



DECEMBER 11, 2019

Energy Payments for Economic Activation of DR Resources – Meeting #2

Meeting Participation

- Webinar participation (including audio):
 - [Web participation link](#)
 - Use the “Ask a Question” function to submit a question during the webinar
- Teleconference participation (audio only):
 - Local (+1) 416 764-8640; Toll Free (+1) 888 239-2037
 - Press *1 to alert the operator that you have a question
- When asking a question, please state your name and who you represent so those participating are aware
- This webinar is conducted according to the IESO [Engagement Principles](#)

Today's Overview

1. Review and discussion of stakeholder feedback received following the October 10th meeting
2. Discussion of the revised problem statement, criteria and scope of research and analysis
3. Next steps

Recap: October 10th Stakeholder Meeting

- The IESO
 - Provided an overview of the energy payment issue.
 - Presented the high-level proposed approach and schedule for undertaking this work with stakeholders.
- The IESO presented a decision framework including:
 - Draft problem statement,
 - Criteria, and
 - Scope of research and analysis for stakeholder feedback.

Recap: October 10th Stakeholder Meeting

- Stakeholders Participation: Ensure the scope of conducted research considers different stakeholder perspectives (via break-out sessions)

Recap: Proposed Decision Framework

1. Identify the Problem Statement:

Should DR Resources receive energy payments for in-market activations.

2. Specify the Criteria:

Is there an overall net-benefit to consumers over the long-term?

3. Conduct Research and Analysis:

Form the basis to which the criteria will be applied (i.e. will be supported by the Brattle Group).

Engagement Objectives 1 and 2 of Meeting

- Review stakeholder feedback following the October 10th engagement meeting and discuss how revisions were considered to the:
 - Problem Statement,
 - Criteria, and
 - Scope of research and analysis.
- Discussion:
 - Problem statement,
 - Criteria, and
 - Scope of research and analysis to be employed in this work.

Engagement Objectives 1 and 2 of Meeting

- Seek stakeholder feedback of the compensation model options to be evaluated in the research and analysis.

Stakeholder Feedback Received

- Stakeholder feedback was received from:
 - Association of Major Power Consumers of Ontario (AMPCO)
 - Advanced Energy Management Alliance (AEMA)
 - Market Surveillance Panel (MSP)
- Stakeholder submissions have been posted to the [stakeholder engagement webpage](#)

Stakeholder Feedback Received (continued)

- Objectives of providing energy payments to demand response (DR) resources in Ontario
 - Include discussion on the drivers of FERC Order 745
- Proposed revisions to the draft problem statement, criteria, and scope of research and analysis



FEEDBACK THEME: OBJECTIVES of PROVIDING ENERGY PAYMENTS to DR RESOURCES

Objectives 1 and 2 of Providing Energy Payments to Resources

Stakeholder Feedback (MSP):

The study should identify the objectives of:

- Using DR in the Ontario market.
- Assess the ability of energy payments to promote objectives consistent with the principles governing the Ontario market.
 - What market benefit, if any, would be achieved by expanding energy payments to loads?
- The FERC Order 745 was to remove barriers of DR resources in the U.S. wholesale market.

Objectives 3 and 4 of Providing Energy Payments to Resources

Stakeholder Feedback (MSP):

- The FERC Order 745 goal has no evidence to be appropriate or necessary in Ontario.
- The consultant reviews if objectives and outcomes should be applied separately to dispatchable loads and hourly demand response (HDR) resources, given various participation frameworks.

Objectives 1 and 2 of Providing Energy Payments to DR Resources

IESO Response:

- The driver of this work is renewed stakeholder interest in energy payments for DR resources as a result of market rule amendments to:
 - Enable off-contract,
 - Non-regulated dispatchable generators to participate in the capacity auction, along with
 - DR resources.

Objectives 3 and 4 of Providing Energy Payments to DR Resources

IESO Response:

- The IESO agrees the decision on the energy payment issue should be evaluated against principles governing the Ontario electricity.
- The IESO agrees the study needs to consider both dispatchable loads and HDR resources.



FEEDBACK THEME: DRAFT PROBLEM STATEMENT

Draft Problem Statement

Stakeholder Feedback (AEMA, AMPCO):

- The problem statement should focus on **how** and **when** DR resources should receive energy payments, rather than **if** to provide them.
- Various revisions to the problem statement were suggested in this regard.

Draft Problem Statement Response 1

IESO Response:

- The IESO believes that the **if** is a necessary component of the problem statement:
 - The issue of energy payments for loads must be examined in an ethical way within the context of the Ontario market and constructed before a decision.
 - A broader cross-section of stakeholders than those participating in the Demand Response Working Group (DRWG) and who provided feedback on the Navigant study.

Draft Problem Statement Response 1 (continued)

IESO Response:

- These stakeholders should be given a chance to provide input into the analysis and share their views before a decision is made.

Draft Problem Statement Response 2

IESO Response:

- The IESO has revised the problem statement to include the **when** and the **how**; however, these questions can only be considered if energy payments are found appropriate.

Revised Problem Statement

Should demand response resources receive energy payments when they are activated in-market?

If so, when should payments be made and what are the options to determine the amount of payment?



FEEDBACK THEME: DRAFT CRITERIA

Draft Criteria of AMPCO

AMPCO:

- No change required if the problem statement is modified as suggested (i.e. focus on **how** and **when** and not **if**).
- Additional criterion is required to ensure the treatment granted to DR resources pursuant to the capacity auction is fair and non-discriminatory in nature.

Draft Criteria of AEMA

AEMA:

- Other markets proven to support the net benefits test the ability to respond to the price has been proven to provide benefits to the:
 - Consumer,
 - System operator,
 - Market participants, and
 - Wholesale market.
- Additional criteria is needed for the IESO to meet its own objectives of fair and non-discriminatory treatment of resources.

Draft Criteria of MSP

MSP:

- The study should identify principles it will rely on when evaluating if to provide energy payments to DR resources of the Market Renewal Program (MRP) five core principles:
 - Efficiency,
 - Competition
 - Implementability,
 - Certainty, and
 - Transparency

Draft Criteria of MSP

MSP:

- Principles applied to making energy payments via DR resources should be consistent with principles applied to the Ontario electricity market.

Draft Criteria of IESO Response

IESO Response:

The IESO supports the use of the market renewal principles to help inform the answer to the problem statement. The principles are/were:

- To be consistent with seeking a net-benefit to Ontario consumers.
- Embody fairness and non-discriminatory competitive opportunities which stakeholders have requested be included in this work.

Draft Criteria of MSP (continued)

IESO Response:

- Created with stakeholder input and their use in this work creates consistency with the ongoing market renewal work

Revised Criteria

Is there an overall net-benefit to consumers over the long-term?

This will be informed by performance against the market renewal principles of:

- Efficiency
- Competition
- Implementability
- Certainty and Transparency

Market Renewal Principles

Efficiency - lower out-of-market payments and focus on delivering efficient outcomes to reduce system costs (good price formation)

Competition - provide open, fair, non-discriminatory competitive opportunities for participants to help meet evolving system needs

Implementability - work together with our stakeholders to evolve the market in a feasible and practical manner

More Market Renewal Principles

Certainty - establish stable, enduring market-based mechanisms that send clear, efficient price signals

Transparency - accurate, timely and relevant information is available and accessible to market participants to enable their effective participation in the market



FEEDBACK THEME: DRAFT SCOPE of RESEARCH and ANALYSIS

Draft Scope of Research and Analysis

AMPCO:

- The scope should be revised to focus on the recommended problem statement (i.e. focus on the **how** and not the **if**).
- Many of these items are unnecessary if the scope is narrowed and have been considered pursuant to the FERC proceeding and in the Navigant paper.

AEMA:

- Specific revision suggested to the scope of research and analysis.

Revised Scope of Research and Analysis: Context and History

1. What is the relevant Ontario context and history?

- History of DR programs and structures, current levels of DR participation and **services provided, and** status quo outlook for future participation.
 - **How do DR resources (HDR, dispatchable loads) participate in the market today?**

NOTE: The **blue font** identifies changes from the proposal.

Revised Scope of Research and Analysis: Context and History

- How might the opportunities for DR evolve over the coming years?
 - Changes to energy market design and fundamentals
 - Projected system needs
 - Advances in technology
 - Alternative structures for integrating DR

Revised Scope of Research and Analysis: Economic Principles and Practical Considerations

2. What are the economic first principles **and practical considerations** that drive the activation decision for DR resources **in Ontario**?

- What economic factors do demand assets consider of making a decision to curtail?
 - Marginal cost of dispatch,
 - Wholesale market prices,
 - Impact of “retail” rates, and
 - Impact of energy payments which may or may not apply

Revised Scope of Research and Analysis: Economic Principles and Practical Considerations (continued)

- How does the IESO activate DR resources and how are they settled?
- Existing barriers to full energy market participation

Revised Scope of Research and Analysis: In-Market Activations

3. How are in-market activations compensated in other jurisdictions and what are the key takeaways for Ontario?

- Alberta and Texas: No energy payments
- Australia: Transition Toward a Purchase-Sellback Model
- Singapore: Customer Benefits Test Approach
- United States: before and after FERC Order 745
- Summary of key takeaways for Ontario

Revised Scope of Research and Analysis: Compensation...

4. If compensation is provided:

- i. When should payments be made?**
- ii. What are the compensation model options for in-market activations in Ontario?**
- iii. What are the implications of each option vis-à-vis the market renewal principles?**

Revised Scope of Research and Analysis: Compensation...continued

- Options for in-market activation compensation include:
 - Status Quo
 - Wholesale price of electricity above a customer benefits threshold price
 - Wholesale price of electricity minus the customer's cost to purchase electricity
 - Retail purchase with wholesale sell-back

Revised Scope of Research and Analysis: Compensation...and continued

NOTE: Some options may only be applicable to dispatchable loads and not HDRs and vice versa.

What other compensation options for in-market activations should be considered in this work?



SUMMARY AND NEXT STEPS

Stakeholder Feedback Requested

Feedback Topic	Details
Scope of Research and Analysis	<ul style="list-style-type: none">• What other compensation options for in-market activations should be considered in this work?• Note that these options will be evaluated vis-à-vis the market renewal principles

Please submit your feedback to engagement@ieso.ca by December 20, 2019.

Proposed Next Steps

When	What
Early-Mid March 2020	Present draft research and analysis findings to stakeholders for feedback
End of April 2020	Present stakeholder feedback, final research and analysis findings, and draft IESO decision and rationale
End of May 2020	Present final EISO decision and rational