



# Market Development Advisory Group (MDAG) Workplan Proposed Market Development Project Valuation Assessment

## Purpose:

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## Instructions:

Please complete this form in full to identify potential market development projects that will be considered by the IESO and MDAG for prioritization.

Stakeholders are asked to complete this project valuation assessment and return the form to [engagement@ieso.ca](mailto:engagement@ieso.ca) by **August 20, 2019** and will be offered the opportunity to present at the August 29 MDAG meeting.

Please note that potential market development projects submitted must, at a minimum, satisfy the criteria in section 1 - “Alignment with MDAG vision” - to be considered further. The IESO will review answers in section 1 of this assessment to verify whether the project submitted is aligned with IESO Markets goals and objectives.

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## A. Key Information

|   |   |
|---|---|
| <b>Project title:</b>                         | Compensation for Load Resources   |
| <b>Organization:</b>                          | Enel X/Rodan  |
| <b>Organization representative and title:</b> | Sarah Griffiths – Director, Regulatory Affairs Ted Leonard – COO, Rodan |
| <b>Mailing address:</b>                       | ████████████████████  |
| <b>Phone:</b>                                 | ████████████████████  |
| <b>Email:</b>                                 | ████████████████████  |
| <b>Date:</b>                                  | August 20, 2019   |

## B. Project Description

**Use the area below to explain the concept and objectives of this project.**

Currently under the TCA design, loads do not receive HOEP when they are dispatched, despite the fact they have a bid in the energy market. Under the OPA contract DR3 program, participants received availability payments for demonstrating their capacity was available as per the program rules.

Participants also received a utilization payment when they were dispatched. During the transition to the IESO market based Demand Response Auction, market rules did not include energy payments for DRA capacity supply obligations, despite the must-offer in the Day-Ahead Commitment Period. This decision was justified by the IESO based on the point that only loads would be participating in the auction, and since no loads received energy payments, the cost of dispatch should be built into the capacity auction bid. When the TCA occurs, demand response resources will now be competing with resources that have access to multiple revenue streams (energy market revenues, ancillary services revenues) whereas DR resources will not have access to energy market revenues, and some resources will not have access to either energy market or ancillary service revenues.

In order to increase competition and market confidence, both of which benefit the Ontario electricity consumers, the IESO needs to:

- Recognize and respect both its own overall MRP objectives and its capacity auction specific objectives of ‘creating a stable and efficient marketplace that produces value for consumers’ by ‘encouraging competition and innovation among suppliers’ and ‘resolving long-standing market design issues’
- Proceed with a focused study to validate the ‘net benefits’ to consumers of energy payments for demand response resources so that the study can be concluded as soon as feasible and its results implemented.

Enel X and Rodan recognize that the IESO has determined that this issue will now be part of a broader stakeholder engagement.

## 1. Alignment with MDAG vision

**All proposed market development projects must demonstrate that they are required for system reliability, meet regulatory need, and/or deliver meaningful market efficiency benefits (deliver system cost savings). Proposed projects that meet these criteria will be further assessed according to information provided in sections 2-5. Projects that do not meet these criteria in section 1 will not be evaluated further.**

**A. Can the proposed market development project demonstrate that it will maintain system reliability, meet a regulatory standard or decision in Ontario, or deliver cost savings?**

**i. Will the proposed market development project contribute to system reliability?**

**Explain:**

There will be no negative impact on reliability and will present a macro-level reliability benefit through increased supplier diversity.

**ii. Is the proposed market development project required to meet a regulatory requirement in Ontario?**

Yes  No

**Explain:**

The Ontario Electricity Act, 1998 governs the authority of the IESO to make Market Rules. Subsection 33 (9) of the Act requires the OEB to consider whether a market rule amendment ‘unjustly discriminates against or in favour of a market participant or class of market participants’. If Market Rule amendments which have the effect of allowing generation resources to unjustly and unfairly compete against DR resources for the provision of capacity to the IESO administered markets would ‘unjustly discriminate against a class of market participants’.

**iii. Is the proposed market development project expected to deliver system cost savings?**

Yes  No

**Explain:**

The success of past DRA have demonstrated with the results of the auctions over the last 4 years. The price of demand response has decreased by 42%, while the number of registered auction participants has increased. The IESO has noted that “Moving to its fourth year, the auction has been established as a valuable and reliable tool for the IESO to secure capacity on the system. Decreasing prices year-over-year ... Lower capacity prices benefit all Ontario consumers, while auction participants benefit by offsetting their energy costs...”.

**B. Will the proposed market development project require design changes to the IESO Administered Markets?**

Yes  No

**Explain:**

Market rules will need to be established to compensate demand response resources in a comparable manner to other resources.

**C. Is the proposed market development project aligned with IESO’s market development principles of competition, transparency, efficiency, certainty, and implementability?**

**i. Does the proposed market development project align with the market development principle of competition?**

Yes  No

**Explain:**

Ensuring competition exists is the key driver of this proposal.

**ii. Does the proposed market development project align with the market development principle of transparency?**

Yes  No

**Explain:**

The cost of the electricity system will be properly reflected.

**iii. Does the proposed market development project align with the market development principle of efficiency?**

Yes  No

**Explain:**

Participation of demand response resources will increase the efficiency of the market.

**iv. Does the proposed market development project align with the market development principle of certainty?**

Yes  No

**Explain:**

Demand response resources are made up of Ontario consumers. They are on the ground and ready to participate once barriers are removed.

**v. Does the proposed market development project align with the market development principle of implementability?**

Yes  No

**Explain:**

Other ISOs have been able to implement the comparable compensation of all resources.



## 2. Reliability Impacts

The purpose of this section is to understand the impact of the proposed market development project on system reliability

A. Provide a high level overview of how the proposed market development project impacts reliability.

**Explain:**

See above.

B. Will the proposed market development project help reduce the risk of loss of load events?

Yes  No

**Explain:**

Yes.

C. Will the proposed market development project help alleviate constraints on the system?

Yes  No

**Explain:**

Yes.

D. If “Yes” was answered to either 2B, or 2C, expand whether reliability impacts are expected to be local, zonal or system wide?

Local  Zonal  System wide

### 3. Market Efficiency Impacts

The purpose of this section is to understand potential market efficiency impacts of the proposed market development project across various components of the IESO Administered Markets over the short term and long term.

A. How will this proposed project improve the efficiency of Ontario's wholesale energy market in the short term (1-2 years)?

**Any information on the materiality of the impact will be helpful, in addition to clarification on which component of the wholesale market design this proposed market development project will impact, e.g., OR, RT, DR etc.**

See above,.

B. How will this proposed market development project impact the efficiency of the wholesale energy market post Market Renewal implementation?

**Any information on the materiality of the impact will be helpful, in addition to clarification on which component of the wholesale market design this proposed market development project will impact, e.g., OR, RT, DR etc.?**

See above.

C. What impacts will the proposed market development project have on system flexibility?

**Explain:**

See above.

D. How will the proposed market development project enable greater wholesale market participation?

**Explain:**

See above.





E. Overall, how will this proposed market development project increase the competitiveness of the Ontario wholesale market?

**Explain:**

See above.

## 4. Risk Assessment

The purpose of this section is to identify risks that may impact the value proposition of the market development project, and to understand how these risks might change over the short term and long term.

A. Identify potential risks that could impact the value proposition of the project. Note that risks identified in 4A will be used to complete the risk assessment in section 4B, C and D.

**Identify potential risks to the project:**

Loss of the demand response resource in Ontario.

**Risk over time**

B. Are the risks identified in section 4A expected to change over the next 1-2 years?

**Explain:**

Yes

**Impact on project**

C. Are the risks identified in section 4A expected to change post Market Renewal implementation?

remain unchanged  decrease  increase

**Explain:**

D. Are there ways that risks identified in section 4A could be mitigated cost effectively?

**Explain:**



## 5. Implementability [This section is to be completed by the IESO]

The purpose of this section is to determine whether the proposed market development project submitted is feasible and practical for the IESO to undertake.

A. What are the IESO internal constraints in terms of capital and personnel to deliver on the proposed market development project?

B. How long does the IESO estimate the proposed market development project will take to implement?

< 1 year    1 to 3 years    > 3 years

**Explain:**

C. Is the proposed market development project feasible and practical for the IESO to begin implementing in the short, medium, or long term?

< 2 years    2 to 5 years    > 5 years

**Explain:**

D. Are there linkages to other potential or ongoing projects?

Yes    No

**Explain:**

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## A. Key Information

|   |   |
|---|---|
| <b>Project title:</b>                         | Expand OR to include Aggregated Non-Dispatchable Load               |
| <b>Organization:</b>                          | Rodan Energy Solutions / Enel X                                     |
| <b>Organization representative and title:</b> | Ted Leonard - COO<br>Sarah Griffiths – Director, Regulatory Affairs |
| <b>Mailing address:</b>                       | ████████████████████  |
| <b>Phone:</b>                                 | ████████████████████  |
| <b>Email:</b>                                 | ████████████████████  |
| <b>Date:</b>                                  | August 20, 2019   |



## B. Project Description

**Use the area below to explain the concept and objectives of this project.**

This project would enable the participation of aggregated non-dispatchable load in the OR market. This project could be expanded to enable the participation of aggregated non-dispatchable load in all ancillary services markets and/or enable other able resource types that are not currently allowed under the current market rules.

Currently, the IESO generally utilizes generators and dispatchable load for the provision of operating reserve (OR). Aggregated non-dispatchable load is capable of reliably providing this service and should be enabled under the market rules. In not allowing aggregated non-dispatchable load to provide OR, it reduces the general competitiveness of the OR market as well as unnecessarily reduces the competitiveness of aggregated non-dispatchable load participating in the TCA or other capacity mechanisms.

Other organized markets, including but not limited to PJM, AESO and ERCOT allow aggregated load to provide OR.

In better enabling more comprehensive and fair competition, this project would improve the cost effectiveness of the IAM while maintaining necessary reliability.

## 1. Alignment with MDAG vision

**All proposed market development projects must demonstrate that they are required for system reliability, meet regulatory need, and/or deliver meaningful market efficiency benefits (deliver system cost savings). Proposed projects that meet these criteria will be further assessed according to information provided in sections 2-5. Projects that do not meet these criteria in section 1 will not be evaluated further.**

**A. Can the proposed market development project demonstrate that it will maintain system reliability, meet a regulatory standard or decision in Ontario, or deliver cost savings?**

**i. Will the proposed market development project contribute to system reliability?**

**Explain:**

By enabling aggregated non-dispatchable load to provide OR the IESO should realize the benefits of broader portfolio risk management (don't want your eggs in one or two baskets), thus enhancing long-term reliability. The IESO may also find lower cost suppliers of these necessary services.

**ii. Is the proposed market development project required to meet a regulatory requirement in Ontario?**

Yes  No

**Explain:**

While there is no strict regulatory requirement to broaden the allowed supply types for OR, many other U.S. markets already allow aggregated non-dispatchable load to provide OR and FERC has ordered RTOs/ISOs in the U.S. to expeditiously implement change that allow energy storage to compete in ancillary services such as OR – a clear direction that ISOs/RTOs should open their markets to all resources that can provide the required service.

**iii. Is the proposed market development project expected to deliver system cost savings?**

Yes  No

**Explain:**

There is capability within industrial and other sites in Ontario that could cost-effectively provide OR. The provision of these necessary services would lower overall system costs



**B. Will the proposed market development project require design changes to the IESO Administered Markets?**

Yes  No

**Explain:**

The IAM is currently structured to allow different resource types to provide OR and this project would simply expand on that existing concept.

However, it is not obvious to Rodan what is characterized as ‘design changes’. This project will require changes to the market rules. The degree of change is uncertain, however, much of the existing market rules are written with a focus on generators so the necessary changes may be material.

**C. Is the proposed market development project aligned with IESO’s market development principles of competition, transparency, efficiency, certainty, and implementability?**

**i. Does the proposed market development project align with the market development principle of competition?**

Yes  No

Enabling aggregated non-dispatchable load to compete to supply OR is directly supportive of increased competition and efficiency.

**ii. Does the proposed market development project align with the market development principle of transparency?**

Yes  No

There would be no change to the existing level of transparency as this is simply other forms of resources providing services the IESO already procures and requires.





**iii. Does the proposed market development project align with the market development principle of efficiency?**

Yes  No

Enabling aggregated non-dispatchable load to compete in the OR market will maximize the efficient use of load resources in the OR market and in delivering more efficient outcomes in future contemplated capacity mechanisms where aggregated non-dispatchable load competes with non-DR resources.

**iv. Does the proposed market development project align with the market development principle of certainty?**

Yes  No

**Explain:**

Yes

**v. Does the proposed market development project align with the market development principle of implementability?**

Yes  No

**Explain:**

It is certain that this can be implemented as other markets already allow a broader array of resource types, including aggregated non-dispatchable load, to provide OR.



## 2. Reliability Impacts

The purpose of this section is to understand the impact of the proposed market development project on system reliability

A. Provide a high level overview of how the proposed market development project impacts reliability.

At a minimum this project would have no negative impact on reliability. Ancillary services are required by the IESO and they would continue to be supplied. However, by broadening the resource types that can reliably provide ancillary services, the IESO reduces its reliance on one or a few resource types that provide these services and thus secures a macro-level improvement to reliability.

B. Will the proposed market development project help reduce the risk of loss of load events?

Yes  No

This project would see the IESO continue to utilize OR in the same manner for supporting loss of load.

C. Will the proposed market development project help alleviate constraints on the system?

Yes  No

Uncertain, however, it might depend on where the physical constraints are, where economic ancillary service providers are located today, and where future aggregated non-dispatchable load OR providers are located.

D. If “Yes” was answered to either 2B, or 2C, expand whether reliability impacts are expected to be local, zonal or system wide?

Local  Zonal  System wide

### 3. Market Efficiency Impacts

The purpose of this section is to understand potential market efficiency impacts of the proposed market development project across various components of the IESO Administered Markets over the short term and long term.

A. How will this proposed project improve the efficiency of Ontario's wholesale energy market in the short term (1-2 years)?

This proposed market development project will impact the OR market as well as any capacity mechanisms that includes aggregated non-dispatchable load.

B. How will this proposed market development project impact the efficiency of the wholesale energy market post Market Renewal implementation?

The proposed market development project will improve market efficiency upon implementation before and after Market Renewal..

C. What impacts will the proposed market development project have on system flexibility?

No change

D. How will the proposed market development project enable greater wholesale market participation?

This project would enable greater market participation as it would expand the allowed resource types that can compete to deliver OR.



E. Overall, how will this proposed market development project increase the competitiveness of the Ontario wholesale market?

This project will increase the competitiveness of the OR market.

This project will increase the fairness in any future competitive capacity mechanism that allows participation by both resources that are currently allowed under the market rules to provide OR and those that are not.

## 4. Risk Assessment

The purpose of this section is to identify risks that may impact the value proposition of the market development project, and to understand how these risks might change over the short term and long term.

A. Identify potential risks that could impact the value proposition of the project. Note that risks identified in 4A will be used to complete the risk assessment in section 4B, C and D.

Any market activities that drive direct competition between generators and aggregated non-dispatchable load for capacity, such as the proposed Transitional Capacity Auction, increases the value proposition of this project since that capacity mechanism would be inherently unfair until DR resources can compete for all services they are capable of providing..

### **Risk over time**

B. Are the risks identified in section 4A expected to change over the next 1-2 years?

The introduction of the TCA prior to completing the proposed project increases the value proposition of the project and TCA is currently scheduled for December 2019.

### **Impact on project**

C. Are the risks identified in section 4A expected to change post Market Renewal implementation?

remain unchanged  decrease  increase

**Explain:**

D. Are there ways that risks identified in section 4A could be mitigated cost effectively?

Implement this project prior to TCA.



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