

09 January 2023

RULES CHANGE COMMITTEE

Philippine Electricity Market Corporation

18/F Robinsons Equitable Tower

ADB Avenue, Ortigas Center

Pasig City, 1605 Philippines

Email addresses: rcc@wesm.ph / mag_rrd@wesm.ph

Contact No: (+632) 8631-8734

Attention : WESM Governance Committee Secretariat

Subject : Call for Comments for the Proposed Amendments to the WESM Rules and the Dispatch Protocol Manual regarding the Maximum Available Capacity

Dear Rules Change Committee:

We wish to inform you that ACEN CORPORATION has filed a submission of its comments via <https://www.wesm.ph/market-governance/rules-change/submit-proposals-and-comments> to the Proposed Amendment to the to the WESM Rules and the Dispatch Protocol Manual regarding the Maximum Available Capacity.

For any question and clarifications, please do not hesitate to contact us through Mr. Renz Patrick Barrientos at barrientos.rp@acenergy.com.ph.

For your consideration.

Thank you.

Sincerely yours,



John Henry C. Liguete
Assistant Vice President, Commercial Operations



ORCP-WR-WM-22-08
Date Received by RCC: 10/28/2022

REQUEST FOR MARKET RULES AND MANUALS AMENDMENTS

Proposals made only under this prescribed form shall be accepted and considered as submitted.

This request for amendments are be submitted to:

Rules Change Committee

Attention: WESM Governance Committee Secretariat
Philippine Electricity Market Corporation
18/F Robinsons Equitable Tower
ADB Avenue, Ortigas Center
Pasig City, 1605 Philippines
Email addresses: rcc@wesm.ph / mag_rrd@wesm.ph
Contact No: (+632) 8631-8734

I. Proponent's Information

| | |
|-----------------|---|
| Name | Atty. Doroteo B. Aguila / Dr. Peter Lee U |
| Designation | Market Surveillance Committee (MSC) Chairman / Compliance Committee (CC) Chairman |
| Company | Philippine Electricity Market Corporation (PEMC) |
| Company Address | 18F Robinsons Equitable Tower |
| | Ortigas Center, Pasig City |
| Telephone No. | |
| Fax. No. | |
| Email Address | dodiaguila@yahoo.com / peter.u@uap.asia |

II. Amendment Information

| | |
|---|---|
| Proposed Amendments to the (please tick the box): | |
| <input checked="" type="checkbox"/> WESM Rules | <input type="checkbox"/> Retail Rules |
| <input checked="" type="checkbox"/> Market Manual: | WESM Manual on Dispatch Protocol Issue 16.0 |
| Topic: | Proposed Amendments to the WESM Rules and WESM Manual on Dispatch Protocol regarding Maximum Available Capacity |
| Proposed Classification of Amendments (please tick the box): | |
| <input checked="" type="checkbox"/> General | <input type="checkbox"/> Minor <input type="checkbox"/> Urgent |
| If Urgent, reason for urgency: _____ | |

III. SUMMARY OF THE PROPOSED RULES CHANGE

The proposed amendments to the WESM Rules and WESM Manual on Dispatch Protocol will provide a clearer guidance and include other conditions (e.g., circuit breaker status, ramp rates) that shall be considered by the Trading Participants when offering/bidding or revising/updating offers in the market.

IV. BACKGROUND

When a Trading Participant offers in the market, it includes (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. These are some of the key inputs in determining prices and schedules in the market.

The Must-Offer Rule (MOR) prohibits generators in offering capacities below their registered capacity (Pmax) without a valid or justifiable cause. The act of offering in the market implies that they are willing and capable to run when dispatched at certain price levels.

However, there were instances when Trading Participants offer in the WESM without clear intention of generating energy for the grid. This is done by opening the breaker so that no schedule will be given, and offers/bids will not be considered in the optimization due to plant's disconnection from the grid. This act is a possible circumvention of the MOR and shows a disconnect between the intention to run by offering capacities, and the actual plan

of not running. In so doing, the Trading Participants are able to free themselves from the possible flagging of probable breach of the MOR.

Aside from the opening of the breaker, Trading Participants can also offer very low ramp rates as would render it impossible for the generating unit or plant to attain the offered capacity in the market. In this manner, they also impact the maximum available capacity that they can produce thereby defeating the purpose of the MOR. While this is currently allowed in the rules, the proponent believes that generators should be more aware of the impact or consequences of their actions vis-à-vis their obligations in the WESM.

V. THE PROPOSED RULES CHANGE

The proposed amendments to the WESM Rules and WESM Manual on Dispatch Protocol aim to:

- 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.

By implementing the proposed rules changes, Trading Participants will reflect more accurately the maximum available capacity of the generating unit by considering other plant conditions in their market offers which achieves the objectives of the proposed amendments. These plant conditions will be part of the considerations of the Enforcement and Compliance Office (ECO) during the validation of the reasons or justifications provided.

In addition, the proposed amendments will 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 following the proposed rules changes.

VI. BACKGROUND AND DESCRIPTION OF THE PROPONENT

The proponent is the Market Surveillance Committee (MSC), alongside with the Compliance Committee (CC), as the co-proponent of the proposed amendments.

- a. **Market Surveillance Committee** – acts to monitor and report on activities in the spot market in accordance with the WESM Rules Clause 1.6

Chairman: Atty. Doroteo B. Agila
Members: Engr. Arthur N. Escalante
Engr. Christian M. Orias
Engr. Ferdinand P. Villareal
Engr. Peter L. Wallace

- b. **Compliance Committee** – acts to monitor compliance to and oversee the investigation of breach of the WESM Rules and Market Manuals by WESM Members, System Operator and the Market Operator, and to perform the functions set out in WESM Clause 1.8

Chairman: Dr. Peter Lee U
Members: Engr. Primo M. Lim III
Atty. Alejandro C. Dueñas II

VII. CONCLUSIONS AND RECOMMENDATIONS

The proposed amendments are recommended to be adopted, as this will improve the compliance of the Trading Participants with the MOR by being more responsible in offering/bidding and revising/updating of offers.

VIII. REFERENCES

- WESM Rules (as of May 06, 2022)
- WESM Manual on Dispatch Protocol Issue 16.0
- WESM Compliance Bulletin 11.0¹ – This issue of the WESM Compliance Bulletin provides for the updated Event Categories Guide for Generator-Trading Participants in Responding to Non-Compliance Notice/ Notice of Investigation

¹ <https://www.wesm.ph/downloads/download/TWfYa2V0IFJlcG9ydHM=/MTMwNw==>

IX. Proposed Amendment to the WESM Rules and WESM Manual on Dispatch Protocol regarding Maximum Available Capacity

A. WESM Rules

| WESM Rules | | | | | | | | |
|--|---------|---|--|---|----------|---------------------------------------|----------------------|---------------|
| Title | Clause | Provision | Proposed Amendment | Rationale | Comments | Proposed Re-wording based on Comments | Proponent's Response | RCC Agreement |
| <i>Please write general comments here, if any.</i> | | | | | | | | |
| 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 and 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 registered capacity or maximum available capacity</u> , for each of its <i>scheduled generating units, battery energy storage systems, and 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> . | <ul style="list-style-type: none"> The Generation Companies shall consider the “possible constraints”, as defined in the maximum available capacity, in submitting a standing market offer. To make sure that the offers in the market are readily available and TPs can provide. | | | | |

| WESM Rules | | | | | | | | |
|---|----------|--|--|--|----------|---------------------------------------|----------------------|---------------|
| Title | Clause | Provision | Proposed Amendment | Rationale | Comments | Proposed Re-wording based on Comments | Proponent's Response | RCC Agreement |
| 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 and 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 shall provide the information set out in Appendix A1. | 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, and pumped-storage unit</i> may revise any of its <i>market offers</i> or <i>market bids</i> <u>equivalent to the maximum 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 horizon</i> . <u>Each revised market offer or market bid shall be submitted</u> 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 shall provide the <u>contain</u> information set out in Appendix A1. | <ul style="list-style-type: none"> To ensure that the revised/updated market offer reflects the TP's readily available capacity. TPs to consider the conditions mentioned in 3.5.11.6 in revising/updating offers. | | | | |

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|---|----------|---|--|---|--|--|--|--|
| 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>(a) <i>the expected availability of the relevant generating unit or scheduled load for that dispatch interval; or</i></p> <p>(b) <i>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 shall be revised by Trading Participants prior to gate closure in accordance with the timetable if they no longer represent a reasonable estimate of:</i></p> <p>(a) <i>the expected availability of the relevant generating unit (e.g., plant breaker status, outage) or scheduled load for that dispatch interval in relation to its status, such as but not limited to, plant breaker status or commitment state; or</i></p> <p>(b) <i>the attainable capacity as may be affected by the ramp rate limitations encountered or likely to be encountered by the generating unit during the relevant</i></p> | <ul style="list-style-type: none"> • Requires TP to revise their offers if it does not represent a reasonable estimate its maximum available capacity • Provided conditions to be taken in revising/updating offers • Revising/updating market bids shall be within the WESM timetable (Reference of timetable: DPM Sec. 4) • Insertion of “shall” to harmonize with DP 6.1.7 and require the TPs to revise the offers if it does not represent a reasonable estimate | <p>We agree with the MSC enforcing that plant breakers should be closed unless a plant is on outage/emergency to ensure compliance to the Must-Offer Rule.</p> <p>How does the MSC define a reasonable estimate of its maximum available capacity?</p> <p>Can the MSC provide clarification on 3.5.11.5 (b)? How will the MSC determine if a ramp rate does not meet their qualifications? This is a significant change since ramp rates are an integral part of the strategies for high-cost fuel plants like diesels especially in the conditions set by the 5-minute market. Besides financial reasons, ramp rates can also be utilized in such a way that it forces a diesel plant to rest</p> | | | |
|---|----------|---|--|---|--|--|--|--|

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| | | | <p><u>dispatch interval; or</u> (c) the <i>demand bids</i> or <i>offers</i> likely to apply for the real-time <i>dispatch</i> optimization of that <i>dispatch interval</i>.</p> | | <p>for a certain period that is essential for the overall plant health.</p> <p>Maybe the MSC can provide conditions or qualifiers that can be used by the trading participants to adhere to rules while also being able to strategize in the market.</p> | | | |
|--|--|--|---|--|--|--|--|--|

| WESM Rules | | | | | | | | |
|------------|--------|---|---|---|----------|---------------------------------------|----------------------|---------------|
| Title | Clause | Provision | Proposed Amendment | Rationale | Comments | Proposed Re-wording based on Comments | Proponent's Response | RCC Agreement |
| Glossary | (new) | (Definition from Dispatch Protocol Manual) Availability. The duration of time over a specified period that a plant/unit is ready to be in service or operational. | <u>Availability. The duration of time over specified period that a plant is ready to be in service or operational state of readiness of a generating unit or facility for actual use, operation, or service for a particular time, period, or dispatch interval.</u> | <ul style="list-style-type: none"> Added to provide clarity on the intent of availability mentioned in 3.5.11.5, that the plant is ready to provide service. Transferred the definition from Dispatch Protocol Manual since this was already introduced in the WESM Rules | | | | |
| Glossary | (new) | (Definition from Dispatch Protocol Manual) 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 | <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 technical constraints and weather disturbance that cause damage to the unit or that would otherwise limit its ability to inject power</u> | <ul style="list-style-type: none"> Transferred the definition from Dispatch Protocol Manual since this was already introduced in the WESM Rules Previous definition includes the condition for co-generation systems. Proposed to delete since this | | | | |

| WESM Rules | | | | | | | | |
|------------|--------|---|--|--|---|---------------------------------------|----------------------|---------------|
| Title | Clause | Provision | Proposed Amendment | Rationale | Comments | Proposed Re-wording based on Comments | Proponent's Response | RCC Agreement |
| | | 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 energy extraction by the energy host and technical constraints. | to the <i>grid</i>. 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. | condition is already specified in the definition of technical constraints including other conditions plant types. | | | | |
| Glossary | (new) | (Definition from Dispatch Protocol Manual) 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 | <u>Technical Constraint. Refers to plant equipment related failure/constraints, limitations encountered during start up/shutdown procedure, effects of ambient temperature and resource-related constraints due to the following:</u> <u>(a) water elevation and diversion requirements for</u> | <ul style="list-style-type: none"> Transferred the definition from Dispatch Protocol Manual since this was already introduced in the WESM Rules | Are ramp rates now considered a technical constraint? | | | |

| WESM Rules | | | | | | | | |
|------------|--------|--|--|-----------|----------|---------------------------------------|----------------------|---------------|
| Title | Clause | Provision | Proposed Amendment | Rationale | Comments | Proposed Re-wording based on Comments | Proponent's Response | RCC Agreement |
| | | 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. | <p><u>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 <i>Generation Company</i> for biomass power plants; and</u></p> <p><u>(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.</u></p> | | | | | |

B. WESM Manual on Dispatch Protocol Issue 16.0

| WESM Manual on Dispatch Protocol Issue 16.0 | | | | | | | | |
|--|------------|--|--|---|--|---------------------------------------|----------------------|---------------|
| Title | Section | Provision | Proposed Amendment | Rationale | Comments | Proposed Re-wording based on Comments | Proponent's Response | RCC Agreement |
| <i>Please write general comments here, if any.</i> | | | | | | | | |
| BIDS, OFFERS AND DATA SUBMISSION AND PROCESSING | Background | 6.1.7 WESM Rules Clause 3.5.11.5 requires <i>Trading Participants</i> to revise their <i>bids</i> or <i>offers</i> 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 the <i>demand bids</i> or <i>offers</i> likely to apply in the <i>real-time dispatch optimization</i> for the <i>dispatch interval</i> . | 6.1.7 WESM Rules Clause 3.5.11.5 requires <i>Trading Participants</i> to revise their <i>bids</i> or <i>offers</i> if they no longer represent a reasonable estimate of either the expected <u>status and availability (e.g., plant breaker status, outage)</u> for the <i>dispatch interval</i> of the relevant <i>generating unit</i> , <u>ramp rate limitations from the plant statuses in attaining the market bids or market offers,</u> or <i>scheduled load</i> or the <i>demand bids</i> or <i>offers</i> likely to apply in the <i>real-time dispatch optimization</i> for the <i>dispatch interval</i> . | <ul style="list-style-type: none"> To include other conditions in revising offers and cite samples To harmonize with the proposed amendment in WESM Rules Clause 3.5.11.5 | Same comments from the 3.5.11.5 revision | | | |
| BIDS, OFFERS AND DATA SUBMISSION AND PROCESSING | Background | 6.1.8 Pursuant to WESM Rules Clause 3.5.11.6, <i>Trading Participants</i> that cancel their <i>bids</i> or <i>offers</i> , or submit <i>bids</i> | 6.1.8 Pursuant to WESM Rules 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 | <ul style="list-style-type: none"> Trading Participants who cancel their <i>bids/offers</i> or | | | | |

WESM Manual on Dispatch Protocol Issue 16.0

| Title | Section | Provision | Proposed Amendment | Rationale | Comments | Proposed Re-wording based on Comments | Proponent's Response | RCC Agreement |
|--|---|--|---|--|----------|---------------------------------------|----------------------|---------------|
| | | <p>or <i>offers</i> less than the registered capacity or <i>maximum available capacity</i> of their <i>facility</i> or <i>generating unit</i> are required to provide information on the reasons or circumstances of such cancellation or submission.</p> | <p>or <i>maximum available capacity</i> of their <i>facility</i> or <i>generating unit</i> are required to provide information on the reasons or circumstances of such cancellation or submission.</p> | <p>submit <i>bids</i> or <i>offers</i> less than the registered capacity, shall provide reasons or justifications.</p> <ul style="list-style-type: none"> To harmonize with <i>WESM Rules</i> Clause 3.5.11.6 | | | | |
| <p>BIDS, OFFERS AND DATA SUBMISSION AND PROCESSING</p> | <p>Revisions of Self-scheduled Nominations, Bids and Offers Based on Reasonable Estimates</p> | <p>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:</p> <ol style="list-style-type: none"> The expected <i>availability</i> for the <i>dispatch interval</i> of the relevant | <p>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:</p> <ol style="list-style-type: none"> The expected <i>status</i> and <i>availability (e.g., plant breaker status, outage)</i> for the <i>dispatch interval</i> of the relevant <i>generating unit</i> or | <ul style="list-style-type: none"> To include other conditions in revising offers and cite samples To harmonize with the proposed amendment in <i>WESM Rules</i> Clause 3.5.11.5 | | | | |

WESM Manual on Dispatch Protocol Issue 16.0

| Title | Section | Provision | Proposed Amendment | Rationale | Comments | Proposed Re-wording based on Comments | Proponent's Response | RCC Agreement |
|--|-------------|--|--|---|----------|---------------------------------------|----------------------|---------------|
| | | <p><i>generating unit or scheduled load; or</i></p> <p>b. <i>The loading level, projected output, bid or offer</i></p> | <p><u>scheduled load in relation to its status, such as but not limited to, plant breaker status or commitment state;</u> or</p> <p>b. <u>The attainable capacity as may be affected by the ramp rate limitations encountered or likely to be encountered by the generating unit during the relevant dispatch interval;</u> <u>or</u></p> <p>c. <i>The loading level, projected output, bid or offer.</i></p> | | | | | |
| DEFINITIONS, REFERENCES AND INTERPRETATION | Definitions | 2.1.2 The following words and phrases as used in this <i>Market Manual</i> shall have the following meaning: | 2.1.2 The following words and phrases as used in this <i>Market Manual</i> shall have the following meaning: a. Ancillary Service Procurement Agreement | <ul style="list-style-type: none"> To refer the definition of terms to WESM Rules Clerical enhancements | | | | |

WESM Manual on Dispatch Protocol Issue 16.0

| Title | Section | Provision | Proposed Amendment | Rationale | Comments | Proposed Re-wording based on Comments | Proponent's Response | RCC Agreement |
|-------|---------|---|---|-----------|----------|---------------------------------------|----------------------|---------------|
| | | <p>a. Ancillary Service Procurement Agreement</p> <p>b. Automatic Generation Control</p> <p>c. Automatic Load Dropping (ALD)</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. xxx</p> <p>.</p> <p>.</p> <p>.</p> <p>s. 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</p> | <p>b. Automatic Generation Control</p> <p>c. Automatic Load Dropping (ALD)</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>ed. Bid</p> <p>fe. Capability</p> <p>gf. Cascading Outages</p> <p>hg. Contingency</p> <p>ih. Contingency Reserve</p> <p>ji. Demand Control</p> <p>kj. Demand Control Imminent Warning</p> <p>lk. Dispatchable Reserve</p> <p>ml. Disturbance</p> <p>nm. Frequency control</p> <p>on. Generator</p> <p>po. Load shedding</p> <p>qp. Manual Load Dropping</p> | | | | | |

WESM Manual on Dispatch Protocol Issue 16.0

| Title | Section | Provision | Proposed Amendment | Rationale | Comments | Proposed Re-wording based on Comments | Proponent's Response | RCC Agreement |
|-------|---------|---|---|-----------|----------|---------------------------------------|----------------------|---------------|
| | | <p>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 <i>co-generation</i> 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>t. xxx</p> <p>.</p> <p>.</p> <p>.</p> <p>jj. Technical Constraint. Refers to plant equipment-related failure, limitations</p> | <p>rg. Market Management System (MMS)</p> <p>s. 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 <i>co-generation</i> 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>tr. MMS-Market Participant Interface (MPI)</p> <p>us. Multiple Outage Contingency</p> <p>vt. Offer</p> | | | | | |

WESM Manual on Dispatch Protocol Issue 16.0

| Title | Section | Provision | Proposed Amendment | Rationale | Comments | Proposed Re-wording based on Comments | Proponent's Response | RCC Agreement |
|-------|---------|--|---|-----------|----------|---------------------------------------|----------------------|---------------|
| | | <p>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 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.</p> | <p>wu. Operating Margin xv. Preferential Dispatch Units yw. Real-Time Data zx. Real-Time Dispatch aa. Red Alert bb. Regulating Reserve eeaa. Security ddbb. Self-scheduled nomination eecc. Shutdown ffdd. Stability ggge. Start-up hhff. System Integrity Protection Scheme (SIPS) igg. System Operator System Advisories jj. 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</p> | | | | | |

WESM Manual on Dispatch Protocol Issue 16.0

| Title | Section | Provision | Proposed Amendment | Rationale | Comments | Proposed Re-wording based on Comments | Proponent's Response | RCC Agreement |
|-------|---------|---------------------------------------|---|-----------|----------|---------------------------------------|----------------------|---------------|
| | | kk. xxx ll. xxx mm. xxx | <p>the following: (a) water 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.</p> <p>kkh<u>h</u>. Voltage Control</p> <p>lli<u>i</u>. Voltage Instability</p> <p>mmj<u>j</u>. Voltage Sag</p> | | | | | |

Note: Please underline and put in bold letters the proposed changes to the Market Rules or Manual.