

Automotive Manufacturer Supports Energy Conservation with Demand Response



Location

25 facilities across Ontario



Program

IESO Demand Response Auction



DR Strategy

Non-operational curtailment measures



DR Revenue

Hundreds of thousands of dollars annually

Based in Ontario, Linamar Corporation has grown from a small machining operation to a global supplier of vehicle and mobile industrial equipment with 37 manufacturing facilities worldwide. Linamar designs and manufactures precision metal components for the global vehicle and power generation markets, as well as designs and produces aerial work platforms and other equipment for its industrial business segment.

As Linamar has grown, so has its yearly energy usage. This dynamic presented a paradox for the environmentally-conscious company; Linamar was eager to minimize its energy usage as much as possible but did not want to impede its manufacturing operations. The customized energy reduction plan proposed by Enel X was exactly the solution that Linamar needed to participate in the IESO Demand Response Auction (DRA) scheme, in which the company's facilities provide 2.4 MW of energy reduction

to earn the company hundreds of thousands of dollars in annual payments.

For Linamar, Enel X's combination of process expertise and local, on-the-ground presence in Ontario is essential. "Enel X has the most information, the most up-to-date process knowledge, and the most insight into the specifics of demand response," said Tony Luis, Linamar's Director of Purchasing.



Customized Site-Specific Demand Response

Linamar was keen to reduce energy usage wherever possible, but with 25 separate facilities across Ontario, knowing where to begin was an intimidating challenge. Enel X's local experts made this daunting task seem simple by working with site managers to determine what level of participation would be right for each individual plant. "Enel X took us through the process step-by-step," Luis recalled. "They met with each individual plant, and explained what each site's involvement would be in a demand response dispatch."

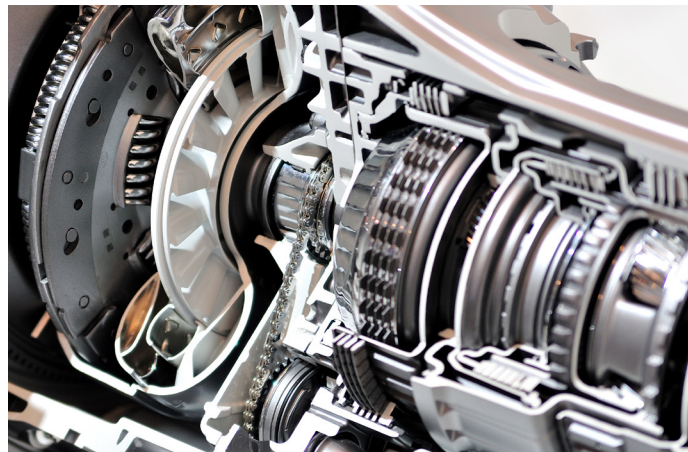
Making Operational Continuity a Priority

Linamar's two requirements for its plants' curtailment plans were to (1) maintain employee safety at all times, and (2) to allow its manufacturing processes to continue unimpeded. Therefore, when a demand response dispatch occurs, Linamar practices non-operational curtailment measures such as reducing air conditioning in the plants' front offices, dimming lights, and reducing the air cycle schedule in the plants.

For most manufacturing companies, the financial incentives from demand response prompt them to pursue a full or partial shutdown of manufacturing processes, while the crew are deployed to other activities like equipment maintenance. For Linamar, though, Enel X was able to identify substantial energy reductions outside of core manufacturing processes so Linamar enjoys the financial rewards of demand response without disruption to its business.

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—Tony Luis, Director of Purchasing at Linamar



A Comprehensive Approach to Sustainability

"A lot of our decision-making processes are green-conscious," said Luis. "The IESO DRA program is just another element of how we do things here. We appreciate the financial benefits but we also learn about our business' effect on our electricity usage." Often, individual plants will challenge themselves to continue curtailment even longer than the official dispatch period. "We take certain measures to reduce electricity during curtailment, but now plants are asking themselves, 'Can we do these things over longer periods?'"