available, the MW offer and compensation is reduced for the subsequent 6-month period. However, it is important to note that this proposal does not adequately value:

- 1) the cost to the load, or the value to the system of preventing the load from starting up during a grid contingency; and
- 2) that more often than not, a batch load will be operating above its hourly average, delivering more MW's than offered to the market during an OR Activation.

Clawback – The IESO's proposal to restrict batch load exempted offers to the HEC eliminates the need for a clawback. However, the IESO has decided also to impose a clawback after 24 intervals. This clawback is in addition to the HEC and is effectively a penalty that treats exempted loads unfairly.

Conclusion

Gerdau trusts this submission will assist by providing missing information and context regarding the history, intent and implementation of the existing exemptions and to demonstrate the value dispatchable batch loads contribute to the OR market. In 2004, Gerdau worked collaboratively and productively with the IESO and the other dispatchable loads to develop a secure and reliable operating reserve participation solution. Gerdau is once again pleased to offer its cooperation to IESO as it refines its proposed draft of the exemption reconsideration. We also encourage the

MSP to engage directly with dispatchable loads to gain a better understanding of the inner workings of how existing exemptions have operated in practice over the past 18 years. To that end, Gerdau cordially invites MSP officials to tour our industrial facility to experience firsthand how our EAF operates in compliance with our 2004 exemption.

In closing, Gerdau underscores its significant concern about MSP's novel interpretation that participation in the OR market is not part of our existing exemption. Gerdau requires clarity and certainty with respect to how it participates in the Ontario electricity market. We need confidence that IESO programs are subject to a common, shared understanding that can be relied upon over time and not subject to novel, prejudicial interpretations articulated many years after a program has been in effect.

Gerdau urges the IESO only to proceed with a revised exemption program that contains no ambiguity to avoid future uncertainty and unacceptable risks for dispatchable loads.

We appreciate the ongoing opportunity to participate in IESO's Dispatchable Load Exemption process.

Yours very truly,

Dev. Eferons

David Lyons

Director of Energy

Gerdau Long Steel North America

Encl.

Copy to:

Joe Oliver, IESO Chair

Lesley Gallinger, President and CEO, IESO

Michael Lyle, Vice-President, Legal Resources and Corporate Governance, IESO

Carolyn Calwell, Chief Corporate Services Officer and General Counsel, OEB

George Pessione, Market Surveillance Panel

Ken Quesnelle, Market Surveillance Panel

Brian Rivard, Market Surveillance Panel

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