

RULES CHANGE COMMITTEE

Proposed Amendments to the WESM Rules and Various Manuals regarding Maximum Available Capacity

Effective Date : 12 May 2023

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WHEREAS, Clause 3.5.5 of the WESM Rules requires Trading Participants to submit market offers which must include (1) the quantity willing to be sold in the WESM, (2) the price at which the quantities are willing to be sold, and (3) the ramp rates that determine the capability of a plant to reach a target generation/schedule;

WHEREAS, the act of submitting offers implies that Trading Participants are willing and capable to run when dispatched at certain price levels;

WHEREAS, under the WESM Rules, the Market Surveillance Committee (MSC) is responsible to monitor the activities of Trading Participants, while the Compliance Committee (CC) is responsible to review reports of investigation of breaches to the WESM Rules and Market Manuals;

WHEREAS, on 24 October 2022, the MSC and the CC, jointly submitted to the Rules Change Committee (RCC) proposed amendments to the WESM Rules and WESM Manual on Dispatch Protocol¹ which seeks to:

- 1) Require Trading Participants to reflect more accurately the maximum available capacity of their generating units by considering other plant conditions in their market offers; and
- 2) Encourage Trading Participants to be more responsible in accounting for permissible limitations in their offers and to recommend a more stringent process in monitoring the MOR;

WHEREAS, the MSC/CC discussed² in the proposal that there were instances where Trading Participants submit offers in the WESM without intention of generating energy as observed through the following simultaneous actions and corresponding results:

- 1) By opening the plant's circuit breaker thus disconnecting it from the grid

The Trading Participants' offers were consequently excluded in the optimization and no schedule were given to them. Submitting offers but opening the plant's circuit breaker are inconsistent actions. In so doing, the Trading Participants are able to free themselves from the possible flagging of probable breach of the MOR;

- 2) By submitting very low ramp rates in their offers

Submitting very low ramp rates renders it impossible for the generating unit or plant to attain their offered capacity in the market thereby defeating the purpose of the MOR. While this is currently

¹ IEMOP, [RCC Form 1](#) - Proposed Amendments to the WESM Rules and WESM Manual on Dispatch Protocol regarding Maximum Available Capacity (ORCP-WR-WM-22-08).

² Ibid., 2.

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allowed in the rules, generators should be more aware of the impact or consequences of their actions vis-à-vis their obligations in the WESM;

WHEREAS, during its 205th Meeting on 18 November 2022, the RCC initially discussed and approved the posting of the proposal in the PEMC website, as submitted, to solicit comments from WESM Members and stakeholders.³ The proposed amendments are summarized as follows:⁴

- have a clearer definition of maximum available capacity;
- provide guidance when offering/bidding or revising/updating of offers, which should be equal to the maximum available capacity;
- require Trading Participants to revise offers/bids if they do not reflect reasonable estimates of the unit's maximum available capacity; and
- include other conditions (e.g., circuit breaker status, ramp rates) in revising/updating offers.

WHEREAS, for the RCC's further understanding of the proposal, the proponents made a supplementary presentation during the 206th RCC Meeting on 16 December 2022, in which they showed simulation results on the possible repercussion of submitting offers but opening the plant breaker or with very low ramp rates, as well as discussed for clarification related market processes;⁵

WHEREAS, following the 30-working day commenting period from 23 November 2022 to 09 January 2023, comments were received from Aboitiz Power, AC Energy, Meralco, NGCP and the WESM Technical Committee (TC);

WHEREAS, the RCC held a caucus on 10 March 2023 (211th RCC [Caucus] Meeting) to discuss the proposed amendments, the comments received and the proponent's responses, the highlights of which are as follows:⁶

- The TC stated that withholding of capacities has been an issue since the start of the WESM. The TC posited that being able to take advantage of the loopholes demonstrates knowledge of the Trading Participants (i.e., knowing how to work around the rules without violating the MOR), and that the proposed amendments may not sufficiently address the root cause of the problem inherent in the market design.
- It is acknowledged that the proposal may not entirely address the larger problem of withholding capacity. Rather, the proposal is only focused on dealing with the specific issue of compliance with the MOR. However, strengthening the ECO's compliance monitoring by properly defining the guidelines and criteria for complying with the MOR shall contribute to minimizing the likelihood of committing withholding of capacity.
- Resulting from the discussions, the RCC adopted the following changes to the proposal:

³ Minutes of [205th](#) RCC Meeting.

⁴ IEMOP, [RCC Form 1](#) – *Proposed Amendments*, 3.

⁵ Minutes of [206th](#) RCC Meeting.

⁶ Minutes of 211th RCC Meeting.

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- WESM Rules Clause 3.5.5.1 – revised wordings to consider comments from NGCP to clearly indicate that a Generation Company is obliged to provide reasons to justify submitting an offer below registered capacity;
- WESM Rules Clause 3.5.11.5 – revised wordings for enhancement and clarity:
 - i. Clause 3.5.11.5(a) – use of the term “*status*”, rather than “*expected availability*”, of generating units as one of the basis for revising market offers;
 - ii. For consistency with Clause 3.5.11.5, revise Section 2.5.4.7 of the WESM Manual on Registration, Suspension and De-registration Criteria and Procedures and other affected provisions regarding the change in term “generator breaker” to “generator circuit breaker”;
 - iii. Clause 3.5.11.5(b) – re-phrase to more clearly state that market offers should be revised if they no longer represent a reasonable estimate of the “capacity that can be attained taking into account the ramp rate limitations of a generating unit”;
- Glossary: Definition of “Availability” – due to revision in WESM Rules Clause 3.5.11.5 and as the proponent recommended, retained the current definition of the term;
- Glossary: Term and definition of “Maximum Available Capacity” – adopted global change of “maximum available capacity” to “available capacity” to differentiate from the same term found in the Philippine Grid Code;
- Glossary: Term and definition of “Technical Constraint” – adopted global change of “technical constraint” to “generator technical constraint” to only pertain specifically to generators’ technical constraints since the original term has broad scope; and
- For the proposed amendments to the Dispatch Protocol Manual – Harmonize all agreements in the WESM Rules;

WHEREAS, during its 212th and 214th Meetings on 17 March and 28 April 2023, respectively, the RCC was informed of further revisions on the proposal, as follows:⁷

- Amended five (5) additional Market Manuals due to change in terminologies based on the agreements from the caucus:
 - 1) Registration, Suspension and De-registration Criteria and Procedures;
 - 2) Market Network Model Development and Maintenance – Criteria and Procedures;
 - 3) Price Determination Methodology;
 - 4) Protocol for Central Scheduling and Dispatch of Energy and Contracted Reserves; and
 - 5) Penalty Manual;
- Replace “registered capacity” to “maximum stable load (Pmax)” to be more straightforward on the quantity that Trading Participants are required to submit as their standing market offer. Registered capacity may refer to either “Pmax” or “Pmin”.

WHEREAS, the RCC acknowledged that the amendments to the Penalty Manual shall be officially endorsed by the MSC to the DOE, being the Committee responsible for all amendments to the said Manual;

⁷ Minutes of 212th and 214th RCC Meetings.

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WHEREAS, the RCC reviewed and finalized the proposal for endorsement to the PEM Board during its 214th Meeting on 28 April 2023;

NOW THEREFORE, we, the undersigned, on behalf of the sectors we represent, hereby resolve as follows:

RESOLVED, that the RCC approve, as amended, the Proposed Amendments to the WESM Rules and Various WESM Manuals regarding Maximum Available Capacity attached as Annexes A to G;

RESOLVED FURTHER, that the said Proposed Amendments to the WESM Rules and Various WESM Manuals regarding Maximum Available Capacity are hereby endorsed to the PEM Board for approval and subsequent transmittal to the DOE for promulgation.

Done this **12th** day of **May 2023**, Pasig City.



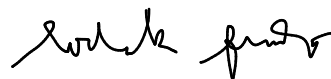
Proposed Amendments to the WESM Rules and Various Manuals regarding Maximum Available Capacity

Approved by:
THE RULES CHANGE COMMITTEE

Independent Members:



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Chairperson



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Jose Roderick Fernando (May 13, 2023 09:49 GMT+8)



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Supply Sector Member:
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Market Operator Member:
<div> JOHN PAUL S. GRAYDA Independent Electricity Market Operator of the Philippines (IEMOP)</div>
System Operator Member:
<div> DARRYL A. ORTIZ National Grid Corporation of the Philippines (NGCP)</div>



Proposed Amendments to the WESM Rules and Various Manuals regarding Maximum Available Capacity

WESM Rules				
Title	Clause	Original Provision	Proposed Amendments	Rationale
Generation Offers and Data	3.5.5.1	Each <i>Generation Company</i> including <i>Generation Companies</i> with <i>bilateral contracts</i> shall submit a standing <i>market offer</i> for each of its <i>scheduled generating units, battery energy storage systems</i> and <i>pumped-storage units</i> for each <i>dispatch interval</i> in each <i>trading day</i> of the week in accordance with the <i>timetable</i> . The standing <i>market offer</i> shall apply until revised or updated by the <i>Generation Company</i> .	Each <i>Generation Company</i> including <i>Generation Companies</i> with <i>bilateral contracts</i> shall submit a standing <i>market offer</i> <u>equivalent to the maximum stable load (Pmax) or available capacity</u> , for each of its <i>scheduled generating units, battery energy storage systems</i> , and <i>pumped-storage units</i> for each <i>dispatch interval</i> in each <i>trading day</i> of the week in accordance with the <i>timetable</i> . <u>If the submitted offer reflects a capacity that is less than the maximum stable load (Pmax), the Generation Company shall include the reason for such in its standing offer</u> . The standing <i>market offer</i> shall apply until revised or updated by the <i>Generation Company</i> .	<ul style="list-style-type: none">• To reflect global change of the term “maximum available capacity” to “available capacity” for clarity and for distinction from the same term found in the Philippine Grid Code.• To oblige Generation Companies to: (1) consider the “possible constraints”, as described in the proposed definition of available capacity, in submitting a standing market offer, and (2) provide justifications if they offer less than the required capacity.
Revision of Market Offers/Bids, Nomination of Loading Levels, and Projected Outputs	3.5.11.1	Each <i>Trading Participant</i> which has submitted standing <i>offers</i> or bids for each of its <i>scheduled generating unit, battery energy storage system</i> and <i>pumped-storage unit</i> may revise any of its <i>market offers</i> or <i>market bids</i> for any <i>dispatch interval</i> in any trading day of the current week-ahead <i>market horizon</i> in accordance with the <i>timetable</i> , and subject to Clause 3.5.11.4 and each revised <i>market offer</i> or <i>market bid</i> submitted	Each <i>Trading Participant</i> which has submitted standing <i>offers</i> or bids for each of its <i>scheduled generating unit, battery energy storage system</i> , and <i>pumped-storage unit</i> may revise any of its <i>market offers</i> or <i>market bids</i> <u>equivalent to the available capacity and shall take into account the conditions under Clause 3.5.11.5 and Clause 3.5.11.6</u> , for any <i>dispatch interval</i> in any trading day of the current week-ahead <i>market</i>	<ul style="list-style-type: none">• To reflect global change of the term “maximum available capacity” to “available capacity” for clarity and for distinction from the same term found in the Philippine Grid Code.• To ensure that the revised/updated market offer



WESM Rules				
Title	Clause	Original Provision	Proposed Amendments	Rationale
		shall provide the information set out in Appendix A1.	<i>horizon. <u>Each revised market offer or market bid shall be submitted</u> in accordance with the timetable, and subject to Clause 3.5.11.4, and each revised market offer or market bid submitted shall provide the <u>contain all the</u> information set out in Appendix A1.</i>	<p>reflects the Trading Participant’s readily available capacity.</p> <ul style="list-style-type: none">To require that Trading Participants must consider the conditions mentioned in WESM Rules Clauses 3.5.11.5 and 3.5.11.6 in revising/updating offers.
Revision of Market Offers/Bids, Nomination of Loading Levels, and Projected Outputs	3.5.11.5	<p><i>Market bids or market offers for any dispatch interval may be revised by Trading Participants prior to gate closure if they no longer represent a reasonable estimate of:</i></p> <p><i>(a) the expected availability of the relevant generating unit or scheduled load for that dispatch interval; or</i></p> <p><i>(b) the demand bids or offers likely to apply for the real-time dispatch optimization of that dispatch interval.</i></p>	<p><i>Market bids or market offers for any dispatch interval may <u>shall</u> be revised by Trading Participants prior to gate closure <u>in accordance with the timetable</u> if they <u>these offers</u> no longer represent a reasonable estimate of:</i></p> <p><i>(a) the expected availability <u>status</u> of the relevant generating unit (<u>e.g., generator circuit breaker status, outage</u>) or scheduled load for that dispatch interval; or</i></p> <p><i>(b) <u>the capacity that can be attained taking into account the ramp rate limitations of the generating unit during the relevant dispatch interval; or</u></i></p> <p><i>(c) the demand bids or offers likely to apply for the real-time dispatch optimization of that dispatch interval.</i></p>	<ul style="list-style-type: none">To require Trading Participants to revise their offers if it does not represent a reasonable estimate of their “available capacity” within the WESM timetable. This is consistent with Dispatch Protocol Manual Section 6.1.8.To provide conditions in revising/updating offers. Note that <i>status</i> (in item a) is a defined term (i.e. The actual operating condition of a generation unit or facility, including its current commitment state, generation level, and AGC activation status).



WESM Rules				
Title	Clause	Original Provision	Proposed Amendments	Rationale
Glossary		(New/Transferred from the WESM Manual on Dispatch Protocol)	<u>Availability. The duration of time over a specified period that a plant unit is ready to be in service or operational.</u>	Transferred the definition from Dispatch Protocol Manual, as is, since this was already used in the WESM Rules
Glossary		(New/Transferred from the WESM Manual on Dispatch Protocol)	<u>Maximum Available capacity. Equal to the registered maximum capacity (Pmax) of the (aggregate) unit less forced unit outages, scheduled unit outages, de-rated capacity derating, generator technical constraints and weather disturbance that cause damage to the unit or that would otherwise limit its ability to inject power to the grid. For co-generation systems, the maximum available capacity is further determined by taking into account the equivalent power of the thermal energy extraction by the energy host and technical constraints.</u>	<ul style="list-style-type: none">• Transferred the definition, with proposed revisions, from Dispatch Protocol Manual since this was already used in the WESM Rules.• To reflect global change of the term “maximum available capacity” to “available capacity” for clarity and for distinction from the same term found in the Philippine Grid Code.• To be consistent with the re-naming of the term “technical constraints” to “generator technical constraints” (see proposed amendment to the definition of “technical constraints” below).• Deletion of last sentence pertaining to co-generating

WESM Rules				
Title	Clause	Original Provision	Proposed Amendments	Rationale
				systems: the condition is already specified in the definition of “generator technical constraints” (see item d) including other conditions plant types.
Glossary		(New/Transferred from the WESM Manual on Dispatch Protocol)	<p><u>Generator Technical Constraint. Refers to plant equipment related failure limitations encountered during start up/shutdown procedure, effects of ambient temperature and resource-related constraints due to the following:</u></p> <p><u>(a) water elevation and diversion requirements for domestic or irrigation use for hydro plants;</u></p> <p><u>(b) steam quality (chemical composition, condensable and non-condensable gases, steam pressure and temperature) for geothermal plants;</u></p> <p><u>(c) unavailability of fuel resources that are not within the control of the Generation Company for biomass power plants; and</u></p> <p><u>(d) steam flow limitations, station load, and electricity demand of its energy host, in the case of the co-generation systems.</u></p>	<ul style="list-style-type: none">• Transferred the definition, with proposed revision, from Dispatch Protocol Manual since this was already used in the WESM Rules.• To clarify that the “technical constraints” in the definition specifically pertains to generators only, since “technical constraints” is a broad term.

WESM Rules				
Title	Clause	Original Provision	Proposed Amendments	Rationale
Glossary		<p><u>(As amended by PEM Board Resolution No. 2023-56-01 dated 25 January 2023 as Urgent Amendment)</u></p> <p>Projected Output. The <i>loading level</i> nominated by a <i>Generation Company</i> for its <i>must dispatch generating units</i> or <i>priority dispatch generating units</i> indicating the forecasted output of its <i>must dispatch generating unit</i> or <i>priority dispatch generating unit</i> at the end of a <i>dispatch interval</i>. In the case of geothermal or impounding hydro plant which is classified as <i>priority dispatch generating unit</i>, <i>projected output</i> shall refer to its <i>maximum available capacity</i>, as defined in <i>WESM Rules</i> or <i>Market Manual</i>.</p>	<p>Projected Output. The <i>loading level</i> nominated by a <i>Generation Company</i> for its <i>must dispatch generating units</i> or <i>priority dispatch generating units</i> indicating the forecasted output of its <i>must dispatch generating unit</i> or <i>priority dispatch generating unit</i> at the end of a <i>dispatch interval</i>. In the case of geothermal or impounding hydro plant which is classified as <i>priority dispatch generating unit</i>, <i>projected output</i> shall refer to its maximum available capacity, as defined in <i>WESM Rules</i> or <i>Market Manual</i>.</p>	<ul style="list-style-type: none">To reflect global change of the term “maximum available capacity” to “available capacity” for clarity and for distinction from the same term found in the Philippine Grid Code.Note: PEM Board Resolution No. 2023-56-01 dated 25 January 2023 is on the implementation of DOE policy on Preferential Dispatch
Information to be Supplied with Offers to Supply and to Buy Electricity	Appendix A1.1 Generation Offers	<p>Generation offers:</p> <p>(a) May include up to ten (10) <i>generation</i> offer blocks per (aggregate) unit, and the maximum combined capacity of <i>generation</i> and <i>reserve offers</i> must not be less than the maximum available capacity of the generator;</p> <p>xxx</p>	<p>Generation offers:</p> <p>(a) May include up to ten (10) <i>generation</i> offer blocks per (aggregate) unit, and the maximum combined capacity of <i>generation</i> and <i>reserve offers</i> must not be less than the maximum available capacity of the generator;</p> <p>xxx</p>	To reflect global change of the term “maximum available capacity” to “available capacity” for clarity and for distinction from the same term found in the Philippine Grid Code.
Information to be Supplied with Offers to Supply and to Buy Electricity	A1.4 Battery Energy Storage System Offer	<p>Battery Energy Storage System Offer:</p> <p>xxx</p> <p>c) May include up to ten (10) <i>energy offer</i> blocks per (aggregate) unit. The maximum combined capacity of <i>generation</i> and <i>reserve offers</i> must not</p>	<p>Battery Energy Storage System Offer:</p> <p>xxx</p> <p>c) May include up to ten (10) <i>energy offer</i> blocks per (aggregate) unit. The maximum combined capacity of <i>generation</i> and <i>reserve offers</i> must not be less</p>	To reflect global change of the term “maximum available capacity” to “available capacity” for clarity and for distinction from the same term found in the Philippine Grid Code.

Proposed Amendments to the WESM Rules and Various Manuals regarding Maximum Available Capacity

WESM Rules				
Title	Clause	Original Provision	Proposed Amendments	Rationale
		be less than the maximum available capacity of the generator; xxx	than the maximum <i>available capacity</i> of the generator; xxx	



WESM Manual on Dispatch Protocol				
Title	Section	Original Provision	Proposed Amendment	Rationale
Definitions	2.1.2	<p>The following words and phrases as used in this <i>Market Manual</i> shall have the following meaning:</p> <p>xxx</p> <p>d. Availability. The duration of time over a specified period that a plant/unit is ready to be in service or operational.</p> <p>e. Bid. xxx</p> <p>f. Capability. xxx</p> <p>g. Cascading Outages. xxx</p> <p>h. Contingency. xxx</p> <p>i. Contingency Reserve. xxx</p> <p>j. Demand Control. xxx</p> <p>k. Demand Control Imminent Warning. xxx</p> <p>l. Dispatchable Reserve. xxx</p> <p>m. Disturbance. xxx</p> <p>n. Frequency control. xxx</p> <p>o. Generator. xxx</p>	<p>The following words and phrases as used in this <i>Market Manual</i> shall have the following meaning:</p> <p>xxx</p> <p>d. Availability. The duration of time over a specified period that a plant/unit is ready to be in service or operational.</p> <p>e. d. Bid. xxx</p> <p>f. e. Capability. xxx</p> <p>g. f. Cascading Outages. xxx</p> <p>h. g. Contingency. xxx</p> <p>i. h. Contingency Reserve. xxx</p> <p>j. i. Demand Control. xxx</p> <p>k. j. Demand Control Imminent Warning. xxx</p> <p>l. k. Dispatchable Reserve. xxx</p> <p>m. l. Disturbance. xxx</p> <p>n. m. Frequency control. xxx</p> <p>o. n. Generator. xxx</p>	<ul style="list-style-type: none">• The definitions for the term “availability”, “maximum available capacity”, and “technical constraints”, as revised, are transferred to the WESM Rules.• Re-numbering.



WESM Manual on Dispatch Protocol				
Title	Section	Original Provision	Proposed Amendment	Rationale
		<p>p. Islanding Operation. xxx</p> <p>q. Load shedding. xxx</p> <p>r. Manual Load Dropping. xxx</p> <p>s. Market Management System (MMS). xxx</p> <p>t. Maximum available capacity. Equal to the registered maximum capacity (Pmax) of the (aggregate) unit less forced unit <i>outages</i>, scheduled unit <i>outages</i>, de-rated capacity due to <i>technical constraints</i> and weather disturbance that cause damage to the unit or that would otherwise limit its ability to inject power to the <i>grid</i>. For co-generation systems, the <i>maximum available capacity</i> is further determined by taking into account the equivalent power of the thermal <i>energy</i> extraction by the <i>energy</i> host and <i>technical constraints</i>.</p> <p>u. MMS-Market Participant Interface (MPI). xxx</p> <p>v. Multiple Outage Contingency. xxx</p> <p>w. Normal State. xxx</p> <p>x. Offer. xxx</p> <p>y. Operating margin. xxx</p>	<p>p. <u>o.</u> Islanding Operation. xxx</p> <p>q. <u>p.</u> Load shedding. xxx</p> <p>r. <u>q.</u> Manual Load Dropping. xxx</p> <p>s. <u>r.</u> Market Management System (MMS). xxx</p> <p>t. Maximum available capacity. Equal to the registered maximum capacity (Pmax) of the (aggregate) unit less forced unit <i>outages</i>, scheduled unit <i>outages</i>, de-rated capacity due to <i>technical constraints</i> and weather disturbance that cause damage to the unit or that would otherwise limit its ability to inject power to the grid. For co-generation systems, the maximum available capacity is further determined by taking into account the equivalent power of the thermal <i>energy</i> extraction by the energy host and <i>technical constraints</i>.</p> <p>u. <u>s.</u> MMS-Market Participant Interface (MPI). xxx</p> <p>v. <u>t.</u> Multiple Outage Contingency. xxx</p> <p>w. <u>u.</u> Normal State. xxx</p> <p>x. <u>v.</u> Offer. xxx</p> <p>y. <u>w.</u> Operating margin. xxx</p>	



WESM Manual on Dispatch Protocol				
Title	Section	Original Provision	Proposed Amendment	Rationale
		<p>z. Preferential Dispatch Units. xxx</p> <p>aa. Real-Time Data. xxx</p> <p>bb. Real-Time Dispatch. xxx</p> <p>cc. Red Alert. xxx</p> <p>dd. Regulating Reserve. xxx</p> <p>ee. Security. xxx</p> <p>ff. Self-scheduled nomination. xxx</p> <p>gg. Shutdown. xxx</p> <p>hh. Stability. xxx</p> <p>ii. Start-up. The synchronization of a <i>generating unit</i> to the <i>grid</i> from its <i>outage</i> state (closing of <i>generator</i> breakers).</p> <p>jj. System Integrity Protection Scheme (SIPS). xxx</p> <p>kk. System Operator System Advisories. xxx</p> <p>ll. Technical Constraint. Refers to plant equipment-related failure, limitations encountered during <i>start-up/shutdown</i> procedure, effects of ambient temperature and resource-related <i>constraints</i> due to the following: (a) water</p>	<p>z. <u>x.</u> Preferential Dispatch Units. xxx</p> <p>aa. <u>y.</u> Real-Time Data. xxx</p> <p>bb. <u>z.</u> Real-Time Dispatch. xxx</p> <p>cc. <u>aa.</u> Red Alert. xxx</p> <p>dd. <u>bb.</u> Regulating Reserve. xxx</p> <p>ee. <u>cc.</u> Security. xxx</p> <p>ff. <u>dd.</u> Self-scheduled nomination. xxx</p> <p>gg. <u>ee.</u> Shutdown. xxx</p> <p>hh. <u>ff.</u> Stability. xxx</p> <p>ii. <u>gg.</u> Start-up. The synchronization of a <i>generating unit</i> to the <i>grid</i> from its <i>outage</i> state (closing of <i>generator</i> <u>circuit</u> breakers).</p> <p>jj. <u>hh.</u> System Integrity Protection Scheme (SIPS). xxx</p> <p>kk. <u>ii.</u> System Operator System Advisories. xxx</p> <p>ll. Technical Constraint. Refers to plant equipment-related failure, limitations encountered during <i>start-up/shutdown</i> procedure, effects of ambient temperature and resource-related <i>constraints</i> due to the following: (a) water elevation and diversion requirements for domestic</p>	<ul style="list-style-type: none">• To use the technical and more accurate term for “generator breaker”.



WESM Manual on Dispatch Protocol				
Title	Section	Original Provision	Proposed Amendment	Rationale
		elevation and diversion requirements for domestic or irrigation use for hydro plants; (b) steam quality (chemical composition, condensable and non-condensable gases, steam pressure and temperature) for geothermal plants; (c) unavailability of fuel resources that are not within the control of the <i>Generation Company</i> for biomass power plants; and (d) steam flow limitations, station <i>load</i> , and electricity demand of its <i>energy</i> host, in the case of the co-generation systems. mm. Voltage Control. xxx nn. Voltage Instability. xxx oo. Voltage Sag. xxx	or irrigation use for hydro plants; (b) steam quality (chemical composition, condensable and non-condensable gases, steam pressure and temperature) for geothermal plants; (c) unavailability of fuel resources that are not within the control of the <i>Generation Company</i> for biomass power plants; and (d) steam flow limitations, station <i>load</i>, and electricity demand of its <i>energy</i> host, in the case of the co-generation systems. mm. jj. Voltage Control. xxx nn. kk. Voltage Instability. xxx oo. ll. Voltage Sag. xxx	
BIDS, OFFERS AND DATA SUBMISSION AND PROCESSING	6.1.8	<i>WESM Rules</i> Clause 3.5.11.5 requires <i>Trading Participants</i> to revise their bids or offers if they no longer represent a reasonable estimate of either the expected <i>availability</i> for the <i>dispatch interval</i> of the relevant <i>generating unit</i> or <i>scheduled load</i> or <i>bids</i> or <i>offers</i> likely to apply in the <i>real-time dispatch</i> optimization for the <i>dispatch interval</i> .	<i>WESM Rules</i> Clause 3.5.11.5 requires <i>Trading Participants</i> to revise their bids or offers if they no longer represent a reasonable estimate of either the expected <i>availability</i> <u>status (e.g., generator circuit breaker status, outage)</u> for the <i>dispatch interval</i> of the relevant <i>generating unit</i> , <u>the capacity that can be attained taking into account the ramp rate limitations of the generating unit during the relevant dispatch interval</u> , or <i>scheduled load</i> or <i>bids</i> or <i>offers</i> likely	<ul style="list-style-type: none">• To require Trading Participants to revise their offers if it does not represent a reasonable estimate their “available capacity” within the WESM timetable.• To provide conditions in revising/updating offers.



WESM Manual on Dispatch Protocol				
Title	Section	Original Provision	Proposed Amendment	Rationale
			to apply in the <i>real-time dispatch</i> optimization for the <i>dispatch interval</i> .	
BIDS, OFFERS AND DATA SUBMISSION AND PROCESSING Background	6.1.9	Pursuant to WESM Rules Clause 3.5.11.6, Trading Participants that cancel their bids or offers, or submit bids or offers less than the registered capacity or maximum available capacity of their facility or generating unit are required to provide information on the reasons or circumstances of such cancellation or submission.	Pursuant to <i>WESM Rules</i> Clause 3.5.11.6, <i>Trading Participants</i> that cancel their <i>bids</i> or <i>offers</i> , or submit <i>bids</i> or <i>offers</i> less than the registered capacity maximum stable load (Pmax) or maximum available capacity of their <i>facility</i> or <i>generating unit</i> are required to provide information on the justifiable reasons or circumstances of such cancellation or submission.	<ul style="list-style-type: none">To reflect global change of the term “maximum available capacity” to “available capacity” for clarity and for distinction from the same term found in the Philippine Grid Code.To be consistent with WESM Rules Clauses 3.5.5.1 (as amended) and 3.5.11.6.
BIDS, OFFERS AND DATA SUBMISSION AND PROCESSING Format and Contents of Submissions	6.9.2	<i>Trading Participants</i> shall provide the following information when submitting <i>market offers</i> : a. May include up to ten (10) <i>market offer</i> blocks per (aggregate) unit. The maximum combined capacity of <i>generation</i> and <i>reserve offers</i> must not be less than the <i>maximum available capacity</i> of the <i>generator</i> ; xxx	<i>Trading Participants</i> shall provide the following information when submitting <i>market offers</i> : a. May include up to ten (10) <i>market offer</i> blocks per (aggregate) unit. The maximum combined capacity of <i>generation</i> and <i>reserve offers</i> must not be less than the maximum available capacity of the <i>generator</i> ; xxx	To reflect global change of the term “maximum available capacity” to “available capacity” for clarity and for distinction from the same term found in the Philippine Grid Code.
BIDS, OFFERS AND DATA SUBMISSION AND PROCESSING	6.9.3	<i>Trading Participants</i> shall provide the following information when submitting <i>battery energy storage system offers</i> :	<i>Trading Participants</i> shall provide the following information when submitting <i>battery energy storage system offers</i> :	To reflect global change of the term “maximum available capacity” to “available capacity” for clarity and for

WESM Manual on Dispatch Protocol				
Title	Section	Original Provision	Proposed Amendment	Rationale
Format and Contents of Submissions		a. May include up to ten (10) <i>energy offer</i> blocks per (aggregate) unit. The maximum combined capacity of <i>generation</i> and <i>reserve offers</i> must not be less than the <i>maximum available capacity</i> of the <i>generator</i> ; xxx	a. May include up to ten (10) <i>energy offer</i> blocks per (aggregate) unit. The maximum combined capacity of <i>generation</i> and <i>reserve offers</i> must not be less than the <i>maximum</i> <i>available capacity</i> of the <i>generator</i> ; xxx	distinction from the same term found in the Philippine Grid Code.
BIDS, OFFERS AND DATA SUBMISSION AND PROCESSING Revisions of Self-scheduled Nominations, Bids and Offers Based on Reasonable Estimates	6.13	<i>Trading Participants</i> shall revise their <i>self-scheduled nominations, bids, or offers</i> , if the <i>self-scheduled nominations, bids or offers</i> submitted no longer represent a reasonable estimate of either the following: a. The expected <i>availability</i> for the <i>dispatch interval</i> of the relevant <i>generating unit</i> or <i>scheduled load</i> ; or b. The <i>loading level, projected output, bid or offer</i> likely to apply in the <i>real-time dispatch</i> optimization for the <i>dispatch interval</i> .	<i>Trading Participants</i> shall revise their <i>self-scheduled nominations, bids, or offers</i> , if the <i>self-scheduled nominations, bids or offers</i> submitted no longer represent a reasonable estimate of either the following: a. The expected <i>availability</i> <u>status (e.g., generator circuit breaker status, outage)</u> for the <i>dispatch interval</i> of the relevant <i>generating unit</i> or <i>scheduled load</i> ; or <u>b. the capacity that can be attained taking into account the <i>ramp rate</i> limitations of the <i>generating unit</i> during the relevant <i>dispatch interval</i>; or</u> b. c. <u>c.</u> The <i>loading level, projected output, bid or offer</i> likely to apply in the <i>real-time dispatch</i> optimization for the <i>dispatch interval</i> . egiste	<ul style="list-style-type: none">• To include the conditions in revising offers and cite samples.• To harmonize with the proposed amendment in WESM Rules Clause 3.5.11.5.



WESM Manual on Dispatch Protocol				
Title	Section	Original Provision	Proposed Amendment	Rationale
MONITORING THE EFFECTIVE PROVISION OF ANCILLARY SERVICES Measuring REF based on Accuracy	21.4.2.1	<p>The REF for a <i>Regulating Reserve</i> facility on GCM with respect to its accuracy shall be based on its static gain. The static gain shall be computed as such:</p> <p>xxx</p> <p>Where:</p> <p>xxx</p> <p><i>Capacity of the Generating Unit_i</i></p> <p>refers to the <i>maximum available capacity</i> of the <i>reserve facility</i> at <i>dispatch interval i</i></p> <p>xxx</p>	<p>The REF for a <i>Regulating Reserve</i> facility on GCM with respect to its accuracy shall be based on its static gain. The static gain shall be computed as such:</p> <p>xxx</p> <p>Where:</p> <p>xxx</p> <p><i>Capacity of the Generating Unit_i</i></p> <p>refers to the <i>maximum</i> <i>available capacity</i> of the <i>reserve facility</i> at <i>dispatch interval i</i></p> <p>xxx</p>	<p>To reflect global change of the term “maximum available capacity” to “available capacity” for clarity and for distinction from the same term found in the Philippine Grid Code.</p>

WESM Manual on Registration, Suspension and De-registration Criteria and Procedures				
Title	Section	Original Provision	Proposed Amendment	Rationale
Modelling of Generating Unit's Availability	2.5.4.7	Upon registration, <i>Trading Participants</i> shall specify if the availability of its <i>generating unit</i> shall be based on the real-time status of its generator breaker, or on the availability of its <i>market offers</i> .	Upon registration, <i>Trading Participants</i> shall specify if the availability of its <i>generating unit</i> shall be based on the real-time status of its generator <u>circuit</u> breaker, or on the availability of its <i>market offers</i> .	To use the technical and more accurate term for “generator breaker”.

WESM Manual on Market Network Model Development and Maintenance – Criteria and Procedures				
Title	Section	Original Provision	Proposed Amendment	Rationale
SYSTEM OPERATOR AND TRADING PARTICIPANTS	3.2.2	The <i>System Operator</i> and the <i>Generation Companies</i> shall ensure that their facilities for real-time monitoring are available and that they accurately reflect the state of their generation (i.e., MW/MVAR output and generator breaker status).	The <i>System Operator</i> and the <i>Generation Companies</i> shall ensure that their facilities for real-time monitoring are available and that they accurately reflect the state of their generation (i.e., MW/MVAR output and generator <u>circuit</u> breaker <i>status</i>).	To use the technical and more accurate term for “generator breaker”.
GENERATOR MARKET RESOURCE	6.5.3	During the registration of the generator resource, <i>Trading Participants</i> shall specify if its availability shall be based on the real-time status of its generator breaker, or on the availability of its <i>market offers</i> .	During the registration of the generator resource, <i>Trading Participants</i> shall specify if its availability shall be based on the real-time status of its generator <u>circuit</u> breaker, or on the availability of its <i>market offers</i> .	To use the technical and more accurate term for “generator breaker”.

WESM Manual on Price Determination Methodology				
Title	Section	Original Provision	Proposed Amendment	Rationale
INTRODUCTION Purpose	1.2	<p>The price determination methodology and <i>settlement</i> formula in this <i>Market Manual</i> shall ensure that the following market design principles and characteristics of the <i>WESM</i> are achieved:</p> <p>a. Gross pool, where each <i>Scheduled Generation Company</i> offers its <i>maximum available capacity</i>, <i>Non-Scheduled Generation Company</i> submits a standing nomination of <i>loading levels</i>, and <i>Generation Company</i>, with <i>must dispatch generating units</i> and <i>priority dispatch generating units</i>, submits projected outputs, for central scheduling and <i>dispatch</i> to ensure <i>system security</i> and a level playing field among <i>generators</i>;</p> <p>xxx</p>	<p>The price determination methodology and <i>settlement</i> formula in this <i>Market Manual</i> shall ensure that the following market design principles and characteristics of the <i>WESM</i> are achieved:</p> <p>a. Gross pool, where each <i>Scheduled Generation Company</i> offers its <i>maximum</i> <i>available capacity</i>, <i>Non-Scheduled Generation Company</i> submits a standing nomination of <i>loading levels</i>, and <i>Generation Company</i>, with <i>must dispatch generating units</i> and <i>priority dispatch generating units</i>, submits projected outputs, for central scheduling and <i>dispatch</i> to ensure <i>system security</i> and a level playing field among <i>generators</i>;</p> <p>xxx</p>	To reflect global change of the term “maximum available capacity” to “available capacity” for clarity and for distinction from the same term found in the Philippine Grid Code.

WESM Manual on Protocol for Central Scheduling and Dispatch of Energy and Contracted Reserves				
Title	Section	Original Provision	Proposed Amendment	Rationale
CENTRAL SCHEDULING OF RESERVE CAPACITIES	4.4.2	<i>Trading Participants</i> shall submit their <i>maximum available capacity</i> to the <i>WESM</i> , inclusive of <i>reserve offers</i> based on the approved day-ahead ancillary schedule.	<i>Trading Participants</i> shall submit their <i>maximum</i> <i>available capacity</i> to the <i>WESM</i> , inclusive of <i>reserve offers</i> based on the approved day-ahead ancillary schedule.	To reflect global change of the term “maximum available capacity” to “available capacity” for clarity and for distinction from the same term found in the Philippine Grid Code.
SUBMISSION OF GENERATION AND RESERVE OFFERS FOR THE REAL-TIME DISPATCH (RTD)	4.5.1	All <i>Trading Participants</i> shall submit <i>generation offers</i> that represent their maximum available capacity pursuant to the provisions of <i>WESM Rules</i> Clause 3.5.5.2.	All <i>Trading Participants</i> shall submit <i>generation offers</i> that represent their maximum <i>available capacity</i> pursuant to the provisions of <i>WESM Rules</i> Clause 3.5.5.2.	

