

**FEBRUARY 14, 2024**

# Market Renewal Program (MRP)

## Discussion with Implementation Working Group: MRP Cutover Approach and Implications

**Stephen Nusbaum**

Director, MRP Implementation

# Purpose and Summary

- **Purpose**

- Update Implementation Working Group (IWG) on the ongoing work related to Go Live planning, focusing on key details regarding cutover to the new market
- Obtain initial feedback on approach and Market Participants' needs to understand and be prepared for the cutover

- **Key Messages**

1. Any system changes not ready for inclusion in the IESO's models by early April 2025 cannot be accommodated until the next update window in mid-June 2025 (i.e., the typical "Network Model Build" schedule will be modified to support MRP cutover)
2. The launch of the new Real-Time Market (RTM) will occur at midnight, followed by the launch of Day-Ahead Market (DAM) the following day; both the IESO and MPs will need to be prepared for a potential rollback

# Background – Network Model Build

- The IESO performs an update of its Production Network Model, known as a “Network Model Build” (NMB), every four to six weeks to ensure its systems reflect any recent and pending physical changes in the power system
- To ensure the new MRP production environment (i.e. the tools, solutions, databases, etc. required to dispatch the grid and administer the market) is synchronized and tested with the Production Network Model of the Ontario system at the time of go live, it will not be possible to have an NMB in the weeks prior to cutover
- Following cutover, IESO resources initial focus will be on completing integration activities and performing any necessary troubleshooting of the new market, after which the ~4 week process of developing and implementing an NMB update can resume
- The key implication of the above is that any system changes not ready for inclusion in the last pre-MRP NMB will not be able to be accommodated until the first post-MRP NMB approximately ~2.5 months later

# Notional NMB Schedule to Support MRP

- NMB schedule is normally published in Q4, IESO working towards providing earlier
- A go live date has not yet been finalized, but for illustrative purposes, the impact of a **notional** May 1<sup>st</sup> go live date on the NMB schedule is shown below; key changes from the typical NMB schedule are:
  - April NMB moves from end of month to start of month
  - As a result of advancing the April NMB, no March NMB to maintain spacing
  - May will be dedicated to MRP cutover (no NMB)

	2023	2024								2025					
	Dec	Jan	Feb	Mar	Apr	May*	Jun		Dec	Jan	Feb	Mar	Apr	May	Jun
	06-Dec-23	24-Jan-24	21-Feb-24	27-Mar-24	24-Apr-24	29-May-24	26-Jun-24		11-Dec-24	22-Jan-25	26-Feb-25	Skip	02-Apr-25	01-May-25	18-Jun-25
Days Since Last NMB	n/a	49	28	35	28	35	28		n/a	42	35	n/a	35	MRP Cutover	48

# Key Takeaways Regarding the 2025 NMB Schedule

- The IESO is aware that (i) new resources that secure positions in the Capacity Auction frequently use the late April NMB to be ready to meet their obligations starting in May, and (ii) new resources secured via recent procurements may look to commence commissioning or achieve commercial operation during this timeframe
- Market Participants anticipating a need to make system changes during this period should begin any necessary planning to ensure they have completed all necessary workflows to support their inclusion in the April NMB
- The NMB schedule is normally published in Q4 of each year, however the IESO is working towards providing the 2025 schedule as early as possible

# Approach for Cutover to the Renewed Market

- Transitioning from the current market to the renewed market will require a number of coordinated steps to ensure:
  - The IESO is able to continue to reliably operate the grid and settle the market
  - Market Participants have clarity on their obligations and can effectively participate in the market
- This transition will require staging in relevant processes, tools, and Market Rules across a period of multiple months; however the major step change, often referred to as “Go Live” will occur over a few hours when the actual “cutover” occurs
- To manage both technology, administrative, and legal related complexities, cutover will occur at midnight such that only a single set of Market Rules (and associated settlement) will apply for a given calendar day

## Approach for Cutover to the Renewed Market *(continued)*

- The simplified mental construct of just “flipping the switch on the new market” at midnight is however complicated when considering that MRP is introducing a Day-Ahead Market (DAM) that during steady state will run in advance of the Real-Time Market (RTM)
- Beginning the transition by launching DAM first presents challenges, including:
  - MPs would be required to submit two sets of dispatch data, under two sets of Market Rules, via two different market interfaces, during a single calendar day
  - Not clear how DAM positions could be settled in the event of a rollback (i.e., LMP based DAM vs. HOEP based RTM)
  - The launch of two new markets, while also continuing to operating legacy market, increases complexity and risk during the transition

## Cutover Approach – RTM first, followed by DAM

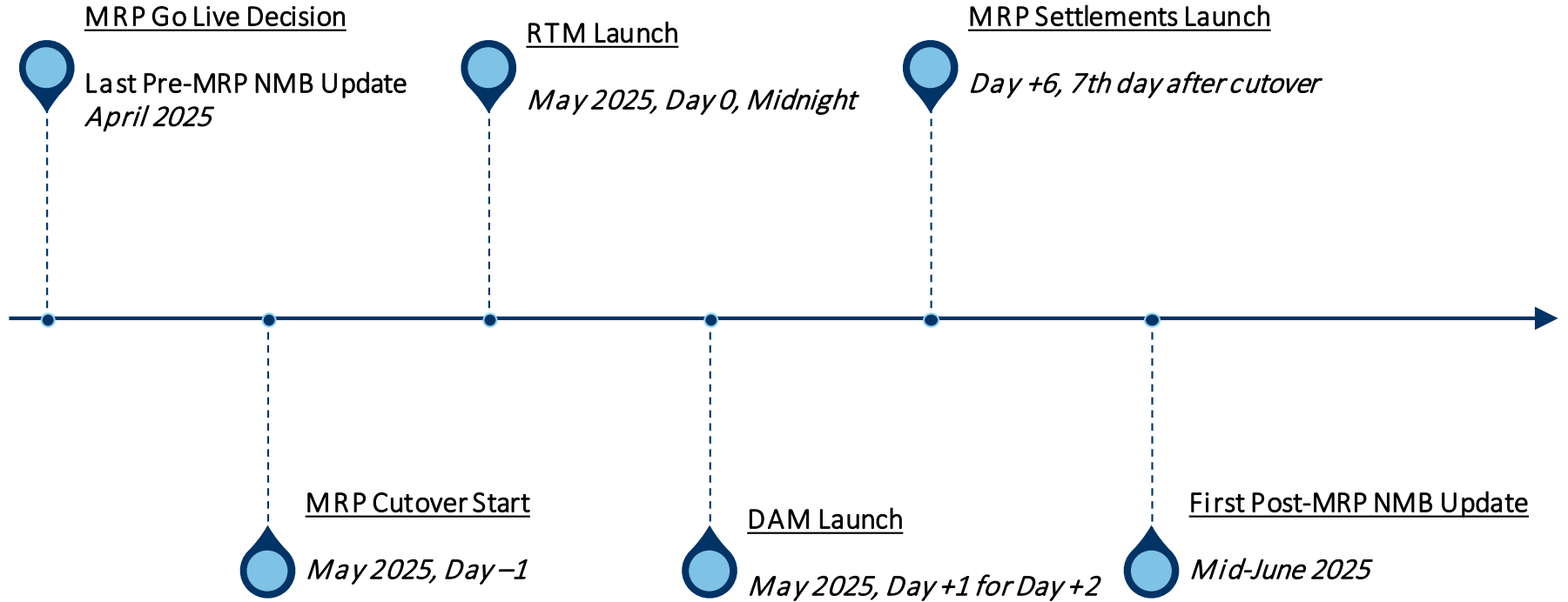
- The cutover plan will therefore begin with launching the renewed RTM on midnight of the “Go Live Date”
- The following day (i.e., Day+1 ~30hrs after start of RTM) Market Participants would then submit offers/bids into the new DAM, with the DAM engine started 10am, and results published by the standard schedule
- The first DAM related commitments would therefore apply to the third day of the cutover (i.e., starting 48 hours after the initial midnight cutover)



# Additional Details on the Cutover Approach

- Details on the administrative approaches that will be adopted to facilitate the cutover will be provided in the coming months (e.g., handling operational commitments that bridge the cutover, contingency plans for dealing with rollback scenarios, use of administrative pricing to bridge markets, etc.)
- Market Participants should be prepared for the potential for the transition to the new market to need to be suspended part way through the cutover process (either due to technology or reliability event related challenges)
  - In such circumstances, it would be necessary to “rollback” to the current set of Market Rules and market interface tools; a subsequent cutover attempt would be scheduled in the following days/weeks
  - While not anticipated to occur, MPs are recommended to plan and test that their systems and processes can accommodate a potential rollback contingency

# Summary - Illustrative MRP Go Live Approach



## Next Steps

- The appropriate IESO groups will be communicating the implications of MRP cutover on the NMB schedule to impacted Market Participants via multiple channels
- A stakeholder session will be held in March/April timeframe to explain details of the MRP transition plan to stakeholders
- The MRP Go Live date, and the 2025 NMB schedule, will be communicated once confirmed