

# Non-emitting Resources Request for Information

February 16, 2018 Webinar

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# Today's purpose

- To provide an update on the overview and purpose of the Non-Emitting Resource Request for Information (NER RFI)
- To report on the initial written feedback received following the December 21, 2017 kick-off webinar
- To present and receive input on the draft Phase 1 RFI

# Agenda

1. Objectives and overview
2. Alignment with other initiatives and timelines
3. Feedback received and future stakeholdering
4. Draft NER Phase 1 RFI overview
5. Questions and Feedback

# RFI objectives and overview – a refresher

# Request for Information (RFI) Objectives

A two phased RFI to gather information on non-emitting resources (NER) to broaden the IESO's understanding of:

## Technical Characteristics and Operating Capabilities

- Of existing resources and potential projects (e.g., energy, capacity, and essential reliability services, regional or locational system benefits)

## Potential Barriers and Mitigating Options

- For participating in IESO's current and future markets, and ultimately, contributing to a reliable and efficient Ontario electricity system

# RFI Phase 1 – Technical and Market Information

Supporting the Market Renewal Program (MRP) by gathering information on:

Current and future market opportunities and challenges

Technical characteristics of a project or facility

Products and services that can be provided

Also focused on potential revenue streams under the MRP and other current IESO-administered markets, including:

Incremental capacity auction

Energy markets (including the development of the single schedule market)

System flexibility and ancillary services

# RFI Phase 2 – Project and Costing Information

- Requested information will likely include

Financial and commercial considerations

Project development requirements and considerations

Indicative project capital and operating costs

Additional technical information, as may be required to fully understand a given project or technology

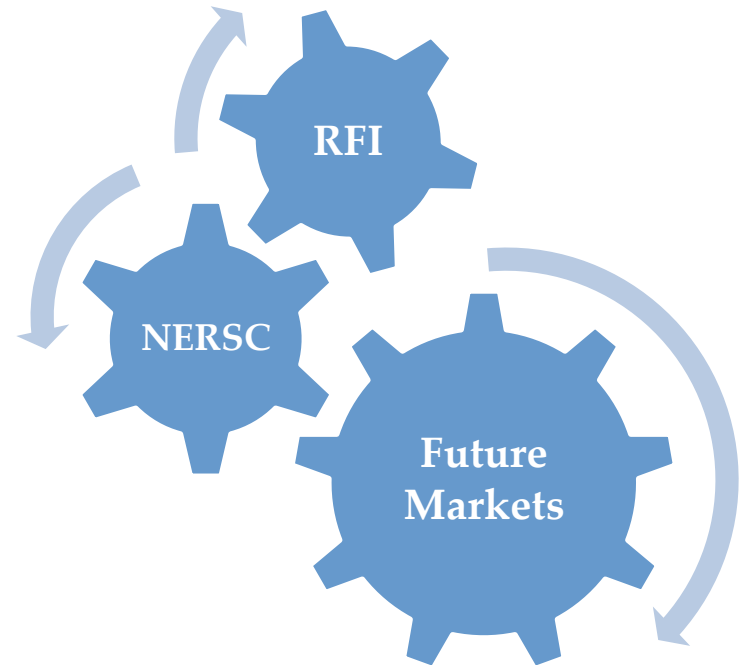
- Phase 1 responses will be used to further tailor Phase 2
- Phase 2 is expected to be launched in August/September 2018

# Alignment with other initiatives and timelines



# NER RFI and MRP

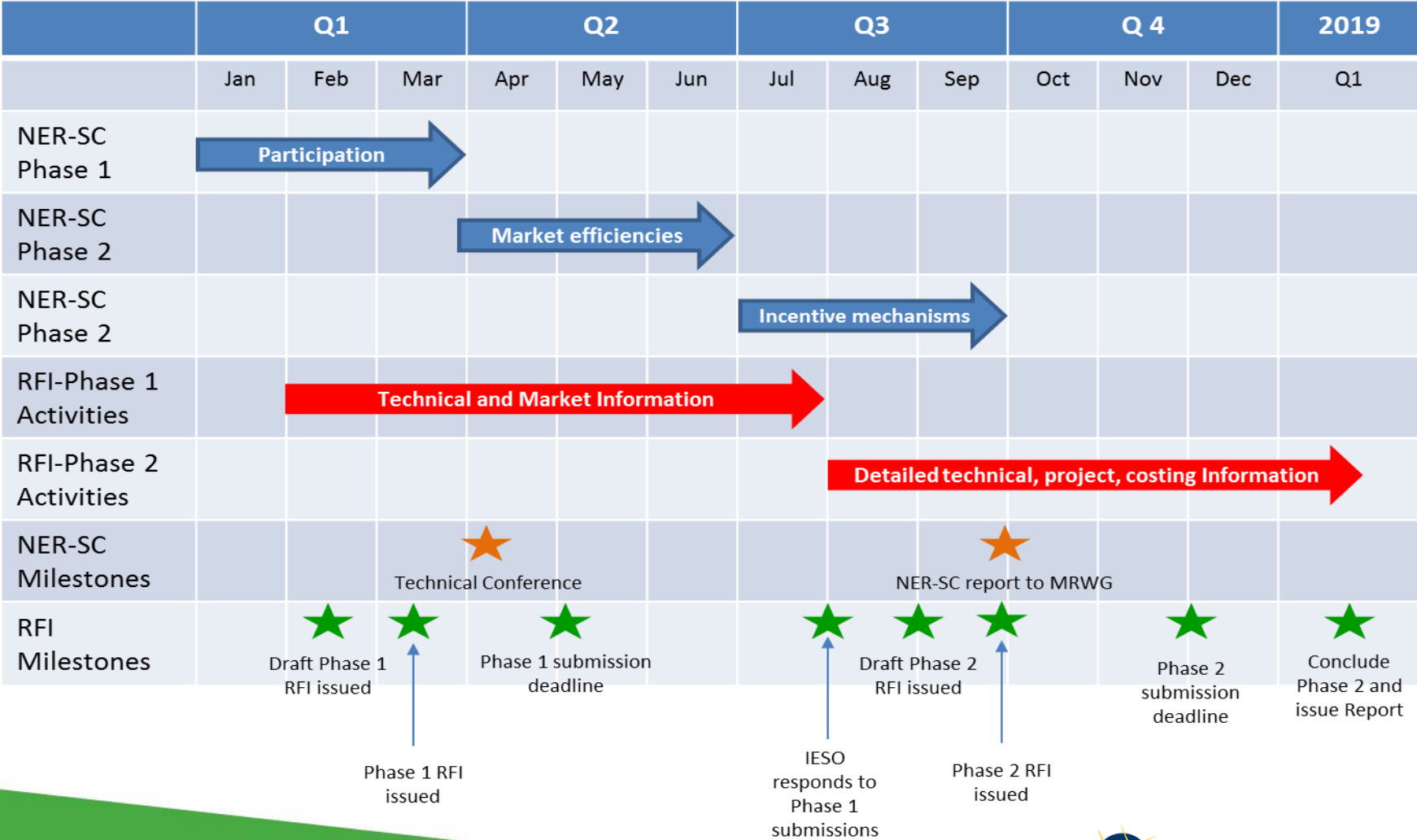
- Broad recognition that NER need to be able to compete on level playing field with other resources to meet future system needs
- The RFI is not part of MRP
  - However, in anticipation that RFI input will have value to the MRP, Phase 1 is aligned to support the work of the Non-Emitting Resource Sub-Committee (NERSC) of the Market Renewal Working Group (MRWG)
  - Phase 2 will help inform the next steps that follow from the work of the NERSC
  - Input will be used to support the MRP and other internal IESO initiatives, aligning with the efforts of other working groups and stakeholdering efforts



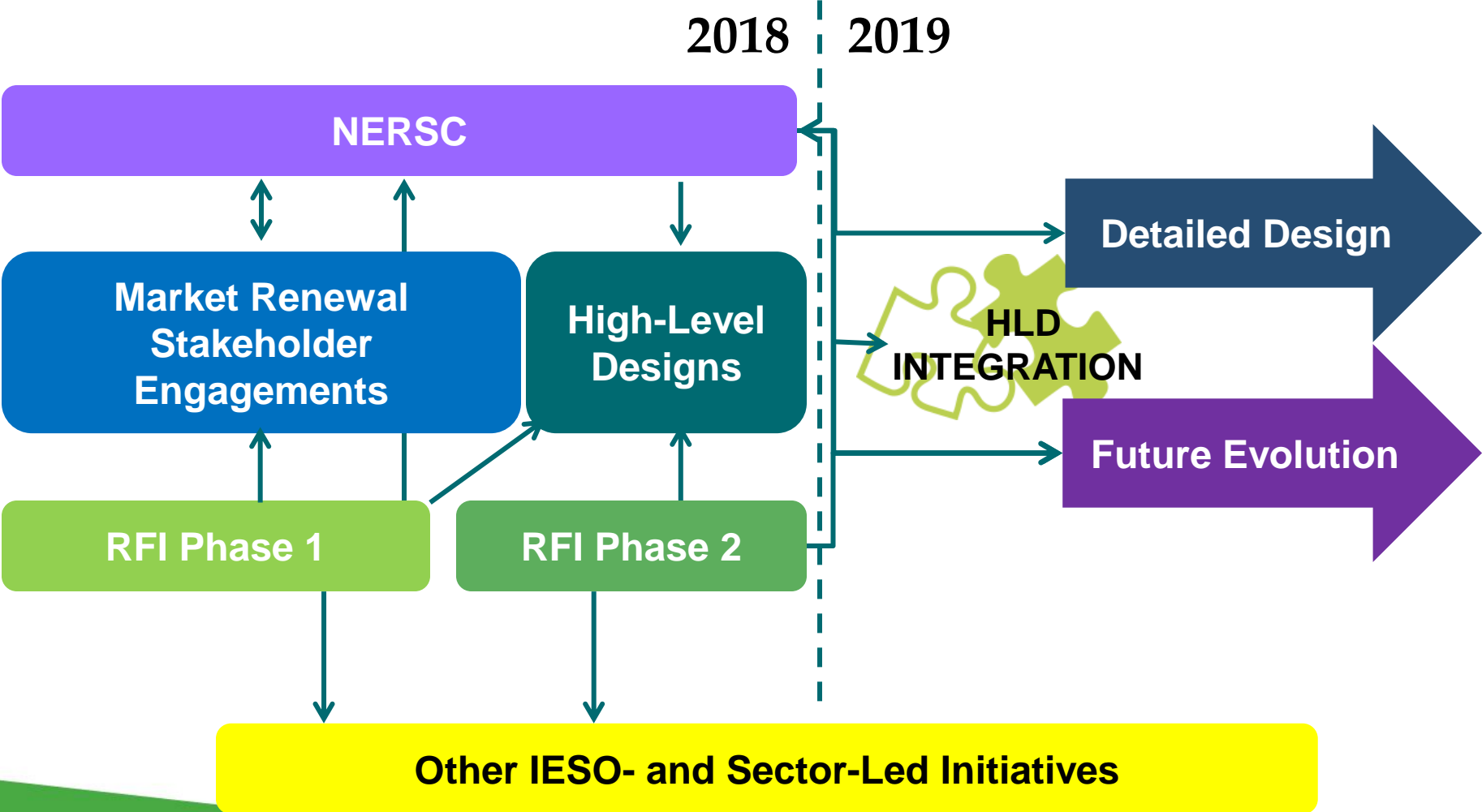
# NERSC Objectives

- To ensure the MRP addresses the unique characteristics of NER and to consider the potential for additional incentive mechanisms to meet low carbon policy objectives
- Focus is to explore the following three areas for NER:
  - **Participation:** future integration and barriers to participation for NER in the proposed MRP design scope
  - **Market efficiencies:** market impacts associated with higher levels of NER with very low to zero marginal costs
  - **Commercial mechanisms:** the potential need for additional incentive mechanisms to value environmental attributes and support net zero / low carbon emission facilities

# RFI and NERSC Timelines



# NERSC, RFI and the Big Picture



# Initial RFI Feedback

# Initial Written Feedback

- A public webinar was held on December 21, 2017 to introduce the RFI
- Written feedback was accepted until January 17
- 12 written submissions were received

Key stakeholder feedback	IESO response
Consolidate the RFI into a single stage with submissions due in summer 2018	IESO will maintain the two phased approach so as not to delay the MRP (further information on slide 16)
A number of suggestions for specific technical and market based questions to be included in the RFI	The IESO will include these suggestions into the RFI where applicable

# Initial Written Feedback

Key stakeholder feedback	IESO response
Request for more certainty, as part of the RFI, regarding Ontario's future capacity and energy needs and details about province-wide connection availability	Not in the scope of this RFI: Will rely on existing forecasts like LTEP, Ontario Planning Outlook and 18-Month Outlook to provide estimates of future system needs for various scenarios; Connection availability is being discussed as part of MRP
Clarity requested regarding the use and sharing of information collected through the RFI	IESO will outline the intended use of the information received through the RFI and how confidential information will be treated in the NER RFI

# Feedback – Single Phase RFI

- To provide effective and timely input into the development of the High Level Design, MRP-related input from Phase 1 of the RFI is needed by May 2018
  - MRP work streams are targeting final decisions and high level design work in Q2-Q4 of 2018
  - MRP's high level design is intended to identify design elements that form the foundation for market rules and manuals
- Requiring all phase 1 and 2 information from stakeholders by May could result in incomplete submissions due to time constraints
- Having a second phase will allow the IESO to tailor and ask for further information based upon the responses received in the first phase

**Therefore, a two-phase RFI approach has been maintained**



# Confidentiality and Disclosure of Information

- In keeping with the goal of transparency and information sharing with stakeholders the IESO may publicly post any information provided in response to the NER RFI not marked “Confidential”
- The information provided in response to this RFI may be shared with the NERSC, MRWG and to other IESO initiatives as well as the Ministry of Energy
- The IESO does acknowledge that some responses may contain commercially sensitive material, so respondents may mark a response or a portion of a response confidential by marking it with **“Confidential”**
  - When marking a response “Confidential”, please provide as much specificity as possible when identifying what information is to be considered confidential

# Draft NER Phase 1 RFI

# Feedback is requested on the draft

- With today's posting of the draft Phase 1 RFI, the IESO is looking for input to help tailor the final RFI document

- Written feedback is requested by March 2 and can be submitted to [engagement@ieso.ca](mailto:engagement@ieso.ca)

- All written feedback will be posted on the NER RFI engagement webpage

<http://www.ieso.ca/en/sector-participants/engagement-initiatives/engagements/non-emitting-resource-request-for-information>

- Program material, timelines, updates and written input on the development of the RFI received from stakeholders will also be posted here

# Phase 1 Timeline and Submissions

<b>Today</b>	Draft Phase 1 RFI posted for input IESO responses to initial RFI feedback posted
<b>March 2</b>	Written feedback due on draft Phase 1 RFI at <a href="mailto:engagement@ieso.ca">engagement@ieso.ca</a>
<b>March 19</b>	Post final Phase 1 RFI
<b>May 2</b>	Phase 1 RFI submission deadline
<b>May to August 2018</b>	Evaluate Phase 1 responses and design draft Phase 2 RFI

- Once finalized, RFI submissions to be sent to [engagement@ieso.ca](mailto:engagement@ieso.ca) by the submission deadline (May 2, 2018).
- To help the IESO identify individual RFI responses, we encourage respondents to use the following subject line:
  - *“Name of respondent”\_RFI – Non-Emitting Resources*

# Appendix A: Respondent and Technical Information Spreadsheet

- Intended to collect contact information and detailed technical information about the respondent's facility or resource

## Facility Characteristics

- Including location, facility type, fuel type and capacity

## Facility Status

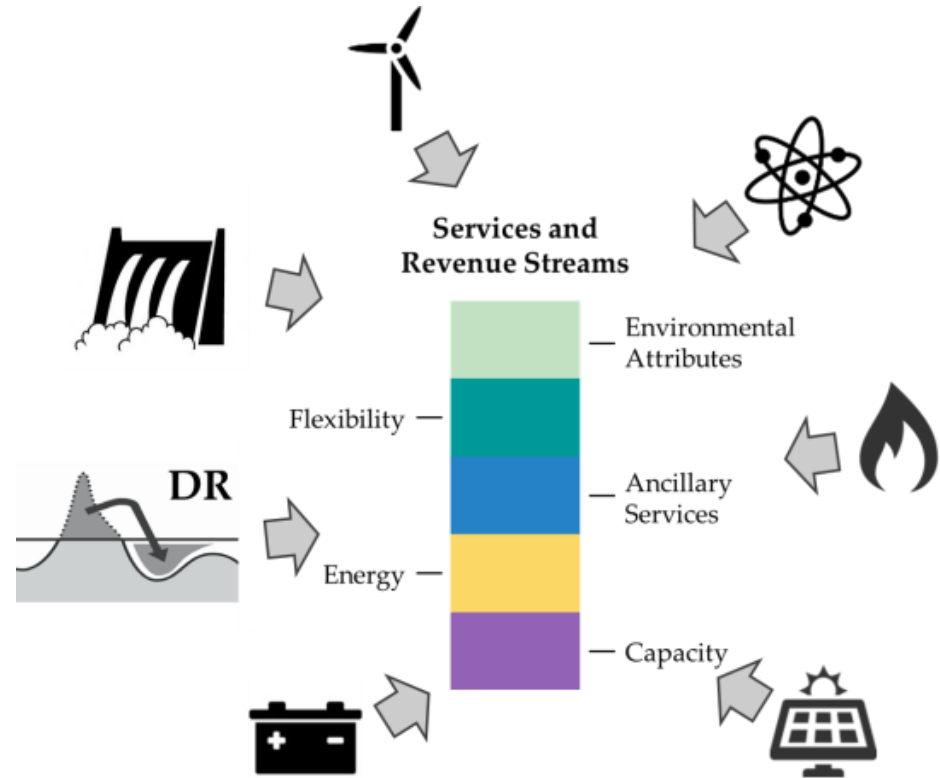
- Including expected facility life, development status and engagement activities undertaken

## Technical Information

- Including grid services/products provided, ramp rate and connection information

# Appendix B: Questionnaire

- Prevailing market conditions under which NER are currently operating in Ontario and elsewhere
- Opportunities for increased participation in IESO markets
- Role that IESO can play in further enabling participation



# Appendix B: Questionnaire

## 1. Current Market Opportunities and Challenges

Energy  
Markets

Ancillary  
Services

Operating  
Reserve  
Markets (OR)

- *Sample question:* Based on current requirements for operating in the IESO controlled grid, as outlined in the IESO Market Rules Chapter 7, are there limitations to your resource's ability to fully participate in any of the IESO markets?
- *Sample question:* For existing facilities – are there any modifications, expansions or reconstructions of a facility or facilities that may enable it or them to participate in additional IESO (or other) markets or revenue streams?

# Appendix B: Questionnaire

## 2. Market Renewal Program (MRP)



- *Sample question:* Based on the proposed ICA design work to date, are you considering including your resource or technology in an eventual incremental capacity auction? Please explain either why or why not
- *Sample question:* If you have experience participating in markets in other jurisdiction with designs that mirror some of the proposed attributes of the renewed energy market, are there any best practices that you can provide, as they relate to non-emitting resources?



# Appendix B: Questionnaire

## 3. Future Markets



- *Sample question:* Are there any services/products that your resource could provide that are not yet contemplated by the IESO? If so, please list jurisdictions in which this service is being or will be provided
- *Sample question:* How quickly could your facility or technology provide flexibility either through ramping speed or start-up requirements (coming online if offline) to the Ontario market?

# In Conclusion

- The NER RFI is now posted in draft and the IESO is seeking feedback in advance of the final posting
- The RFI is intended to gather information on NER to broaden the IESO's understanding of technical characteristics and operating capabilities as well as potential barriers and mitigating options
- The information gathered through this RFI will be used to support the MRP and other internal IESO initiatives, while aligning with the efforts of other working groups and stakeholdering efforts

# Questions and Feedback

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