

## Baseline Plan For Market Facing Documents Changing in Baseline 45.0 – March 03, 2021 for Electricity Storage Participation Amendments – February 26, 2021



The documents described in the plan are drafts only, (with the exception of Market Rules) and are subject to change until final review and approval, typically on the Baseline publication date. The plan is updated anytime that documents are added or revised for the current baseline.

Category 1: For your Information.

Category 2: Participants should review these changes as an update to procedures may be required.

Category 3: Participants are advised to review, due to the potential impact of this change.

Changes to the baseline plan will be redlined and appears in 'Update to Baseline' section.

January 29, 2021

Document Title, ID#, Ver.	Intended Audience	Stakeholder History	Cat.	Description of Change
Market Rules				
Implementation of the Interim Storage Design - Updates to Defined Terms MR-00446-R00	All	Market Rule Amendment MR-00446-R00 Updates to Defined Terms. Approved by the IESO Board December 9, 2020. The effective date of this market rule amendment is January 18, 2021. The market rule chapter will be published on February 26, 2021 in advance of Baseline 45.0.	3	<p><b>Reason For Change</b> Market Rule Amendment - MR-00446-R00 Chapter 11.</p> <p><b>Description of Change</b> Chapter 11 of Defined Terms will be updated to include new and revision to existing defined terms.</p> <p><b>Description of Impact</b> The list of new and revised defined terms will be updated in Chapter 11 Definitions.</p>
Implementation of the Interim Storage Design - Participation and Connection Requirements MR-00446-R01	All	Market Rule Amendment MR-00446-R01- Participation and Connection Requirements. Approved by the IESO Board December 9, 2020. The effective date of this market rule amendment is January 18, 2021. The	3	<p><b>Reason For Change</b> Market Rule Amendment - MR-00446-R01 Chapter 2, 2A, 4, 4A.</p> <p><b>Description of Change</b> This proposal is focused on including the changes needed to facilitate the connection and registration requirements outlined in Chapters 2 and 4. The language of proposed new sections is typically modelled on existing requirements for other market participants e.g. generators.</p> <p><b>Description of Impact</b></p>

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		market rule chapters will be published on February 26, 2021 in advance of Baseline 45.0.		Chapter 2 establishes electricity storage as a new class of market participants and includes electricity storage into the technical and performance requirements outlined for certain market participants. Appendix 2.1 outlines the requirements for voice communications and monitoring and control upon which electricity storage participants may be subject to. Chapter 4 includes some requirements that pertain to embedded electricity storage participants, even if they are not market participants. Outlines the performance standards applicable to different types of facilities, including electricity storage, and the obligations of different classes of market participants, including in a new section, electricity storage participants. In addition, the electricity storage, the requirement to have a signed connection agreement, along with the compliance, inspection, testing and monitoring requirements. Electricity storage participants will be required to provide to the IESO certain data both at the time of connection, and also on an on-going basis, similar to generation facilities, and these requirements are outlined in Chapter 4 and in the new Appendices 4.24 and 4.25.
Implementation of the Interim Storage Design - Power System Reliability MR-00446-R02	All	Market Rule Amendment MR-00446-R02 Power System Reliability. Approved by the IESO Board December 9, 2020. The effective date of this market rule amendment is January 18, 2021. The market rule chapters will be published on February 26, 2021 in advance of Baseline 45.0.	3	<p><b>Reason For Change</b> Market Rule Amendment - MR-00446-R02 Chapter 5, 5A.</p> <p><b>Description of Change</b> The market rule changes contained in this proposal are focused on changes required to Chapter 5; Power System Reliability. One of the objects of the IESO is to maintain the reliability of the IESO- controlled grid, and the proposed edits are intended to reflect the obligations electricity storage participants will have in supporting the IESO to meet this object.</p> <p><b>Description of Impact</b> In a combination of both new sections and additions to existing sections, the edits in this chapter begin by establishing the obligations of the IESO and electricity storage participants. The edits then enable dispatchable electricity storage participants to provide Operating Reserve and certain types of ancillary services. This proposal also extends existing requirements on outages and communication standards to electricity storage participants. For near and long term system planning purposes this proposal includes both the capacity value of storage injections and the additional load of their withdraws. Lastly, edits are proposed to sections 1.3 and 1.4 of Appendix 5.1 to reflect that storage facilities may provide Reactive Support and Voltage Control. While the edits contained in this proposal enable electricity storage over a longer term, note that there are additional requirements to enable this participation for the interim period that are contained in a new section of Chapter 7, which can be found in proposal MR-00446-R04.</p>

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Implementation of the Interim Storage Design - System Operations, Physical Markets and Settlements MR-00446-R03	All	Market Rule Amendment MR-00446-R03 System Operations, Physical Markets and Settlements. Approved by the IESO Board December 9, 2020. The effective date of this market rule amendment is January 18, 2021. The market rule chapters will be published on February 26, 2021 in advance of Baseline 45.0.	3	<p><b>Reason For Change</b> Market Rule Amendment - MR-00446-R03 Chapter 7, 9, 9A.</p> <p><b>Description of Change</b> Chapter 7 outlines the process for registering facilities, and where applicable edits have been proposed to include electricity storage where comparable references are made to other resource types. To extend the rights to storage that market participants have in Chapter 9 related to station service, some additional sections were required. Edits in Appendix 9.1 outlines how estimates to metering data would be developed if this data was unavailable.</p> <p><b>Description of Impact</b> For more details regarding these changes, refer to the MR-00446-R03.</p>
Implementation of the Interim Storage Design - Interim Design MR-00446-R04	All	Market Rule Amendment MR-00446-R04 - Interim Design. Approved by the IESO Board December 9, 2020. The effective date of this market rule amendment is January 18, 2021. The market rule chapters will be published on February 26, 2021 in advance of Baseline 45.0.	3	<p><b>Reason For Change</b> Market Rule Amendment - MR-00446-R04 Chapter 7.</p> <p><b>Description of Change</b> This proposal contains the market rules needed to implement the interim design of the storage design project. This interim design allows near-term for electricity storage participants to access IESO markets until such time as IESO's tools are able to recognize the unique nature of energy storage resources. As these rules are anticipated to change in the future, they proposed to be located in a dedicated section of chapter 7, so as to facilitate future revisions. This proposal is dedicated to this section 21.</p> <p><b>Description of Impact</b> Section 21 outlines the nature and the rationale for having these interim rules in one dedicated section. For details, refer to MR-00446-R04.</p>
Implementation of the Interim Storage Design - Miscellaneous changes MR-00446-R05	All	Market Rule Amendment MR-00446-R05 - Miscellaneous changes. Approved by the IESO Board December 9, 2020. The effective date of this market rule amendment is January 18, 2021. The market rule chapters will be	3	<p><b>Reason For Change</b> Market Rule Amendment - MR-00446-R05 Chapter 3, 6, 6A, 8, 10.</p> <p><b>Description of Change</b> The market rule changes contained in this proposal are intended to capture a variety of miscellaneous changes needed to support the integration of electricity storage resources into the IESO's markets.</p> <p><b>Description of Impact</b></p>

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		published on February 26, 2021 in advance of Baseline 45.0.		Changes in Chapter 3 are intended to extend to storage the dispute resolution rights that apply to disputes related to compensation for outages rejected by the IESO. Chapter 6 sets out the basis upon which the IESO will estimate metering data when there is an outage of metering installation equipment. Appendix 6.2- Alternative Metering Installation standards, where a methodology for producing estimates is provided along with certain requirements for electricity storage participants choosing alternative metering arrangements. Appendix 6.3- outlines the inspecting and testing requirements and broadens the language of section 1.5 so that it applies to electricity storage facilities. Chapter 8 expands references to include electricity storage participants so that they may participate in bi-lateral contracts, and Chapter 10 expands the references to that electricity storage facilities are included in the resources that are subject to dispatch by the IESO.
Market Manual 2: Market Administration Part 2.11: Reliability Outlook and Related Information Requirements IMP_PRO_0024 14.1	All	Will be issued February 26, 2021 in advance of Baseline 45.0. Posted for review - January 18, 2021.	2	<p><b>Reason For Change</b> Updated to include electricity storage participation</p> <p><b>Description of Change</b> Updated to include electricity storage participation</p> <p><b>Description of Impact</b> Updated to include electricity storage participation</p>
Information & Technology Services				
Market Manual 1: Market Entry, Maintenance & Exit Part 1.3: Identity Management Operations Guide IMP_GDE_0088 26.1	All	Will be issued February 26, 2021 in advance of Baseline 45.0. Posted for review - January 18, 2021.	3	<p><b>Reason For Change</b> Updated to include electricity storage participation.</p> <p><b>Description of Change</b> Updated to include electricity storage participation.</p> <p><b>Description of Impact</b> Updated to include electricity storage participation.</p>
MACD				
Market Manual 2: Market Administration Part 2.12: Treatment of Local Market Power	All	Will be issued February 26, 2021 in advance of Baseline	3	<p><b>Reason For Change</b> Updated to include electricity storage participation.</p> <p><b>Description of Change</b></p>

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IMO_PRO_0034 10.1		45.0. Posted for review - January 18, 2021.		Updated to include electricity storage participation.  <b>Description of Impact</b> Updated to include electricity storage participation.
Metering				
Market Manual 5: Settlements Part 5.2: Metering Data Processing MDP_PRO_0032 29.1	All	Will be issued February 26, 2021 in advance of Baseline 45.0. Posted for review - January 18, 2021.	3	<b>Reason For Change</b> Updated to include electricity storage participation.  <b>Description of Change</b> Updated to include electricity storage participation.  <b>Description of Impact</b> Updated to include electricity storage participation.
Market Manual 3: Metering Part 3.4: Measurement Error Correction MDP_PRO_0010 12.1	All	Will be issued February 26, 2021 in advance of Baseline 45.0. Posted for review - January 18, 2021.	3	<b>Reason For Change</b> Updated to include electricity storage participation.  <b>Description of Change</b> Updated to include electricity storage participation.  <b>Description of Impact</b> Updated to include electricity storage participation.
Market Manual 3: Metering Part 3.6: Conceptual Drawing Review MDP_PRO_0012 14.1	All	Will be issued February 26, 2021 in advance of Baseline 45.0. Posted for review - January 18, 2021.	3	<b>Reason For Change</b> Updated to include electricity storage participation.  <b>Description of Change</b> Updated to include electricity storage participation.  <b>Description of Impact</b> Updated to include electricity storage participation.
Market Manual 3: Metering Part 3.7: Totalization Table Registration	All	Will be issued February 26, 2021 in advance of Baseline	3	<b>Reason For Change</b> Updated to include electricity storage participation.  <b>Description of Change</b>

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IMP_PRO_0047 22.1		45.0. Posted for review - January 18, 2021.		Updated to include electricity storage participation.  <b>Description of Impact</b> Updated to include electricity storage participation.
Wholesale Revenue Metering Standard - Hardware MDP_STD_0004 13.1	All	Will be issued February 26, 2021 in advance of Baseline 45.0. Posted for review - January 18, 2021.	3	<b>Reason For Change</b> Updated to include electricity storage participation.  <b>Description of Change</b> Updated to include electricity storage participation.  <b>Description of Impact</b> Updated to include electricity storage participation.
Operations				
Market Manual 2: Market Administration Part 2.8: Reliability Assessments Information Requirements MDP_PRO_0024 17.1	All	Will be issued February 26, 2021 in advance of Baseline 45.0. Posted for review - January 18, 2021.	2	<b>Reason For Change</b> Updates to include electricity storage participation  <b>Description of Change</b> Updates to include electricity storage participation  <b>Description of Impact</b> Updates to include electricity storage participation
Market Manual 13.1: Capacity Export Requests PRO-357 3.1	All	Will be issued February 26, 2021 in advance of Baseline 45.0. Posted for review - January 18, 2021.	2	<b>Reason For Change</b> Updated to include electricity storage participation  <b>Description of Change</b> Updated to include electricity storage participation  <b>Description of Impact</b> Updated to include electricity storage participation
Market Manual 11 Reliability Compliance Part 11.3 Reliability Information Catalogue	All	Will be issued February 26, 2021 in advance of Baseline	2	<b>Reason For Change</b> Updated to include electricity storage participation  <b>Description of Change</b>

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IESO_CAT_0011 7.1		45.0. Posted for review - January 18, 2021.		Updated to include electricity storage participation  <b>Description of Impact</b> Updated to include electricity storage participation
Market Manual 11: Reliability Compliance Part 11.1 Applicability Criteria for Compliance with NERC Reliability Standards and NPCC Criteria IESO_GDE_0364 6.1	All	Will be issued February 26, 2021 in advance of Baseline 45.0. Posted for review - January 18, 2021.	2	<b>Reason For Change</b> Updated to include electricity storage participation.  <b>Description of Change</b> Updated to include electricity storage participation.  <b>Description of Impact</b> Updated to include electricity storage participation.
Market Manual 7: System Operations Part 7.1: IESO- Controlled Grid Operating Procedures MDP_PRO_0040 38.1	All	Will be issued February 26, 2021 in advance of Baseline 45.0. Posted for review - January 18, 2021.	2	<b>Reason For Change</b> Updated to include electricity storage participation  <b>Description of Change</b> Updated to include electricity storage participation  <b>Description of Impact</b> Updated to include electricity storage participation
Market Manual 7: System Operations Part 7.2: Near-Term Assessments and Reports IMP_PRO_0033 45.1	All	Will be issued February 26, 2021 in advance of Baseline 45.0. Posted for review - January 18, 2021.	2	<b>Reason For Change</b> Updated to include electricity storage participation  <b>Description of Change</b> Updated to include electricity storage participation  <b>Description of Impact</b> Updated to include electricity storage participation
Market Manual 7: System Operations Part 7.3: Outage Management IMP_PRO_0035 43.1	All	Will be issued February 26, 2021 in advance of Baseline 45.0. Posted for review - January 18, 2021.	2	<b>Reason For Change</b> Updated to include electricity storage participation  <b>Description of Change</b> Updated to include electricity storage participation

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Market Manual 9.0 Day-Ahead Commitment Process Overview IESO_MAN_0041 15.1	All	Will be issued February 26, 2021 in advance of Baseline 45.0. Posted for review - January 18, 2021.	2	<b>Reason For Change</b> Updated to include electricity storage participation  <b>Description of Change</b> Updated to include electricity storage participation  <b>Description of Impact</b> Updated to include electricity storage participation
Market Manual 9: Part 9.3 Operation of the Day-Ahead Commitment Process IESO_MAN_0078 10.1	All	Will be issued February 26, 2021 in advance of Baseline 45.0. Posted for review - January 18, 2021.	2	<b>Reason For Change</b> Updated to include electricity storage participation  <b>Description of Change</b> Updated to include electricity storage participation  <b>Description of Impact</b> Updated to include electricity storage participation
Market Manual 9: Part 9.4 Real Time Integration of the Day-Ahead Commitment Process IESO_MAN_0079 7.1	All	Will be issued February 26, 2021 in advance of Baseline 45.0. Posted for review - January 18, 2021.	2	<b>Reason For Change</b> Updated to include electricity storage participation  <b>Description of Change</b> Updated to include electricity storage participation  <b>Description of Impact</b> Updated to include electricity storage participation
Market Manual 4: Market Operations Part 4.2: Submission of Dispatch Data in the Real-Time Energy and Operating Reserve Markets MDP_PRO_0027 63.1	All	Will be issued February 26, 2021 in advance of Baseline 45.0. Posted for review - January 18, 2021.	2	<b>Reason For Change</b> Updated to include electricity storage participation  <b>Description of Change</b> Updated to include electricity storage participation



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				<b>Description of Impact</b> Updated to include electricity storage participation
Market Manual 4: Market Operations Part 4.3: Real-Time Scheduling of the Physical Markets IMP_PRO_0034 59.1	All	Will be issued February 26, 2021 in advance of Baseline 45.0. Posted for review - January 18, 2021.	2	<b>Reason For Change</b> Updated to include electricity storage participation  <b>Description of Change</b> Updated to include electricity storage participation  <b>Description of Impact</b> Updated to include electricity storage participation
Market Manual 1.4: Connection Assessment and Approval MDP_PRO_0048 21.1	All	Will be issued February 26, 2021 in advance of Baseline 45.0. Posted for review - January 18, 2021.	2	<b>Reason For Change</b> Updated to include electricity storage participation  <b>Description of Change</b> Updated to include electricity storage participation  <b>Description of Impact</b> Updated to include electricity storage participation
Market Manual 1.5: Market Registration Procedures PRO-408 2.1	All	Will be issued February 26, 2021 in advance of Baseline 45.0. Posted for review - January 18, 2021.	3	<b>Reason For Change</b> Updated to include electricity storage participation.  <b>Description of Change</b> Updated to include electricity storage participation.  <b>Description of Impact</b> Updated to include electricity storage participation.
Market Manual 1.6: Performance Validation IESO_REQ_0208 12.1	All	Will be issued February 26, 2021 in advance of Baseline 45.0. Posted for review - January 18, 2021.	3	<b>Reason For Change</b> Updated to include electricity storage participation.  <b>Description of Change</b> Updated to include electricity storage participation.

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				<b>Description of Impact</b> Updated to include electricity storage participation.
Market Manual 7: Systems Operations Part 7.4: IESO-Controlled Grid Operating Policies IMP_POL_0002 39.1	All	Will be issued February 26, 2021 in advance of Baseline 45.0. Posted for review - January 18, 2021.	3	<b>Reason For Change</b> Updated to include electricity storage participation.  <b>Description of Change</b> Updated to include electricity storage participation.  <b>Description of Impact</b> Updated to include electricity storage participation.
Market Manual 9 Part 9.2 Submission of Operational and Market Data for the Day-Ahead Commitment Process IESO_MAN_0077 11.1	All	Will be issued February 26, 2021 in advance of Baseline 45.0. Posted for review - January 18, 2021.	2	<b>Reason For Change</b> Updated to include electricity storage participation  <b>Description of Change</b> Updated to include electricity storage participation  <b>Description of Impact</b> Updated to include electricity storage participation
Market Manual 11 Reliability Compliance Part 11.4 Ontario Bulk Electric System (BES) Exception IESO_PRO_0875 3.1	All	Will be issued February 26, 2021 in advance of Baseline 45.0. Posted for review - January 18, 2021.	2	<b>Reason For Change</b> Updated to include electricity storage participation  <b>Description of Change</b> Updated to include electricity storage participation  <b>Description of Impact</b> Updated to include electricity storage participation
Settlements				
Market Manual 5: Settlements Part 5.5: Physical Markets Settlement Statements MDP_PRO_0033 81.1	All	Will be issued February 26, 2021 in advance of Baseline 45.0. Posted for review - January 18, 2021.	3	<b>Reason For Change</b> Updated to include electricity storage participation.  <b>Description of Change</b> Updated to include electricity storage participation.

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IESO Charge Types and Equations IMP_LST_0001 74.1	All	Will be issued February 26, 2021 in advance of Baseline 45.0. Posted for review - January 18, 2021.	3	<b>Reason For Change</b> Updated to include electricity storage participation.  <b>Description of Change</b> Updated to include electricity storage participation.  <b>Description of Impact</b> Updated to include electricity storage participation.
Technical Interface				
Market Manual 6: Participant Technical Reference Manual IMO_MAN_0024 37.1	All	Will be issued February 26, 2021 in advance of Baseline 45.0. Posted for review - January 18, 2021.	3	<b>Reason For Change</b> Updated to include electricity storage participation.  <b>Description of Change</b> Updated to include electricity storage participation.  <b>Description of Impact</b> Updated to include electricity storage participation.
Update to Baseline				
Market Manual 2: Market Administration: Part 2.1 Dispute Resolution MDP_PRO_0017 17.1	All	Will be issued February 26, 2021 in advance of Baseline 45.0. Posted for review - January 29, 2021.	3	<b>Reason For Change</b> Updated to include electricity storage participation.  <b>Description of Change</b> Updated to include electricity storage participation.  <b>Description of Impact</b> Updated to include electricity storage participation.