

# Market Renewal Update

Stakeholder Advisory Committee

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April 27, 2018

# Purpose

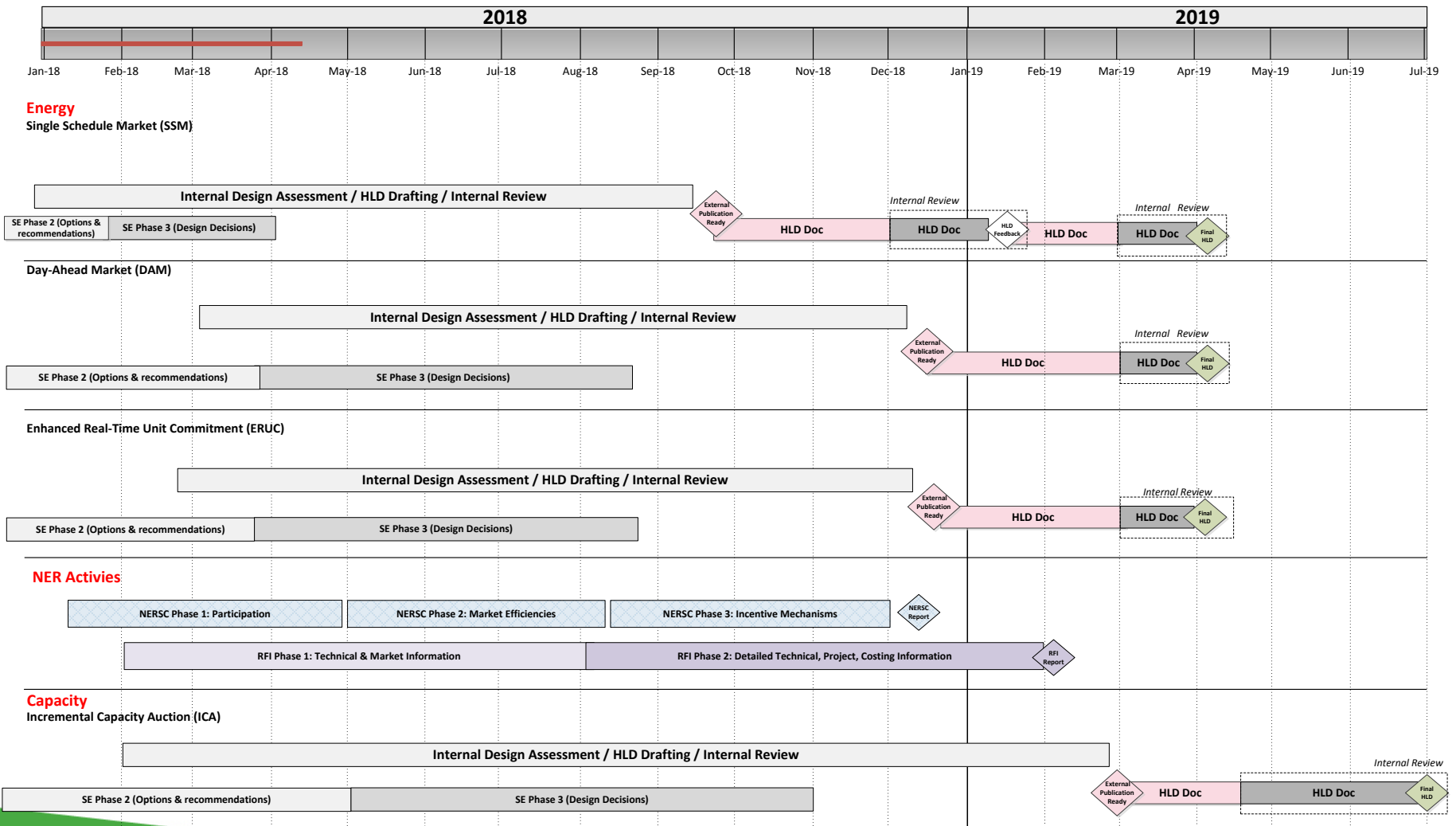
This presentation:

- Outlines Market Renewal milestones for the next year
- Provides updates on status, integration activities and key considerations for:
  - Energy Workstream
  - Capacity Workstream
  - Non-Emitting Resource Subcommittee (NERSC)
  - Non-Emitting Resource Request For Information (NER RFI)
  - Future Market Evolution

# Questions for SAC Feedback

- How can the IESO ensure effective integration across Market Renewal initiatives?
- How can the IESO leverage its experience with the Market Renewal Working Group to effectively manage future market evolution?
  - Is there a role for an enduring markets committee?
  - What should the IESO consider in establishing such a group?

# Market Renewal Timeline



# Energy: Status and Integration

## Status

- Single Schedule Market (SSM), Day-Ahead Market (DAM), and Enhanced Real-Time Unit Commitment (ERUC) progressing towards High Level Designs (HLDs)
- Preliminary decisions made for many of the design elements in each initiative
- IESO and stakeholders continuing to work together on several substantial design decisions (e.g., Load Pricing)
- HLDs to be delivered for stakeholder review in 2018 (SSM in Q3/18, DAM and ERUC in Q4/18)

## Integration Activities

- The three Energy HLDs will be integrated to ensure a cohesive approach
- These documents will be developed with consideration for other Market Renewal Work underway and will provide the foundation for integration efforts

# Energy: Key Considerations

## Load Pricing

- Load Pricing is the Energy stream's most impactful design decision
- Ontario is the only market that uses a uniform price for all loads
  - All other jurisdictions use some combination of zonal/nodal pricing
- More granular pricing is used elsewhere because it drives more efficient operational and investment decisions
- In January the IESO proposed:
  - Nodal pricing for dispatchable loads
  - Zonal pricing (with a nodal option) for customers who are market participants (non-dispatchable loads)
  - *Non-Market Participant consumers will not be directly impacted (e.g., RPP consumers can continue to pay a uniform price, which will be calculated differently than HOEP)*
- Stakeholders are seeking to better understand the impact of this change and the IESO is working with them to provide clarity

# ICA: Status and Integration

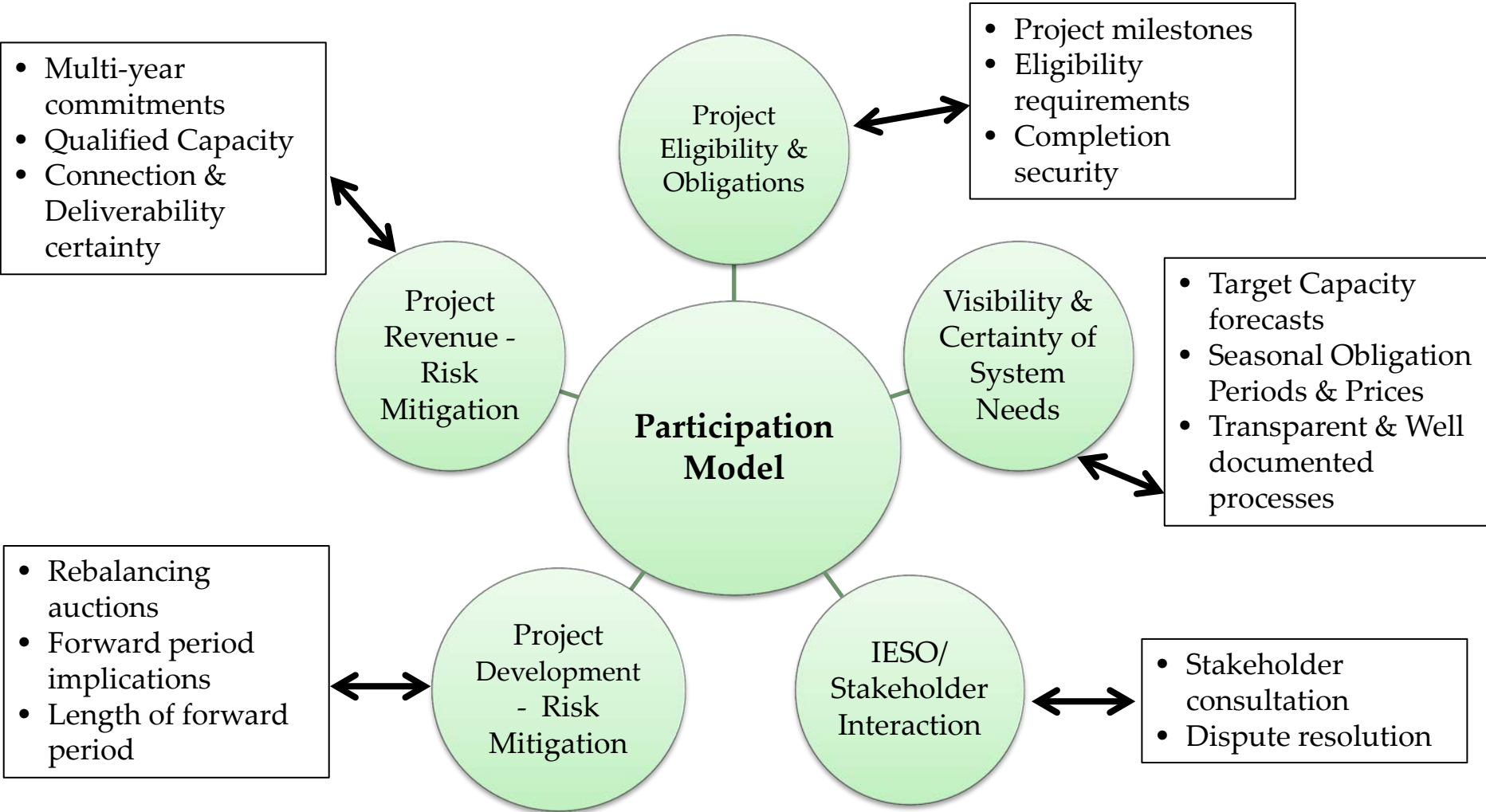
## Status

- 19 major design elements have been introduced and discussed with stakeholders over seven successive meetings starting last fall
- Incremental Capacity Auction (ICA) is an entirely new market in Ontario - design features/options less defined compared to Energy stream
- Analysis and decisions will be rolled out over the coming months that will outline how resources will participate in the auction
- Preliminary decisions on major ICA design elements to be shared with stakeholders for feedback in the fall
- HLD draft to be published externally in 2019

## Integration Activities

- Upon publication of HLD, stakeholders will be provided the opportunity to review and comment on any seams issues between Energy HLDs, NERSC, NER RFI and ICA

# Participation Model





# NERSC: Status and Integration

## Status

- A technical conference was held April 5<sup>th</sup> to complete the initial phase of NERSC work (*Phase 1: NER participation*)
- Discussion focused on:
  - Wholesale market opportunities for distributed energy resources
  - Expanding the role of variable generation
  - Capturing the full value of capital intensive NERs in unbundled markets
- Findings from technical conference and Phase 1 will be integrated into final NERSC report (on track for delivery by end of 2018)

## Integration Activities

- Input from NERSC will be incorporated into development of energy and capacity HLDs, as appropriate, on an ongoing basis and the group's work will provide a key input in future market discussions

# NERSC: Key Considerations

## Next Steps

- The first phase of the NERSC work has been focused on barriers to participation within the existing and future market design
- The next phase will be centered around a modelling exercise to help NERs better understand how they will participate and what their opportunities may be in the future market
- The third phase will explore the pros and cons of different approaches to ensure the electricity markets remain aligned with environmental policy goals and objectives.
  - The goal will be to identify approaches that can work most effectively alongside Market Renewal

# NER RFI: Status and Integration

## Status

- RFI Phase 1 issued (March 21<sup>st</sup>) with responses due May 4
  - Phase 1 focuses on understanding technical characteristics and current and future market opportunities
- Phase 2 is expected to be issued August/September 2018
  - Phase 2 focuses on financial and project development considerations and costing information
- Final report of findings due Q1, 2019

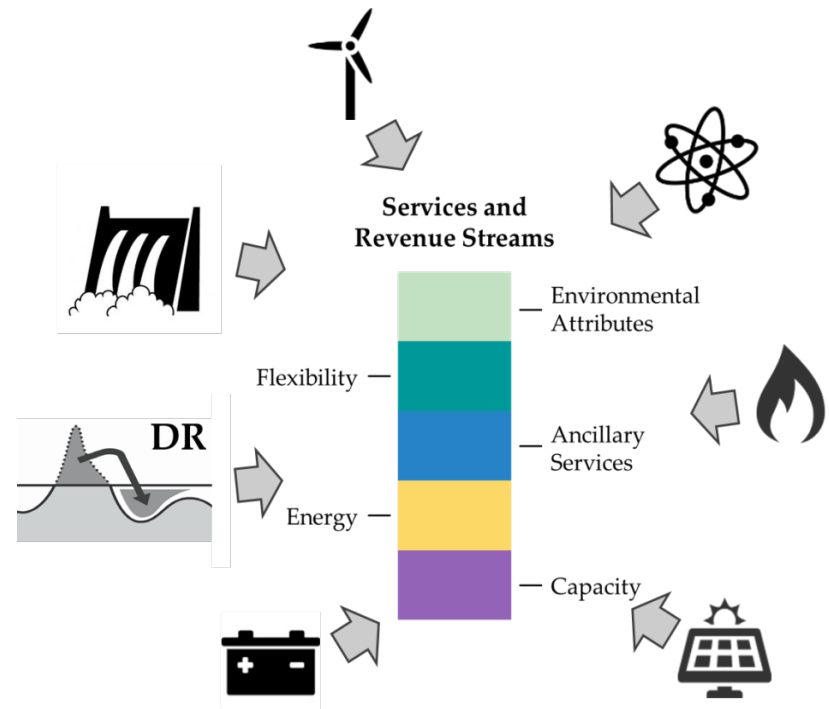
## Integration Activities

- Phase 1 of the RFI will be used as an input into the NERSC report and relevant findings will be integrated into development of HLDs
- The final report will help to ensure RFI results are appropriately reflected in Market Renewal (high-level and detailed design) and will serve as an input into future market evolution discussions

# Future Market Evolution: Status and Integration

## Status

- As MRP moves into detailed design there is an opportunity for the Market Renewal Working Group (MRWG) to shift focus beyond Market Renewal to future evolution
- MRWG has been an effective forum for receiving strategic stakeholder advice on the IESO administered markets and a similar committee could continue to play an important role moving forward



## Integration Activities

- Future evolution discussions will draw on results of NERSC and RFI as well as considerations raised through the Energy and Capacity streams
- Focus will be building on the foundation put in place through Market Renewal and address other market enhancement issues, such as operability and other ancillary services

# Future Market Evolution: Key Considerations

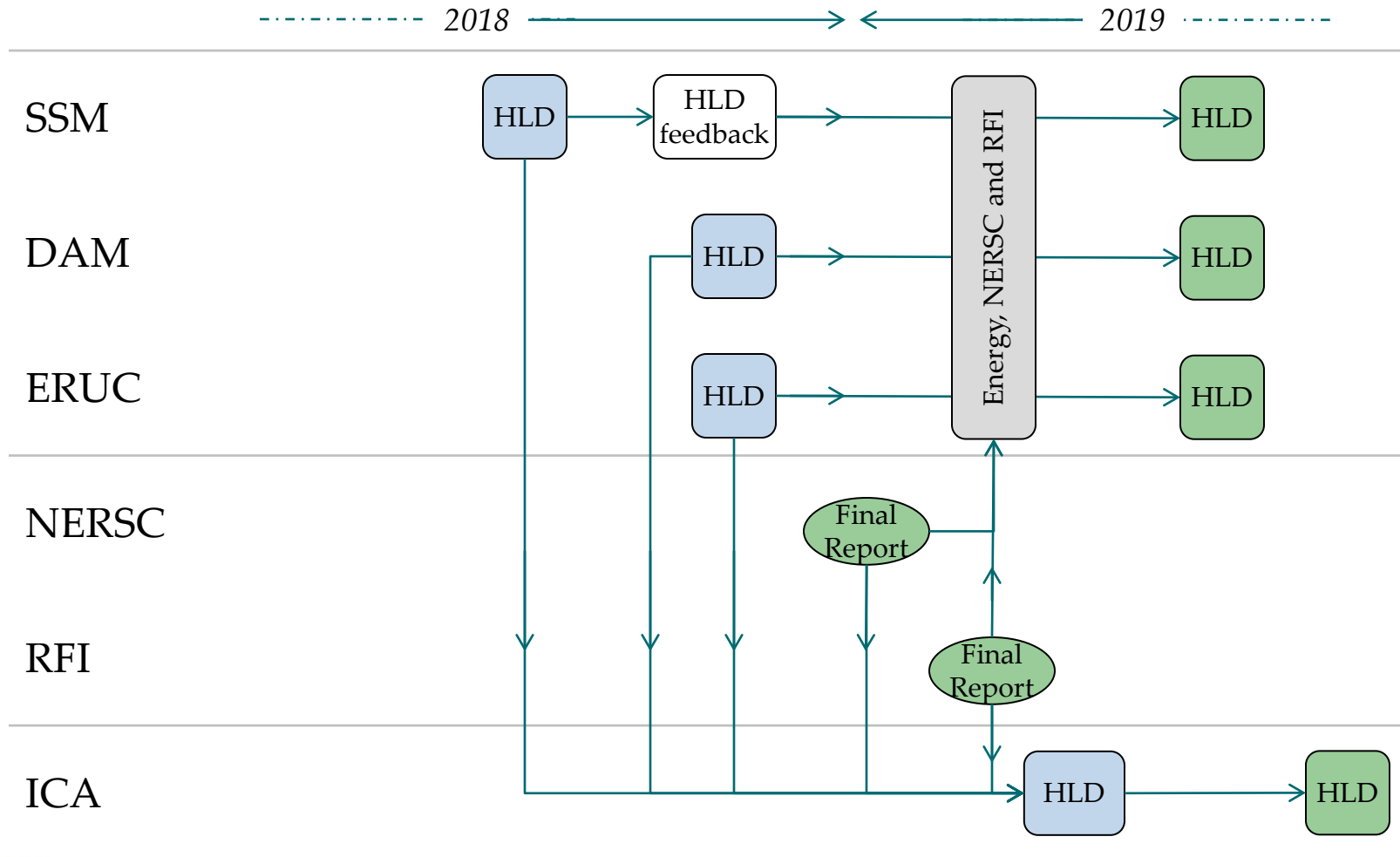
## Potential focus areas:

- Future Flexibility/Reliability Enhancements:
  - Conduct a holistic review of Ontario's flexibility and reliability needs and explore market based approaches to meeting those needs
- Market Renewal Roadmap:
  - Create a transparent plan, incorporating stakeholder feedback, to ensure a cohesive approach to future market development
- Markets of the Future:
  - Explore how the future market will evolve to incorporate changes in distributed energy resources, climate change goals, empowering consumers, etc.

# Integration of Market Renewal Initiatives

- With a range of Market Renewal initiatives underway, it is important to consider all the initiatives in a holistic sense
- The IESO is proposing a measured approach to review and integrate the energy HLDs, capacity HLD, NERSC and RFI final reports:
  - The IESO will make sure that the HLDs will have been developed with the other initiatives in mind (to the extent possible)
  - As HLDs and/or final reports are published, IESO will assess the seams/gaps issues that need to be addressed, or re-visited
  - IESO will work with stakeholders on identifying and addressing previously unforeseen seams /gaps and reflect them in the HLDs, if needed
- The review and integration plan presented on the following slide provides an indicative approach and basis for further discussion

# Indicative HLD Review and Integration Plan



Key: Draft Feedback Integration Final

# THANK YOU!