MARCH 24, 2026

IESO Public Information Session

Update to Day-Ahead Market (DAM) Initializing Conditions for Non-Quick Start Resources

Independent Electricity System Operator (IESO)

ieso
Connecting Today. Powering Tomorrow.

Territory Acknowledgement

The IESO acknowledges the land we are delivering today's webinar from is the traditional territory of many nations including the Mississaugas of the Credit, the Anishnabeg, the Chippewa, the Haudenosaunee and the Wendat peoples and is now home to many diverse First Nations, Inuit and Métis peoples. We also acknowledge that Toronto is covered by Treaty 13 with the Mississaugas of the Credit First Nation.

As we have attendees from across Ontario, the IESO would also like to acknowledge all of the traditional territories across the province, which includes those of the Algonquin, Anishnawbe, Cree, Oji-Cree, Huron-Wendat, Haudenosaunee and Métis peoples.

Information Session Recording and Webpage

- Today’s session will be **recorded** and available for viewing online
- **Meeting materials** are posted on the Public Information Session webpage created for this topic
- Please visit the Public Information Session's webpage here

Meeting Logistics and Participation

- For questions and comments, click on the "**raise hand**" icon (hand symbol) at the top of the application window**.** This will indicate to the host you would like to speak
- To **unmute** audio, click on the microphone icon at the top of the application window
- Audio should be **muted** when not speaking
- **Connection issues** contact engagement@ieso.ca or Microsoft Office Support directly

Purpose

- Provide awareness on a parameter change in the Day-Ahead Market: (located in **Market Manual 4: Market Operations | Part 4.2: Operation of the Day-Ahead Market)**
- Inform on the process for making changes to this Market Manual via the IESO's Change Management process

Introduction

- IESO continues to explore improvements to the market design that lead to increased efficiency, transparency, and competition.
- This is a refinement to the Day-Ahead Market (DAM) initialization logic.
- The logic determines the assumed physical status of Non-Quick Start (NQS) units in hour ending (HE) 24 of the current day.
- Using this updated assumption will enable the existing optimization algorithm to better reflect resource status and availability.
- Details on the DAM initialization can be found in Market Manual 4.2.
- This manual will be updated within the IESO's Change Management process and targeted as part of the June Baseline. The change does not impact any of the IESO’s technical interfaces used by Market Participants.

Why a Day-Ahead Market Initialization?

- For NQS resources, the DAM needs to know the resource's physical status at the end of the previous operating day.
- Initializing conditions ensure that the transition from today's real-time operation at HE24 to tomorrow's DAM for HE1 schedules reflect a realistic and physically accurate operating state for NQS resources.
- These initializing conditions are provided by the final Pre-Dispatch (PD) run prior to the execution of the DAM.
- The DAM engine assumes that the initial state of an NQS resource is given by its online status of "ON" or "OFF" from PD.

Current Approach to DA Initialization of NQS Status

- In pre-dispatch (PD), a NQS resource can receive either a **commitment (C)**[1] or a **schedule (S)**, indicating that it is online in that hour.
- Currently, the DA initialization will only assume a NQS resource is "ON" if it has a **commitment** in HE24 of PD. When the NQS resource does not have a commitment in HE24 of PD, it is assumed to have an online status of "OFF".
- This assumption is made regardless of whether the resource has a PD HE24 **schedule.**

[1] A commitment provides an NQS resource with an instruction to come online and provides greater certainty than a schedule

Current Approach to DA Initialization of NQS Status, *cont'd.*

- Since initialization occurs 14 hours before HE24, NQS resources typically do not have a PD HE24 commitment and are therefore initialized as "OFF".
- When a NQS resource has a **schedule** in HE24 of the PD initialization run, it is almost always online when HE24 arrives in RT/PD.
- As a result, relying solely on the PD HE24 **commitment** flag causes many NQS resources to be initialized as “OFF” in the DA engine, even though they ultimately come online.

DAM Initialization Using PD status – Current Approach

Hour Ending	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Scheduled MW															50	50	50	50	60	65	70	75	75	75
Commitment															C	C	C	C						
Schedule																			S	S	S			S

Pre-Dispatch Results 09:10 DAY 0

Resource A has a schedule for HE24, but no commitment.

DAM Results 13:30 DAY 0 FOR DAY 1

Current initialization rules specify Resource A = OFF.

Initialization Rules

Hour Ending	1	2	3	6	7	8	9	10	..	...	...	24
Scheduled MW												
Commitment												
Schedule												

But in RT, Resource A is almost always online in HE24

Actuals Pre-Dispatch Results 22:10 DAY 0,1

Hour Ending	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Scheduled MW	75	75	75	75	75	75										50	50	50	50	60	65	70	75	75	75
Commitment																C	C	C	C						
Schedule	S	S	S	S	S	S														S	S	S	S	S	S

Addressing the DAM Initialization Accuracy

The change will set the initialization status to "ON" if a resource has a **schedule** in Day 0 HE24, irrespective of whether it has a commitment in this hour.

	Scenario	Commitment HE 24 Day 0	PD HE 24 Day 0 Schedule	Status	Consider Start-Up Offer HE1 Day 1	Satisfy MGBRT over Midnight?
CURRENT	1	YES	≠0	**ON**	NO	YES
CURRENT	2	NO	0	**OFF**	YES	NO
NEW	**3**	**NO**	**≠0**	**ON**	**NO**	**NO**

DAM Initialization Using PD status – Scenario 3 NEW

Hour Ending	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Scheduled MW															50	50	50	50	60	65	70	75	75	75
Commitment															C	C	C	C						
Schedule																			S	S	S	S	S	S

Pre-Dispatch Results 09:10 DAY 0
Resource A has a schedule for HE24, but no commitment.

DAM Results 13:30 DAY 0 FOR DAY 1
Updated initialization rules specify Resource A = ON.

Hour Ending	1	2	3	4	5	..	8	9	10	..	...	...	24
Scheduled MW	75												
Commitment													
Schedule	S												

Initialization Rules

In RT, Resource A is almost always online in HE24

Actuals
Pre-Dispatch Results
22:10 DAY 0,1

Hour Ending	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Scheduled MW	75	75	75	75	75	75										50	50	50	50	60	65	70	75	75	75
Commitment																C	C	C	C						
Schedule	S	S	S	S	S	S														S	S	S	S	S	S

ieso
Connecting Today. Powering Tomorrow.

Changes to Address the DAM Initialization Accuracy

What's Changing

- Initialization logic will be updated to better represent what NQS resources are online.

What's Not Changing

- The DAM calculation algorithm remains the same.
- No changes to PD or RT initialization logic or optimization.
- Market Participant processes remain unchanged.

Market Manual – Review of Changes

Changes to Market Manual 4.2: Table 2-1

MLP Constraint Status HE 24 Day 0	*Pre-dispatch Initial Schedule HE 24 Day 0	Initial Hours of Operations (IHO)	Consider Start-up Offer HE 1 Day 1	Satisfy MGBRT over Midnight
YES = Constraint NO = No constraint	≠0 = In operation 0 = Not in operation		YES = Start-up offer is considered NO = Start-up offer is not considered	YES = MGBRT is satisfied NO = MGBRT is not satisfied
YES	≠0	~~0 < IHO ≤ 24~~Min(PDIHO, CMIHO)	NO	YES
NO	≠0	Min(24, MGBRT)	NO	NO
NO	0	0	YES	NO

Input Data	Calculated Value	Treatment by Day-Ahead Market Calculation Engine

* As determined by the most recent *pre-dispatch schedule* results for the current *dispatch day* prior to the initialization of the *day-ahead calculation engine*.

CMIHO = The number of consecutive hours the *dispatchable generation resource* is constrained on in *Resource* Constraint Data at the end of Day 0 as determined by its active minimum constraint contracts Day 0

PDIHO = The number of consecutive hours the *dispatchable generation resource* has a schedule greater than zero at the end of Day 0 as determined by the most recent PD run for Day 0

Changes to Market Manual 4.2: Appendix B

For the nth *resource* IHO is determined as follows:

~~If $CMSC24_n$ = "No":~~

~~$IHO_n = 0$~~

~~Otherwise:~~ $$IHO_n = \begin{cases} 0, & if\ RSI_n = 0 \\ \min(24, MGBRT_n), & if\ RSI_n \neq 0\ and\ CMCS24_n = "NO" \\ \min(PDIHO_n, CMIHO_n), & otherwise \end{cases} \quad (1)$$

Based on the above formula, the IHO can have the following values:

$IHO = 0$	The *dispatchable generation resource* is not in operation in the last study time of Day 0 (i.e. RIS = 0)
~~$0 < IHO \leq 24$~~	~~The *dispatchable generation resource* is in operation in the last study time of Day 0 (i.e. RIS ≠ 0); and~~ ~~The *dispatchable generation resource* has a constraint in the last study time of Day 0 in *Resource* Constraint Data as determined by the active minimum constraint contracts in Day 0~~
$IHO = min(24, MGBRT)$	The dispatchable generator is in operation in the last study time of Day 0 (i.e., RIS ≠ 0); and The dispatchable generator does not have a constraint in the last study time of Day 0 in Resource Constraint Data as determined by active MIN contracts in Day 0.
$IHO = min(PDIHO, CMIHO)$	The dispatchable generator is in operation in the last study time of Day 0 (i.e., RIS ≠ 0); and The dispatchable generator has a constraint in the last study time of Day 0 in Resource Constraint Data as determined by active MIN contracts in Day 0.

Changes to Market Manual 4.2: Appendix B (2)

Initial Status	Initial Schedule (RIS)	IHO	CMCS24	Last Status Change Time (YYYYMMDD HH:MM:00)
OFF	0	0	No	The timestamp of the last hour of Day 0 – MGBDT hours This is to ensure that the *generation resource* will not be kept off at the beginning of the day due to a MGBDT constraint.
ON	≠ 0	~~0 < *IHO* ≤ 24~~Min(PDIHO, CMIHO)	Yes	The timestamp of the first hour of Day 1 – IHO hours
ON	≠ 0	Min(24, MGBRT)	No	The timestamp of the first hour of Day 1 – min(24, MGBRT) hours. This is to ensure that the *generation resource* will not be kept on at the beginning of the day due to a MGBRT constraint.

Next Steps & Timeline

Next Steps and Timeline

- Changes to Market Manual 4.2 are targeted to take place as part of the IESO's Change Management process (Baseline 55.1)
- Comments on the Market Manual will be accepted via the Pending Changes process
- For any questions or comments on today's information session, please contact IESO Engagement at engagement@ieso.ca

Thank You

ieso.ca

1.888.448.7777

customer.relations@ieso.ca

engagement@ieso.ca

@IESO_Tweets

facebook.com/OntarioIESO

linkedin.com/company/IESO

ieso
Connecting Today. Powering Tomorrow.

Appendix:

Illustrations for Scenarios 1 and 2

DAM Initialization Using PD status – Scenario 1 (no change)

Pre-Dispatch Results 09:10 DAY 0

…Is an input to the DAM. The DAM looks at the status of resources in HE24 to determine if a unit is ON or OFF.

The status will indicate if a resource has a commitment ("C") or a schedule ("S")

Hour Ending	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Scheduled MW																					50	50	50	50
Commitment																					C	C	C	C
Schedule																								

Resource A has a commitment for HE24.

DAM Results 13:30 DAY 0 FOR DAY 1

Initialization rules = Resource A is ON.

DAM will produce a commitment for Resource A in HE1

Hour Ending	1	2	3	4	5	6	7	8	9	10	..	…	…	24
Scheduled MW	50													
Commitment	C													
Schedule														

Initialization Rules

DAM Initialization Using PD status – Scenario 2 (no change)

Pre-Dispatch Results 09:10 DAY 0

…Is an input to the DAM. The DAM looks at the status of resources in HE24 to determine if a unit is ON or OFF.

The status will indicate if a resource has a commitment ("C") or a schedule ("S")

Hour Ending	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Scheduled MW															50	50	50	50	60	65	0	0	0	0
Commitment															C	C	C	C						
Schedule																			S	S				

Resource A does not have a commitment or a schedule for HE24.

Hour Ending	1	2	3	4	..	6	7	8	9	10	..	…	…	24
Scheduled MW														
Commitment														
Schedule														

Initialization Rules

DAM Results 13:30 DAY 0 FOR DAY 1

Initialization rules = Resource A is OFF.

DAM will not produce a schedule for Resource A in HE1