



Regulating Energy for Sustainable Development

MARKET RULES FOR THE MALAWI ELECTRICITY MARKET¹

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Table of Contents

PART 1: GENERAL CONDITIONS	4
SECTION 1: BACKGROUND	4
1.1. TITLE.....	4
1.2. APPLICATION OF THE RULES	4
1.3. OBJECTIVES.....	4
SECTION 2: INTERPRETATION AND EFFECTIVENESS	5
2.1. DEFINITIONS AND INTERPRETATION	5
2.2. TIMES AND DATES.....	8
2.3. INTERPRETATION	8
2.4. MARKET PROCEDURES	8
2.5. UNFORESEEN CIRCUMSTANCES.....	9
2.6. EFFECTIVENESS.....	9
SECTION 3: RULES AMENDMENT	10
3.1. AMENDMENT PROCESS.....	10
3.2. RULES REPORT	10
3.3. MARKET RULES REVIEW PANEL.....	10
3.4. REQUESTS FOR REVIEW OR AMENDMENT OF MARKET RULES.....	11
SECTION 4: MARKET DEVELOPMENT	13
4.1. MARKET STAGES	13
4.2. SINGLE BUYER PHASE	13
4.3. PRINCIPAL BUYER AND BILATERAL TRADING PHASES	14
PART 2: PARTICIPATION: ADMISSION AND TERMINATION – DURING THE SINGLE BUYER PHASE	15
SECTION 5: MARKET PARTICIPANTS ELIGIBILITY REQUIREMENTS	15
SECTION 6: ADMISSION	16
6.1. PROCEDURE TO BECOME A MARKET PARTICIPANT.....	16
6.2. APPLICANT'S RESPONSE.....	17
6.3. MARKET PARTICIPANT'S ONGOING REPORTING OBLIGATIONS.....	18
6.4. SMO'S MAINTENANCE OF MARKET PARTICIPANT INFORMATION.....	18
6.5. TERMINATION OF PARTICIPATION.....	19
6.6. WITHDRAWAL BY MARKET PARTICIPANT	19
6.7. CONNECTION POINT AND TRADING NODE	19
6.8. MARKET PARTICIPANTS GENERAL RIGHTS AND OBLIGATIONS	19
6.9. COMPLIANCE	20
6.10. TERMINATION OF THE RULES AND MARKET PARTICIPATION AGREEMENT	20
PART 3: COMMERCIAL TRANSACTIONS	21
SECTION 7: COMMERCIAL TRANSACTIONS DURING THE SINGLE BUYER PHASE 21	
SECTION 8: CONTRACT CHARACTERISTICS	22
8.1. MANDATORY CLAUSES.....	22
8.2. CONTRACT REGISTER.....	23
PART 4: OPERATIONAL RULES DURING THE SINGLE BUYER PHASE	24
SECTION 9: OPERATIONAL PLANNING	24
9.1. PLANNING HORIZONS.....	24
9.2. RESERVOIR PLANNING.....	25
9.3. OUTAGES MANAGEMENT.....	26
9.4. YEAR AHEAD PLAN	26
9.5. MONTHLY UPDATED PLAN	26
9.6. WEEK AHEAD PLANS.....	27
SECTION 10: ECONOMIC DISPATCH AND SCHEDULING	28

10.1.	<i>DISPATCH PROCEDURES</i>	28
10.2.	<i>DATA REQUIREMENTS</i>	28
10.3.	<i>DAY AHEAD ECONOMIC DISPATCH</i>	29
10.4.	<i>ADMINISTRATION OF SHORTAGES</i>	29
10.5.	<i>REAL TIME OPERATION AND DISPATCH INSTRUCTIONS</i>	30
10.6.	<i>CALCULATION OF SYSTEM MARGINAL PRICE</i>	30
10.7.	<i>EX-POST DISPATCH</i>	30
PART 5: COMMERCIAL METERING SYSTEM		31
SECTION 11: METERING REQUIREMENTS		31
11.1.	<i>GENERAL CONSIDERATIONS</i>	31
SECTION 12: METERING RESPONSIBILITIES		31
12.1.	<i>RESPONSIBILITY OF THE MARKET PARTICIPANT</i>	31
12.2.	<i>RESPONSIBILITY OF THE SINGLE BUYER</i>	31
12.3.	<i>RESPONSIBILITY OF THE SMO</i>	32
12.4.	<i>RESPONSIBILITY OF THE TRANSMISSION LICENSEE</i>	32
SECTION 13: METER READING AND DATA VALIDATION		32
13.1.	<i>METER READING</i>	32
13.1.	<i>METERING DATABASE</i>	32
13.2.	<i>RETRIEVAL AND ACCESS TO METERING DATA</i>	33
13.3.	<i>DATA VALIDATION</i>	33
PART 6: SETTLEMENT, BILLING AND PAYMENT DURING THE SINGLE BUYER PHASE		35
SECTION 14: MARKET SETTLEMENT		35
14.1.	<i>MARKET QUANTITIES</i>	35
14.2.	<i>SETTLEMENT OF MARKET TRANSACTIONS</i>	35
14.3.	<i>SETTLEMENT OF REGULATED CHARGES</i>	36
14.4.	<i>PRELIMINARY SETTLEMENT STATEMENT</i>	36
14.5.	<i>FINAL SETTLEMENT STATEMENT</i>	36
14.6.	<i>COMPLAINTS TO THE FINAL SETTLEMENT STATEMENT</i>	36
14.7.	<i>SETTLEMENT MARKET PROCEDURES</i>	37
14.8.	<i>EXCEPTIONAL CONDITIONS</i>	37
SECTION 15: INVOICING AND PAYMENT		37
15.1.	<i>BILLING OF MARKET TRANSACTIONS</i>	38
15.2.	<i>PAYMENT SYSTEM</i>	38
15.3.	<i>TRANSFER SYSTEM</i>	38
15.4.	<i>NON PAYMENT</i>	39
SECTION 16: AUDITS		39
16.1.	<i>MARKET TRANSACTIONS AUDIT</i>	39
SECTION 17: ENFORCEMENT		41
17.1.	<i>COMPLIANCE</i>	41
17.2.	<i>PROCEDURES CONCERNING ALLEGED BREACHES OF THESE RULES</i>	41
17.3.	<i>SUSPENSION ORDERS AND DISCONNECTION ORDERS</i>	42
17.4.	<i>TERMINATION ORDERS AND DISCONNECTION ORDERS</i>	43
PART 7: TRANSITIONAL ISSUES		45
SECTION 18: METERING DURING THE TRANSITIONAL STAGE		45
18.1.	<i>METERING SYSTEM ADEQUACY REPORT</i>	45
18.1.	<i>METERING AND SETTLEMENT DURING THE TRANSITIONAL PERIOD</i>	45

PART 1: GENERAL CONDITIONS

Note: This Part covers the general conditions that apply to all the Market Rules. It establishes the scope of the Market Rules, the principles of market design and stages for implementation, as well as definitions of terms.

SECTION 1: BACKGROUND

1.1. TITLE

- 1.1.1. These rules shall be called the Market Rules for the Electricity Sector of Malawi (the “Rules” or the “Market Rules”)

1.2. APPLICATION OF THE RULES

- 1.2.1. These Rules shall apply to all Market Participants, the Transmission Licensees (TL), the Single Buyer and the SMO.
- 1.2.2. The TL, the DISCO, the SB and the SMO are separated operating divisions of the TDC.
- 1.2.3. Nothing in the Rules shall derogate any license obligation from the SMO, the SB, the DISCO, the TL or any other Market Participant.
- 1.2.4. A person who is registered with the SMO as a Market Participant or is an Applicant Market Participant is bound by these Rules.
- 1.2.5. A Market Participant is bound by these Rules through registration with the SMO and signing the Market Participation Agreement.

1.3. OBJECTIVES

- 1.3.1. These Rules have the following objectives:
- a) To ensure that the Market Rules and the Grid Code work together with efficient coordination and adequate participation;
 - b) To provide the framework for an efficient, transparent and reliable electricity market;
 - c) To set out the responsibilities of the Market Participants, the TL, the SB and the SMO in relation to trading, co-ordination, dispatch, pricing, metering, settlement and payments;
 - d) To ensure an efficient, transparent and predictable settlement system and set the payment obligations; and
 - e) To provide an efficient and transparent process for amending the Market Rules.
- 1.3.2. Any amendment to the Market Rules shall be done in accordance with the rules amendment process defined in Section 3: Rule Amendments. MERA has the responsibility of ensuring the Market Rules enforcement in accordance with these Rules.

SECTION 2: INTERPRETATION AND EFFECTIVENESS

2.1. DEFINITIONS AND INTERPRETATION

2.1.1. Capitalised words and expressions used in these Rules, unless the context otherwise requires:

- **Admission Application** means the document which an Applicant Participant must submit when applying to the SMO for admission to the Market, pursuant to these Rule;
- **Amendment** means any change, modification, insertion or deletion of this Rules;
- **Ancillary Services** means Services supplied to the TL by GENCOs, DISCOs or HV Customers necessary for the reliable and secure operation of the Transmission system. Ancillary Services to be provided are detailed in the Grid Code;
- **Applicant Market Participant** means any person who has initiated the application process with the SMO to become a Market Participant;
- **Bulk Supply Customer** means a Consumer which is directly connected to the Transmission system;
- **Commercial Metering System** means the system to measure and send to the SMO the energy and capacity injected or withdrawn from the Transmission system by a Market Participant;
- **Commercial Metering Equipment** means
- **Connection Agreement** means an agreement between a Market Participant and the TL, which specifies the terms and conditions pertaining to the connection of the Market Participant's equipment to the Transmission system;
- **Connection Point** means a site or point of connection between a GENCO or a DISCO or a Bulk Supply Customer and the TL a Market Participant connects to the Transmission system to inject or extract energy, and which will be considered its trading point for Commercial Metering and Market Settlement;
- **Contract (PPA)** means an agreement between a GENCO and the SB to buy electricity for a pre-established period of time;
- **Customer** means a person purchasing electricity;
- **Data Registers** means the equipment which receives, registers and stores the information received from the Meters, and serves as a link to the remote reading. Data registers could be incorporated into the Meters itself or constitute a separated piece of equipment;
- **Dispatch Instructions** means orders or indications issued by the SMO to the TL or any Market Participant to operate their equipment accordingly. For the avoidance of doubt, it may include orders or instructions to GENCOs to produce a certain amount of electricity and/or to provide any kind of Ancillary Services;
- **Distribution Licensee (DISCO)** means a holder of a Distribution and Supply licence granted or deemed to be granted by the Authority under the Energy Regulation Act in accordance with [Part II of the Electricity Act];
- **Distribution** means the conveyance of electricity at less than 66,000 volts, from the Transmission network to customers through a distribution power system;
- **Generation** means the production of electricity for sale;
- **Generation Company** means a company whose objective is to produce and sell the electricity it produces;
- **Generation Licensee (GENCO)** means holder of a Generation licence granted or deemed to be granted by the Authority under the Energy Regulation Act in accordance with [Part II of the Electricity Act];
- **Grid Code** means the Malawi Grid Code issued by MERA which contains the set of rules for connection to the Transmission system, operation, dispatch, metering and reporting of the Malawi's power system;

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- **Interconnection** means a set of overhead lines and/or underground cables and associated equipment whose objective is to permit the interchange of electricity between Malawi and a neighbouring country;
 - **Interconnection Agreement** means the agreement signed between the TL and the corresponding institution in a neighbouring country stating the rules and procedures for operating an Interconnection;
 - **International Trading Agreement** means an agreement signed between the Single Buyer and an institution located in a foreign country, or an agreement signed by the Government of Malawi with a foreign country whose administration has been transferred to the SB, aimed at importing electricity to Malawi, exporting electricity from Malawi or executing regional trading;
 - **Main Meter** means a meter other than the Redundant Meter that is capable of and is used to measure the flow of active or reactive energy at a Connection Point.
 - **Market Participant** means any person who is a party, in addition to the SMO and the SB in the Market Participation Agreement. During the Single Buyer Phase includes GENCOs and DISCOs;
 - **Market Participants Register** means a register developed and maintained by the SMO which list all Market Participants and Applicant Market Participant in accordance with Section 6 of these Rules;
 - **Market Participation Agreement** means the agreement pursuant to which the Market Participant commits to comply with these Rules and the Grid Code, and that formalises that the Rules and the Grid Code are binding on the Market Participant
 - **Market Procedures** means the set of processes, procedures, templates and forms developed by the SMO and approved by MERA whose objective is to properly implement this Market Rules;
 - **MERA** is the acronym of the Malawi Energy Regulatory Authority;
 - **Meter** means a device that measures and registers the integral active Energy or Reactive Energy over a metering interval and may include a data recorder, but shall be deemed to exclude instrument transformers;
 - **Meter Collection** means the process by which the SMO obtains the information from the Meters and stores it in an appropriate database;
 - **Metering Equipment** means the current transformers, voltage transformers, metering protection equipment including alarms and LV electrical circuitry, associated with a Meter, but shall be deemed to exclude the Meter itself;
 - **Metering Installation** means the Meters and Metering Equipment associated at a specific Connection Point.
 - **Monthly Updated Plan** means the updated Year Ahead Plan prepared by the SMO every month covering the period from this month to the end of the year. The plan will take into consideration the differences between the actual and projected load and generation from the beginning of the year until the end of the previous month and, if considered appropriate, updated load and generation forecasts;
 - **Nodal Marginal Price** is the marginal cost of supplying, at least cost, the next increment of electric demand at the specific location (node) on the Transmission system.
 - **Nomination (Generation nomination)** means the declaration issued by a GENCO having a Take-or-pay Contact to the SMO, indicating the amount of generation to be produced for each period of the following day or week.
 - **Redundant Meter** means the Meter and associated Metering Equipment installed at the same Connection Point where the Main Meter is installed which is used to cross-check the measurements of the Main Meter;
 - **Regional Electricity Market** means the SAPP or any other international organization which supersedes it, in which Malawi is integrated, and whose objective is to allow the interchange of electricity among its members;
 - **Regional Trading** means the import or export of electricity according to rules which govern a Regional Electricity Market;
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- **SAPP** is the acronym of Southern Africa Power Pool;
- **Self-Generation** means the generation of electricity from a power station with the main purpose of consumption in the industrial, agricultural or commercial process of the owner of such generation;
- **Self-Generator** means the person owning Self Generation;
- **Single Buyer (SB)** means an institution responsible to buy from GENCOs the electricity that DISCOs and the TL will provide to consumers and holds a Single Buyer licence granted or deemed to be granted by the Authority under the Energy Regulation Act in accordance with [Part II of the Electricity Act];
- **Suspension Notice** means the notification issued by the SMO to inform a Market Participant that it is not fulfilling all eligibility requirements to participate in the Market and that, if not corrected, the Market Participant will lose its rights to participate in the Market;
- **Suspension Notification** means the notification issued by the Market Operator to inform a Participant that a suspension has become effective and that the Participant is no longer allowed to participate in the Market;
- **Suspended Participant** is any Market Participant who has received and is the subject of a valid and continuing Suspension Order;
- **System and Market Operator (SMO)** means an area of the TDC responsible for operating the system and administering the market, and holds the System and Market Operation licence granted or deemed to be granted by the Authority under the Energy Regulation Act in accordance with [Part II of the Electricity Act];
- **System Operation Reports** means the reports issued by the SB or the SMO, as it corresponds, in which the Year Ahead Plan, the Monthly Update Plans and the Week Ahead Plans are documented;
- **Take-or-pay Contract** means an agreement (PPA) between a GENCO and the SB which contains clauses where the SB agrees to either buy a pre-specified quantity of energy over a pre-specified period or to pay for it even if such amount of energy is not produced due to instructions of the SMO.
- **Terminated Participant** means a Market Participant whose authorisation to participate in the Market has been terminated pursuant to a Termination Order;
- **Termination Order** means an order issued by the SMO pursuant to Rule PART 6: 17.4;
- **Transmission** means the conveyance of electricity at 66,000 volts or more, from generators or import points to Distribution Licensees or HV Customers or export point through a transmission power;
- **Transmission Licensee (TL)** means a holder of a Transmission licence for transmitting electricity granted or deemed to be granted by the Authority under the Energy Regulation Act in accordance with [Part II of the Electricity Act];
- **Verification Meter** means the Meter and associated Metering Equipment installed in different locations than the Main Meter, whose measurements permit the verification of the Main Meter measurement through simple calculations that eliminates the effect of the network element that could exist between them;
- **Water Value** means the opportunity value of using a marginal unit of water which is stored in the reservoir. Mathematically is the derivative of the Future Cost function with respect to the volume of water in the reservoir.
- **Week Ahead Plan** means the operational plan prepared by the SMO the last business day of each week detailing the forecasted load and expected generation for each hour of the following week;
- **Year Ahead Plan** means the plan prepared by the SB detailing the expected energy balance and system operation for the 12 months of the next year and the associated fuel requirements.

2.1.2. In these Rules, unless the context otherwise requires:

- a) A reference to a particular Part, Rule, or Appendix is to a part or rule of, or appendix to, these Rules;

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- b) A reference in a particular Rule or Appendix to a paragraph is to a paragraph of that Rule or Appendix;
 - c) The table of contents and Part and Section headings are for convenience only and shall be ignored in construing these Rules;
 - d) References to the masculine include the feminine and references in the singular include references in the plural;
 - e) The word “include” shall be construed without limitation;
 - f) A reference to a “person” includes any individual, partnership, firm, company, corporation (statutory or otherwise), joint venture, trust, association, organisation or other entity, in each case whether or not having separate legal personality;
 - g) A reference to law shall be construed, at the particular time, as including a reference to any modification, extension, re-enactment or replacement thereof then in force; and
 - h) A reference to another agreement or any deed or other instrument shall be construed as a reference to that other agreement, deed or other instrument, as the same may have been, or may from time to time be, modified.

2.2. TIMES AND DATES

2.2.1. For the purposes of these Rules, “Business Day” means a day other than:

- a) a Saturday or a Sunday; or
- b) a public holiday in Malawi;

2.2.2. References to times of the day in these Rules are to official time in Malawi.

2.3. INTERPRETATION

2.3.1. In the implementation and application of these Rules, the SMO has the right of interpreting the Rules, when necessary, but shall present promptly the interpretation and its justification to MERA. Where practical and possible, the SMO shall discuss and agree the interpretation prior to its application.

2.3.2. An interpretation of the SMO shall be valid and binding to all Market Participants and TL in any of the following conditions:

- a) Due to practical and operational considerations, the SMO has been unable to present the interpretation to the Market Rules Review Panel, involved Market Participants and MERA;
- b) The SMO has presented the interpretation to MERA, and MERA has not notified the SMO that the interpretation is incorrect or invalid;

2.3.3. Once an interpretation has been agreed, the SMO shall draft or update as necessary the Market Procedures, in particular the clarifications that may be needed for the agreed interpretation, and submit it to MERA for approval. After such approval it will inform all Market Participants, the SB and the TL of the interpretation.

2.4. MARKET PROCEDURES

2.4.1. The SMO shall draft, as necessary, detailed Market Procedures for the implementation and application of the Market Rules to clarify interpretations and the methodologies to be used in the application of these Rules.

2.4.2. These procedures shall be drafted after a consultation process with the Market Participants, the SB and the TL and shall be approved by MERA.

2.4.3. The procedures and the Market Rules will be published in the web site of the SMO, for open access to the public.

2.5. UNFORESEEN CIRCUMSTANCES

- 2.5.1. If circumstances arise which have not been foreseen in the Market Rules, the SMO shall, if practicable and possible, consult promptly with the TL, SB and Market Participants trying to agree on the manner to act. If the SMO, TL, SB and the Market Participants cannot reach an agreement within the time available for the SMO to perform its functions, the SMO shall decide what is to be done. In such cases, all Market Participants and TL shall comply with all instructions issued by the SMO and Settlement Statements issued by the SB.
- 2.5.2. The SMO shall refer all unforeseen circumstances and the measures taken to the Market Rules Review Panel and to MERA for review and proposals on these Rules amendment to cover the unforeseen circumstances.

2.6. EFFECTIVENESS

- 2.6.1. The provisions of these Market Rules shall come into effect upon notification by MERA, or such other date as MERA may specify.

SECTION 3: RULES AMENDMENT

3.1. AMENDMENT PROCESS

- 3.1.1. The provisions of these Rules may only be amended when the applicable procedures set forth in this Rule have been followed.

3.2. RULES REPORT

- 3.2.1. Every year, [*on the first week of February*], the SMO shall prepare a Rules Report describing the problems experienced by the SMO in the implementation and application of this Market Rules and complementary procedures. This report will be submitted by the SMO to MERA, all Market Participants and the TL.

- 3.2.2. The Rules Report will include:

- a) Problems identified in the implementation and the results of the Market Rules and the Market Procedures;
- b) Conflicts of interpretation with Market Participants or the TL;
- c) Any transitional exception in complying with these Rules or its procedures, identifying the Market Participant that was assigned this exception and the reason(s) that justifies this exceptional condition; and
- d) Any other relevant matter to identify any problems in the performance, feasibility, efficiency and design of these Rules.

3.3. MARKET RULES REVIEW PANEL

- 3.3.1. The SMO shall establish and maintain a Market Rules Review Panel. The Market Rules Review Panel shall:

- a) Maintain and ensure publication of the current version of the Market Rules;
- b) Review all proposals for amendment of the Market Rules received in accordance with Rule 3.4.1;
- c) Issue guidance in relation to the Market Rules and its implementation and interpretation when asked to do so by the SMO, SB, TL or any Market Participant; and
- d) Consider what changes are necessary to the Market Rules arising out of any unforeseen circumstances referred to it under Rule 2.5.2;

- 3.3.2. The Market Rules Review Panel shall include representatives of Market Participants, the TL, the SMO and MERA as an observer.

- 3.3.3. The Market Rules Review Panel shall consist of:

- a) One member from the SMO will act as a Chairman;
- b) Two members representing the Generation Licences;
- c) One member representing the Distribution Licensees;
- d) One member representing the Transmission Licensee;
- e) One member representing the Single Buyer; and
- f) One member representing MERA (as an observer and with no voting rights)

- 3.3.4. The Market Rules Review Panel Chairman may propose to MERA:

- a) To accept or review a rules amendment proposal that has been presented to the Panel;

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- b) Amendments to correct, complete or improve the Market Rules and, eventually, the Grid Code; and
 - c) New or updated Market Procedures for implementation of the Market Rules;

3.4. REQUESTS FOR REVIEW OR AMENDMENT OF MARKET RULES

- 3.4.1. The SMO, a Market Participant, or any other interested person may file a written submission (the "Amendment Submission") to the Market Rules Review Panel, at such address as may be published by the SMO from time to time, to propose one or more Amendments to these Rules or to identify any provision of these Rules in respect of which it is considered that an Amendment or review may be necessary or desirable. The Amendment Submission shall include a statement of the reasons for which an Amendment to or review of these Rules may be necessary or desirable. The Market Rules Review Panel may request that the person submitting the Amendment Submission provide further particulars with respect to the Amendment Submission.
- 3.4.2. The Market Rules Review Panel shall provide to MERA a copy of any Amendment Submission received.
- 3.4.3. The Market Rules Review Panel shall give written notice to the person who made an Amendment Submission as to whether the proposed Amendment or the request for consideration of an Amendment or review is, in the opinion of the Market Rules Review Panel:
 - a) Of such a nature that consideration of the Amendment Submission is warranted; or
 - b) Of such a nature that no consideration of the Amendment Submission is warranted.
- 3.4.4. Where the Market Rules Review Panel gives notice under Rule 3.4.3.b), it shall notify MERA in writing of its opinion that no consideration of the Amendment Submission is warranted.
- 3.4.5. Where the Market Rules Review Panel decides pursuant to Rule 3.4.3.a) to proceed with the request, it shall Publish and give notice to all Market Participants of the particulars of the Amendment Submission and may also give notice to the person who made the Amendment Submission and to all the Market Participants of any comments which the Market Rules Review Panel may wish to make in respect of the Amendment Submission. The notice shall invite Market Participants and other interested persons to make, within such reasonable period as shall be specified in the notice, written submissions to the Market Rules Review Panel concerning the Amendment Submission.
- 3.4.6. The Market Rules Review Panel may, where it considers necessary or desirable, schedule and hold meetings with the person who made the Amendment Submission, Market Participants and other interested persons who filed a written submission.
- 3.4.7. The Market Rules Review Panel shall, as soon as reasonably practicable following any meetings and consultations which may have been held, convene on one or more occasions as may be necessary to consider and vote on the Amendment Submission. The Market Rules Review Panel shall consider all submissions received within the time specified by the Market Rules Review Panel.
- 3.4.8. Following the conclusion of the deliberations if the Market Rules Review Panel considers the Amendment to be made, the Market Rules Review Panel shall submit a written report to MERA setting out:
 - a) The recommendations of the Market Rules Review Panel and the reasons for its recommendations;
 - b) Where the recommendations of the Market Rules Review Panel include a proposal to amend these Rules, a copy of the proposed text of the Amendment, the suggested time of commencement of the Amendment, the recommendations of the Market Rules Review Panel, and a summary of any objections to the proposed Amendment which may have been

contained in the submissions received or brought to the attention of the Market Rules Review Panel during any meetings held pursuant to 3.4.7;

- c) A summary of the procedure followed by the Market Rules Review Panel in considering the matter;
- d) A record of the vote of each member of the Market Rules Review Panel in respect of each of the recommendations made in the report; and
- e) A summary of any objections raised by any member of the Market Rules Review Panel to the recommendations, if such objecting member so requests.

3.4.9. The Market Rules Review Panel shall Publish the recommendations contained in the report referred to in Rule 3.4.8 and shall give notice thereof to all Market Participants and to the person who made an Amendment Submission to which the recommendations relate.

3.4.10. As soon as reasonably practicable following receipt of the report of the Market Rules Review Panel referred to in Rule 3.4.9, MERA may:

- a) Confirm the Amendment to these Rules, proposed by the Market Rules Review Panel;
- b) Refuse to accept the Amendment for one or more reasons set out in Rule 3.4.12 and refer the decision back to the Market Rules Review Panel for additional review. MERA may suggest an alternative amendment to the Amendment proposed by the Market Rules Review Panel.

3.4.11. Where an Amendment is submitted to MERA pursuant to Rule 3.4.9 for its approval, MERA may reject the proposed Amendment if, in its opinion, the proposed Amendment:

- a) Unfairly discriminates against a Market Participant or class of Market Participants;
- b) Will limit, and not advance, competition, or prevent free entry into the electricity market;
- c) May allow one or more Market Participants to possess market power;
- d) May have a potential for abuse of market power by one or more Market Participants;
- e) Is not conducive to efficient and economic operation of the electricity market;
- f) Materially alters the framework of the electricity market in Malawi; or
- g) Is not consistent with the Applicable Law or policy direction of the Ministry of Energy.

3.4.12. Subject to Rule 3.4.11 and to the terms of any order issued by MERA pursuant to these Rules, an Amendment to these Rules shall come into force on the date specified in the order of MERA confirming the Amendment, which date shall not be less than 30 days following the date of publication of the Amendment by the SMO in accordance with this Rule.

3.4.13. Where MERA:

- a) confirms the recommendation to amend these Rules, the SMO shall publish such decision on its website, together with a copy of the Amendment, and shall give notice of the decision to all Market Participants, the person who made the Amendment Submission to which the decision relates and any persons who made submissions under Rules 3.4.5 or 3.4.6 . The SMO will prepare and publish in its website the amended version of the Market Rules.
- b) Rejects the adoption of an Amendment to these Rules, the SMO shall publish such decision on its website and shall give notice of the decision to all Market Participants and to any person who made an Amendment Submission to which the decision relates.

SECTION 4: MARKET DEVELOPMENT

4.1. MARKET STAGES

- 4.1.1. The development of the electricity market through a series of phases. The first phase, to which this Rules apply is the Single Buyer phase.
- 4.1.2. During the Single Buyer phase, the SB will purchase capacity and energy from the GENCOs on behalf of the DISCOs and will sell this capacity and energy to the DISCOs and Bulk Power Consumers on behalf of the GENCOs.
- 4.1.3. Subsequent phases, which will be implemented at a later stage when decided by the Ministry, include:
 - a) Principal Buyer Phase: In this Phase, Bulk Power Consumers will be allowed purchase capacity and energy from generators, other than those selling their production to the SB.
 - b) Bilateral Trading Phase: In this phase, the Distribution Companies will directly purchase capacity and energy from the Generation Companies through bilateral contracts.

4.2. SINGLE BUYER PHASE

- 4.2.1. The Single Buyer Phase will start at the Effective Date of this Market Rules, and will last until the moment the Ministry issues an order or directive, stating that:
 - a) Principal Buyer Phase will start, specifying a certain date for this commencement;
 - b) HV Customers will be allowed to directly trade energy and capacity with GENCOs on a bilateral base, and, eventually, issues any regulation related with the conditions to be met for this allowance; and
 - c) The SMO confirms to all Market Participants it has in place the settlement software required, and all the required necessary procedures.
- 4.2.2. During the Single Buyer Phase, Market Participants will be:
 - a) All DISCOs;
 - b) All GENCOs;
 - c) Self-Generators which have been authorised by MERA to act as a Market Participant
 - d) Any new Generation Company that may be created in Malawi, provided that such new Generation Company is duly licensed by MERA and enters in a Power Purchase Agreement with the Single Buyer, according with the rules established in Section 8: of this Market Rules.
- 4.2.3. During the Single Buyer Phase, the SB will be:
 - a) The sole purchaser of capacity and energy from the GENCOs, on behalf of the DISCOs and the HV Customers, and the sole seller of this capacity and energy to the DISCOs and the HV Customers;
 - b) The sole purchaser of capacity and energy from Self Generators;
 - c) The sole administrator of any International Trading Agreement; and
 - d) the sole participant in SAPP or other Regional Electricity Market.
- 4.2.4. During the Single Buyer Phase the SB shall purchase:
 - a) The generation capacity and all the energy produced by the GENCOs;
 - b) All the energy produced, and eventually generation capacity, produced by Self Generators;
 - c) All energy imported through Interconnections which have a valid Interconnection Agreement with the TL or that resulted from an interchange of the Regional Electricity Market.

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- 4.2.5. During the Single Buyer Phase the SB shall sell all the energy and generation capacity purchased under the Rule 4.2.4 to:
- a) The DISCOs;
 - b) The HV Customers;
 - c) Neighbouring countries which have a valid Interconnection Agreement with the TL or that resulted from an interchange of a Regional Electricity Market if this market develops during the duration of this Phase.
- 4.2.6. TL shall provide transmission services (with its transmission assets) and the SMO shall provide operational services to all Market Participants. The SB shall purchase such services on behalf of DISCOs and the HV Customers and it will transfer their associated costs to the DISCOs and the HV Customers according with the provisions stated in the Tariff Methodology approved and issued by MERA.

4.3. PRINCIPAL BUYER AND BILATERAL TRADING PHASES

- 4.3.1. The Principal Buyer and Bilateral Trading Phases will start at the moment Ministry issues an order or directive stating this initiation and this Market Rules have been amended accordingly.

PART 2: PARTICIPATION: ADMISSION AND TERMINATION – DURING THE SINGLE BUYER PHASE

SECTION 5: MARKET PARTICIPANTS ELIGIBILITY REQUIREMENTS

- 5.1.1. A person, who wishes to trade or participate in the Market, shall register as a Market Participant with the SMO in accordance with this Part of the Market Rules.
- 5.1.2. A Market Participant is a company or person authorised to trade in the Market and that fulfils the following requirements:
 - a) The Company or person
 - a.1) has a license or is authorised by MERA as a GENCO or a DISCO; or
 - a.2) owns Self-Generation and is authorised by MERA to act as a Market Participant; or
 - a.3) is a Bulk Supply Consumer; or
 - a.4) is an authorised company from another country that participates in Regional Trading through a contract with the SB.
 - b) Have Commercial Metering System in each Connection Point, in accordance with these Rules and the Grid Code.
 - c) Submits an Admission Application to the SMO, and is registered as a Market Participant.
- 5.1.3. If at any time a Market Participant ceases to be eligible to be registered as a Market Participant in accordance with these Rules, the Market Participant shall inform the SMO and, as soon as practicable, the SMO shall issue a suspension notice, in accordance with these Rules.

SECTION 6: ADMISSION

6.1. PROCEDURE TO BECOME A MARKET PARTICIPANT

- 6.1.1. *SMO Information.* The SMO shall make publicly available the following information, in its most current form, on the Website:
- a) the form of Admission Application;
 - b) these Rules and the Grid Code, and associated procedures;
 - c) standard form drafts of the Market Participation Agreement; and
 - d) the amount of non-refundable fee charged by the SMO, in accordance to SMO license, to an Applicant Market Participant for processing an Admission Application.
- 6.1.2. *Form of Admission Application.* The Market SMO shall develop and publish in its website an Admission Application form. This form shall include among others the following:
- a) Identification of the Company or person, legal representative and operation representative;
 - b) Proof of granted license, if required, or of interim license or of authorisation by MERA;
 - c) Connection Agreements or, if connected to distribution network, agreement with the DISCO for use of the network;
 - d) Description of metering system and communication system; and
 - e) Identification of the bank account for the administration of the payment system in accordance with these Rules.
- 6.1.3. *Application Process.* An Applicant Market Participant wishing to become a Market Participant shall submit to the SMO, with a copy to MERA:
- a) a completed Admission Application
 - b) the information set out in 6.1.2 in the form indicated in the Market Procedures
 - c) a non-refundable application processing fee, as approved by MERA
 - d) drafts of the Participation Agreement, to be initialled by an authorised official of the Applicant Market Participant, and
 - e) where appropriate, initialled draft of a Connection Agreement or a declaration that the relevant facility of the Applicant Market Participant is connected to the TL network.
- 6.1.4. *Notice of Receipt of Application.* Within [five (5)] Business Days of receiving an Admission Application and the other information specified in these Rules, the SMO shall send a written notification to the Applicant Market Participant stating that it has received the Admission Application and the non-refundable processing fee, and requesting:
- a.1) In the case the Applicant Market Participant is a DISCO, the details of the Bank Account it has to open and maintain according with the provisions of Rule 15.2.2.
 - a.2) In the case the Applicant Market Participant is a Generation Company, the details of the Bank Account it has to open and maintain according with the provisions of Rule 15.2.2.
- 6.1.5. *SMO Review of Application.* Within 14 Business Days after receipt of the proposal of the Applicant Market Participant pursuant to Rule 6.1.4, the SMO shall notify the Applicant Market Participant whether:
- a) the Applicant Market Participant's Admission Application is not in accordance with any of the requirements specified in Rule 6.1.3;
 - b) the Applicant Market Participant has not supplied all the required documents and information pursuant to Rule 6.1.3; and/or

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- c) the Applicant Market Participant is required to supply additional information in connection with its Admission Application; and/or
 - 6.1.6. If the SMO requests additional information or documents pursuant to Rule 6.1.5 or notifies the Applicant Market Participant that its proposal for the Escrow Account is not acceptable, the Applicant Market Participant shall provide such additional information, documents, or submit a revised proposal for the Escrow Account, or re-submit a completed Admission Application, as the case may be, as soon as is practicable.
 - 6.1.7. *Automatic Termination of Application Process.* If an Applicant Market Participant has not submitted all additional information, documents or a proposal for the Escrow Account, as the case may be, pursuant to Rule 6.1.5, as requested by the SMO, within 3 months of notification by the SMO, the Applicant Market Participant's Admission Application will automatically lapse, provided that such lapse of the Admission Application shall not prevent such Applicant Market Participant applying again to the SMO in accordance with this Section 6:, and the Admission Application submitted again by such Applicant shall be treated as a new Admission Application.
 - 6.1.8. Grounds for the SMO's Rejection of Admission Application. The SMO may reject an Admission Application where:
 - a) the Applicant Market Participant requires a licence and does not possess such Licence;
 - b) the Applicant Market Participant requires an authorization by MERA and does not possess such authorization;
 - c) the Applicant Market Participant has not supplied all of the information required within 3 months of the initial application made pursuant to Rule 6.1.3;
 - c.1) the Applicant Market Participant has not supplied the details of the Bank Account pursuant to Rule 15.2.2.
 - d) within 30 days of notification;
 - d.1) the revised details of the Applicant Market Participant Bank Account is not, in the SMO's sole discretion, in accordance with the requirements specified in of Rule 15.2.2.
 - e) and the SMO informs the Applicant Market Participant the reason for the rejection;
 - f) where appropriate, the conditions of the Connection Agreement are not acceptable to the SMO, subject to any direction by MERA to the contrary; or
 - g) MERA notifies the SMO its objection to admission of the Applicant Market Participant as a Market Participant, informing the reasons for objection.
 - 6.1.9. *Acceptance of Application.* If the Applicant Market Participant fulfils the requirement specified in this Rule 6, the SMO shall accept the Admission Application of an Applicant Market Participant, and shall forward to the Applicant Market Participant a Market Participation Agreement.

6.2. APPLICANT'S RESPONSE

- 6.2.1. Final Steps to Assumption of Market Participant Status:
 - a) Upon receipt of a Market Participation Agreement and the approved form forwarded by the SMO pursuant to Rule 6.1.9 for the Applicant Market Participant's signature, the Applicant Market Participant shall
 - a.1) Execute such Market Participation Agreement and return them to the SMO; and
 - a.2) Execute a Connection Agreement, where appropriate; and
 - b) On receipt of such Market Participation Agreement, duly executed by an authorised official of the Applicant Market Participant the SMO, no later than 15 Business Days from the date of receipt of the documents under paragraph (a), shall issue confirmation to the Applicant

Market Participant confirming the status of the Applicant Market Participant to be of a Market Participant.

- c) The Applicant Market Participant shall be a Market Participant with effect from the date of the SMO's confirmation pursuant to paragraph (b).
 - d) Upon the Applicant Market Participant becoming a Market Participant pursuant to paragraph (c), the SMO shall so notify:
 - d.1) To the Market Participant: the names of all other Market Participants and their notice details;
 - d.2) To all other Market Participants: the name of the Market Participant, newly admitted, its notice details and its Market Participant Accession Date.
 - e) The Market Participant shall be given a unique identification number.
- 6.2.2. *Appeal against rejection of Application.* An Applicant Market Participant may challenge a decision by the SMO to reject its Admission Application pursuant to Rule 6.1.8, and may appeal to MERA for this purpose.

6.3. MARKET PARTICIPANT'S ONGOING REPORTING OBLIGATIONS

- 6.3.1. Each Market Participant has an ongoing obligation to inform the SMO of any material changes relevant to its assets or circumstances as described in its Admission Application made or any modification to the technical and operational characteristics of the equipment it owns and is connected.
- 6.3.2. If a Market Participant fails to inform the SMO of a material change in the information provided with its Admission Application, which material change may affect the reliability or safety of the Transmission Network, or have a materially adverse effect on the trading obligations of other Market Participants, the SMO, may impose a penalty and/or suspend or terminate the Market Participant's rights in accordance with 6.5.

6.4. SMO'S MAINTENANCE OF MARKET PARTICIPANT INFORMATION

- 6.4.1. *Market Participants Register.* The SMO shall organise, maintain and publish in the website a register of Market Participants and Applicant Market Participants, called the Market Participants Register. The Market Participants Register shall identify suspension status or notification of withdrawal.
- 6.4.2. Upon admitting a Market Participant, the SMO shall record the Market Participant's information, as contained in the Market Participant's Admission Application in the Market Participants Register.
- 6.4.3. The SMO shall allocate a unique identification code to each Generating Group of a Market Participant who is a GENCO or an authorised Self-Generator, which shall be utilised by the SMO for issuing Dispatch Instructions pursuant to Part V - System Operation Code of the Grid Code. The SMO shall update the Market Participants Register upon entry of a new Market Participant, to indicate suspension notice and to eliminate a Market Participant upon the date when such Market Participant ceases participation.
- 6.4.4. For Applicant Market Participants, the SMO will include in the Market Participants Register the date in which the application form was presented and current status of processing the application.
- 6.4.5. *Updates to the Market Participants Register.* On being informed of a change in the filled information in accordance with 6.4.1, the SMO shall within 2 Business Days update the Market Participant's entry in the Market Participants Register.

6.5. TERMINATION OF PARTICIPATION

- 6.5.1. A Market Participant may cease to be a Market Participant in accordance with Rule 6.6 or 0 (Enforcement).

6.6. WITHDRAWAL BY MARKET PARTICIPANT

- 6.6.1. A Market Participant may at any time cease to be a Market Participant upon:

- a) giving notice of not less than [two] months in writing to the SMO of that intention;
- b) complying with the requirements of Rule 6.6.2 below; and
- c) obtaining the prior written consent of the MERA to its ceasing to be a Market Participant, and, its withdrawal shall take effect only on such terms and conditions as MERA shall determine.

- 6.6.2. The requirements to be fulfilled by the Market Participant prior to its withdrawal pursuant to Rule 6.6.1 are:

- a) all amounts due and payable by the Market Participant under or pursuant to these Rules before the Market Participant Discontinuance Date shall have been paid in full;
- b) the Market Participant shall not be in breach of any legal requirement (or any condition of any applicable exemption) by ceasing to be a Market Participant; and
- c) any outstanding breach by the Market Participant of these Rules, the Market Participation Agreement or the Grid Code which is capable of remedy shall have been remedied.

- 6.6.3. Notwithstanding compliance with Rule 6.6.2, the Market Participant shall remain subject to and liable for all its obligations and liabilities as a Market Participant which were incurred or arose prior to the Discontinuance Day on which it ceases to be a Market Participant regardless of the date on which any claim relating thereto may be made.

- 6.6.4. Withdrawal by a Market Participant shall result in the automatic termination of that Market Participant's Market Participation Agreement.

6.7. CONNECTION POINT AND TRADING NODE

- 6.7.1. The Applicant Admission Form shall identify the Connection Point(s). A Market Participant may have more than one Connection Point, and each Connection Point will be a trading node and shall have a metering system to calculate energy taken or injected to the grid and, if applicable, the maximum demand in each Connection Point, in accordance with Section 11: of these Rules;

- 6.7.2. The SMO shall identify for each Market Participant the trading node(s) [market entry and exit points], as the Connection Point(s) to the Transmission or Distribution system, as the case may be, with the corresponding Commercial Metering System.

- 6.7.3. For Regional Trading, the interconnector will be considered the trading node in the national Market except in the case of a Regional Electricity Market and where the rules or codes of the Regional Electricity Market establish a different arrangement on trading nodes.

6.8. MARKET PARTICIPANTS GENERAL RIGHTS AND OBLIGATIONS

- 6.8.1. Each Market Participant has the following obligations:

- a) The ability to receive, acknowledge and implement Dispatch Instructions issued by the SMO;
- b) Obey instructions of the SMO, except when such instructions may endanger its equipment or safety of its staff;

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- c) Submit to the SMO, the SB and the TL, as it proceeds, in time and to the best of its knowledge the information established in the Grid Code and these Market Rules and any additional information that the SMO, the SB and the TL may require as necessary to adequately carry out its functions, and notify as soon as possible any change in such information;
 - d) Pay in time the charges that result from market operation and services, as a result of the settlement and billing process in accordance with these Rules; and
 - e) Maintain a bank account for the administration of the market payment system.

6.8.2. Each Market Participant has the following rights:

- a) Open access to non-discriminatory transmission services, in accordance with the Grid Code;
- b) Non-discriminatory system operation and market operation services;
- c) Access to the reports and non-confidential information in the website of the SMO, which are defined as open access in the Market Rules.
- d) Submit complaints to the SMO or to the SB when the Market Participant considers that the SMO or the SB is not complying with the Market Rules or the Grid Code, including the necessary justification.

6.9. COMPLIANCE

6.9.1. Each Market Participant, the SMO, and TL shall comply with the provisions of these Rules and the Grid Code, insofar as applicable to it.

6.10. TERMINATION OF THE RULES AND MARKET PARTICIPATION AGREEMENT

6.10.1. *No fixed duration.* The Market Participation Agreement and these Rules shall have no fixed duration, provided that the Market Participation Agreement shall terminate when the Market Participant ceases to be a Market Participant pursuant to Rule 6.7.

PART 3: COMMERCIAL TRANSACTIONS

Section 7: COMMERCIAL TRANSACTIONS DURING THE SINGLE BUYER PHASE

7.1.1. The Commercial Transactions during the Single Buyer Phase are:

- a) Energy and generation capacity sold by GENCOs and purchased by the SB according to the conditions stipulated in the corresponding Contracts;
- b) Energy and generation capacity sold by Self-Generators authorised by MERA to be Market Participants and purchased by the SB according to the conditions stipulated in the corresponding Contracts;
- c) Energy and eventually capacity purchased (imported) or sold (exported) by the SB through Interconnections according to the conditions stipulated in the respective International Trading Agreements;
- d) Energy purchased or sold by the SB as a result of Regional Trading according to the conditions of a Regional Electricity Market
- e) Energy sold by the SB to the DISCOs or HV Customers according to the tariffs approved by MERA as indicated in the Tariff Methodology;

7.1.2. In order to determine the commercial transactions among Market Participants, the following quantities will be calculated:

- a) Energy and capacity sold by GENCOs
 - a.1) At the end of each month, SMO will establish the daily and monthly availability of each generation power plant according to the procedures established by the SMO and in accordance with the Contracts signed between GENCOs and the SB;
 - a.2) Using this information and the metered energy quantities at the end of each month, the SMO shall calculate and communicate to the SB the energy and the generation capacity sold during the month by each GENCO;
 - a.3) Using this information, and based on the provisions stated in the Contracts, the SB will calculate the amounts due to each GENCO.

- b) Liquidated Damages

Based on the provisions contained in the Contracts between GENCOs and the SB, the SB will calculate the corresponding liquidated damages the GENCO should afford, corresponding to the previous month, if such provisions are included in the Contracts. SMO will produce a verification of the communicated values (taken into account the registered contracts).

- c) Unbalances of GENCOs with Take-or-pay Contracts

In case of GENCOs having Take-or-pay Contracts, the SMO will calculate the hourly differences between the energy actually produced by these Generators and:

- c.1) The energy stipulated in the Contract, in case the Contract contains such clauses; or
- c.2) The energy nominated for such GENCO the day ahead, as indicated in clause 10.2.1, if such possibility is envisaged in the applicable Contract.

This difference (positive or negative) will be valued at the Nodal Marginal Price of the corresponding hour, as indicated in Section 10.3, at the node of the Transmission system at which the GENCO is connected.

- d) Energy purchased by GENCOs

During maintenance periods and, eventually, in exceptional conditions, the Generation Companies may receive energy from the transmission network. This energy shall be

purchased by the GENCOs at a tariff determined by MERA, which may be different than the generation prices stated in the contract. The SB will determine, based on the metered quantities supplied by the SMO, for each generator the total amount of energy purchased from the network and its corresponding price.

- e) Energy Imported or exported – International Trading Agreements
 - e.1) Based on the information of the Commercial Metering System the SMO will determine and communicate to the SB the total amount of energy imported or exported from/to neighbouring countries having an International Trading Agreement;
 - e.2) Based on the information provided by the SMO and the signed International Trading Agreements the SB will calculate the corresponding amounts to be paid or received.
- f) Energy Imported or exported – Regional Trading
 - f.1) Based on the information of the Commercial Metering System the SMO will determine and communicate to the SB the total amount of energy imported or exported from/to neighbouring countries which participate in a Regional Electricity Market;
 - f.2) Based on the information provided by the SMO and the rules which govern a Regional Electricity Market the SB will calculate the corresponding amounts to be paid or received.
- g) Energy and capacity purchased by Distribution Companies
 - g.1) Based on the information of the Commercial Metering System the SMO will determine and communicate to the SB the total amount of energy and capacity purchased at each connection point during the previous month;
 - g.2) Based on the information provided by the SMO and the tariffs approved by MERA the SB will calculate the corresponding amounts to be paid by each DISCO.

SECTION 8: CONTRACT CHARACTERISTICS

8.1. MANDATORY CLAUSES

- 8.1.1. All Contracts shall include a clause in which both the GENCO and the SB accept these Rules (the Market Rules) and the Grid Code.
- 8.1.2. All Contracts shall include a clause in which the GENCO accepts to provide during the Single Buyer Phase all Ancillary Services defined in the Grid Code, if the contracted generation has the technical capability and equipment to do so, without any additional payment. This obligation will be considered included in the contract and therefore no additional payment or Ancillary Services contract will be required.
- 8.1.3. All Contracts during the Single Buyer Phase shall include a clause in which both parties accept to use the quantities in the Settlement Statement of the SMO as Contract quantities, in accordance to the rules and procedures of these Rules. The review of the settlement data and document or any related dispute will be in accordance with these Rules.
- 8.1.4. All the Contracts during the Single Buyer Phase shall have clauses which stipulate that:
 - a) The capacity payments should be subject to a targeted availability level and shall include the formulation by which actual availability will be determined. All generation
 - b) As a general rule, the generation should be dispatchable by the SMO (i.e. there should not be "Take-or-pay" clauses). In exceptional circumstances, for convenience reasons, the SB may conclude PPAs with Take-or-pay clauses if approved by the MERA.
 - c) Allows its novation and transfer to the DISCOs at the moment the Bilateral Contract Phase will initiate

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- 8.1.5. In all Contracts during the Single Buyer Phase the unitary prices of the capacity (MWK or USD/kW/month) and energy (MWK or USD/kWh) shall be those approved by MERA in the tariff determination for such GENCO.

8.2. CONTRACT REGISTER

- 8.2.1. The SB will establish and maintain a Contract Register, containing all the information of the contracts (either signed by the SB or by Market Participants) except those that will be considered as confidential information. In any case the contracted quantities and schedules will be considered confidential information.

- 8.2.2. The Contract Register will be included in the SB web page, and it will be accessible to any Market Participant.

- 8.2.3. The Contract Register shall record for each Contract:

- a) Contracting parties, identifying Seller (GENCO) and Purchaser (SB);
- b) Duration of the Contract;
- c) Profile of the contracted generation capacity over the duration of the Contract;
- d) Profile of the contracted energy over the duration of the Contract (in the form of hourly generation);
- e) Mechanism or formula to calculate contracted energy
- f) Total generation capacity sold in the Contract

- 8.2.4. The SB shall update the Contract Register when:

- a) A modification to a Registered Contract is agreed between the GENCO and the SB; or
- b) a Registered Contract ends.

PART 4: OPERATIONAL RULES DURING THE SINGLE BUYER PHASE

The “Operational Rules” Part of the Market Rules will define the rules, procedures and obligations, both for the SMO and the Market Participants, to plan and execute the scheduling and dispatch of the system, which are not already contained in the Grid Code.

Section 9: OPERATIONAL PLANNING

9.1. PLANNING HORIZONS

- 9.1.1. The SB and the SMO will produce plans of expected system operation for, at least, the following horizons:
- a) Single Buyer:
 - a.1) Year ahead
 - b) System and Market Operator
 - b.1) Monthly updates (until the end of the year);
 - b.2) Week ahead.
- 9.1.2. The SB has the responsibility to produce an Annual Generation Forecast to forecast energy balance, identifying the generation resources required to supply the forecasted load and to prepare the fuel supply requirements of each power station
- 9.1.3. The SMO has the responsibility of intra-year system operation planning, including reservoir operation planning, to forecast energy balance and identify the expected generation resources required to supply the forecasted load with adequate reserve, and the expected consequences of unavailability and system constraints.
- 9.1.4. The plans should be based on the long-term load forecast produced by the SB, short term load forecasts produced by the SMO, expected transmission constraints, generation availability and reserve. These plans will be indicative and have the purpose of providing each Market Participant with adequate information to evaluate expected load supply and the impact of system constraints and unavailability.
- 9.1.5. The SMO, in consultation with the SB, will define the data required to execute the commitment established in Rule 9.1.1, and the Market Participants will be obliged to supply it. The SMO should draft procedures indicating the data that each Market Participant will provide, and the associated time-schedules and formats.
- 9.1.6. The results of the Year Ahead Plan, the Monthly Updated Plans and the Week Ahead Plan will be documented in System Operation Reports. Each System Operation Report will represent, with the available data and the best knowledge of the SB or the SMO, as it corresponds, indicative expected results of system operation including at least:
- a) Load forecasts;
 - b) Generation availability
 - c) Reservoir levels
 - d) Transmission constraints (including “must run” generation)
 - e) Risk of shortages (and, eventually, spilling)

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- 9.1.7. Neither the SB nor the SMO will be responsible for any deviation between these projections and actual generation and energy balance, since actual conditions may differ from the projections due to uncertainties in hydrological conditions, load forecasts and forced outages.

9.2. RESERVOIR PLANNING

- 9.2.1. The SMO will be responsible for centrally administer a planning process for the reservoirs with a storage capacity that allows yearly, seasonal or monthly regulation of outflows. GENCOs owning hydraulic generation plants have the right to participate in this reservoir planning process.
- 9.2.2. GENCOs owning hydraulic generation plants will be responsible to agree with the relevant water authorities and any other water user the constraints to be applied to each reservoir management (i.e. minimum discharges, maximum reservoirs levels, etc). These agreements should define the data, criteria and methodology to agree, on a periodical basis, on water restrictions. It will establish basic rules for water use in wet and dry conditions.
- 9.2.3. At the dates the SMO will determine, each GENCO with one or more hydro power plants will submit to the SMO information on:
- a) reservoir operation and dispatch restrictions due to hydro downstream obligations;
 - b) rain or discharges forecasts if any;
 - c) upstream and downstream water restrictions due to other users or environmental requirements, and
 - d) expected inflows.
- 9.2.4. The SMO shall determine the reservoir operation using a “reservoir optimization and hydrothermal dispatch model” (software). This model should be capable to represent:
- a) reservoir characteristics and other water uses priorities, such as irrigation and environmental;
 - b) generation characteristics: availability, operation constraints, heat rate, fuel prices, etc.;
 - c) expected generation for each period for the GENCOs having Take-or-pay Contracts;
 - d) load forecast and load shape;
 - e) transmission constraints and losses (at least the constraints that may impact the operational planning);
 - f) hydrological risk (rain pattern, hydrological series of recorded inflows, etc.)
- 9.2.5. The “reservoir optimization and hydrothermal dispatch model” shall be capable to calculate and report the Water Value of the water stored in the reservoirs, for each period or sub-period represented in the model (monthly or weekly values). These values will be utilized while calculating the Year, Month, Week and Day Ahead dispatches.
- 9.2.6. Actual modelling of each hydro power plant should be agreed between the SMO and the GENCO that owns the hydraulic generation.
- 9.2.7. With the available data, trends or forecasts, the SMO will elaborate scenarios for hydrology, thermal availability, load forecast, cross border trading (if any), and all other matters that may affect the relation between consumption and the cost of supply, in order to determine the optimal reservoir policy and calculate the hydro generation in accordance with this policy.

9.3. OUTAGES MANAGEMENT

- 9.3.1. Generation and Transmission outages management shall be performed in accordance with the prescriptions indicated in Part V (System Operation Code) Section 15 (Maintenance Coordination / Outage Scheduling) of the Grid Code.

9.4. YEAR AHEAD PLAN

- 9.4.1. Before the end of each year, the SB, with the assistance of the SMO, will plan the expected energy balance and system operation for the 12 months of the next year and prepare and publish in the website the Year Ahead Plan.

- 9.4.2. The SB will prepare the Year Ahead Plan based on:

- a) The economic dispatch and optimization of hydro reservoirs, within security constraints and restrictions due to other water uses;
- b) Annual load forecasts;
- c) GENCO's PPAs prices and Conditions;
- d) Expected generation for each period of GENCOs having Take-or-pay Contracts (if any);
- e) Annual Maintenance Plan informed by the GENCOs and approved by the SMO;
- f) Import / Export forecasts, based on the International Trading Agreements signed or administered by the SB as well as the expected operation of the SAPP's day ahead market;
- g) (Eventually) import/export forecast in the Regional Electricity Market; and
- h) Transmission Network restrictions and constraints information submitted by TL.

- 9.4.3. The data and projected results for the next year will be compiled by the SB in a Year Ahead Plan which should include, for each month, at least:

- a) Load forecasts;
- b) Expected energy balance;
- c) Indicative generation plan and fuel requirements;
- d) Expected reservoir operations;
- e) Expected shortages (or, in the future, risk of shortages) with an estimation of the Energy non Served;
- f) Expected imports and exports;
- g) Expected Regional Trading;
- h) (Eventually) Risks of spilling; and
- i) Value of the water stored at each reservoir (Water Values)

9.5. MONTHLY UPDATED PLAN

- 9.5.1. Before the end of each month, the SMO will analyse and update the expected energy balance and system operation plan for the rest of the year, and prepare (and publish) an update of the Year Ahead Plan prepared by the SB.

- 9.5.2. The SMO will prepare the Monthly Updated Plan based on the same criteria used to prepare the Year Ahead Plan by the SB, but using more accurate information regarding water flows, generator outages, fuel prices and load forecast. The Market Participants are obliged to supply all the information the SMO considers suitable for carrying out this commitment.

- 9.5.3. The report with the Monthly Updated Plan shall also include a summary of the results and conditions in the previous month and during the current year, including an analysis of the deviations occurred from the Year Ahead Plan, as well as their causes.

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- 9.5.4. The SMO will plan reservoir operations at least on a month ahead basis, to forecast and co-ordinate with other water users the hydraulic generation requirements.

9.6. WEEK AHEAD PLANS

- 9.6.1. The purpose of the Week Ahead Plans are to co-ordinate maintenance outages, plan thermal and hydraulic generation and assist Market Participants to anticipate possible conditions and constraints in order to make efficient decisions on matters that affect system operation, fuel requirements and other system conditions during the following week.

- 9.6.2. Before the end of each week, the SMO shall prepare and publish a Week Ahead Plan including the expected load supply, generation schedule, expected shortages and constraints for the following week.

- 9.6.3. The Week Ahead Plan should be based on:

- a) The results and data of the Monthly Updated Plan;
- b) Updated load forecasts;
- c) Adjustments and final co-ordination of maintenance outages;
- d) Generation Nominations of GENCOs having Take-or-pay Contracts (if any) if this possibility is allowed in the corresponding Contract;
- e) Any additional information submitted by Market Participants and the TL, and
- f) The economic dispatch and optimization of hydrothermal generation, within security and quality of service constraints and the co-ordination with other water uses;

- 9.6.4. In order to carry out the commitment established in Rule 9.6.3, each GENCO shall submit to the SMO, within the deadline established in the SMO Procedures:

- a) Requests for modifications to the Maintenance Outage Plan, if any;
- b) Updated information on generators availability; and
- c) For hydro generation, information on co-ordination and hydro requirements agreed with the relevant authorities on the water use.

- 9.6.5. The SMO will prepare the Week Ahead Plan using a hydro optimization and dispatch model which should minimize the total operation cost of the week to supply the forecasted load, taken into consideration:

- a) Upstream and downstream hydro restrictions,
- b) Transmission and operational constraints,
- c) Generation Nominations of those GENCOs having Take-or-pay Contracts (if any), if this requirement is established in the corresponding Contract; and
- d) Security and quality of service standards.

- 9.6.6. The SMO shall document in a "System Planning Operational Procedure" the details of the methodology and the description of the model to be used for the preparation of the Week Ahead Plan.

- 9.6.7. The Week Ahead Plan shall contain, at least:

- a) The maintenance outages planned for the week;
- b) The best estimation on load forecast (with probable hourly load profiles);
- c) Expected energy balance;
- d) (Eventually) expected imports and exports;
- e) Indicative weekly and daily generation of each power plant;

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- f) Expected reservoir levels and risk of spilling (if any); and
 - g) Identification of expected conditions with shortages or inadequate reserve margins.

Section 10: Economic Dispatch and Scheduling

10.1. DISPATCH PROCEDURES

- 10.1.1. The Market Participants shall submit to the SMO the required data and information required for day ahead dispatch and real time dispatch;
- 10.1.2. The SMO will validate data, confirm or reject data, inform generation schedules, load supply, Ancillary Services schedules and other results of the dispatch process; and
- 10.1.3. The SMO communicate the results of the Day Ahead Scheduling as well as the Dispatch Instructions, including request for load disconnection, which may be issued during real time operation.

10.2. DATA REQUIREMENTS

- 10.2.1. Every day, before 9:00 Malawi's time each Market Participant and the TL shall submit the information required by the SMO required for day ahead dispatch and real time dispatch. The information required shall include:
 - a) GENCOs
 - a.1) Availability of each generation unit;
 - a.2) Reservoir levels and expected inflows;
 - a.3) Fuel availability at eventual restrictions due to this availability;
 - a.4) Generation Nominations for each hour of the next day for each GENCO having a Take-or-pay Contract; and
 - a.5) Any situation which may affect the operation or may introduce restrictions in the dispatch.
 - b) Self-Generators
 - b.1) Generation available to be injected into the Transmission network
 - c) DISCO
 - c.1) Load forecasts at each bus of the Transmission system;
 - c.2) Any event of which it is aware that may significantly affect the load in its system;
 - d) TL
 - d.1) Forced or planned outages in the Transmission system;
 - d.2) Any situation of which it is aware that may significantly affect the availability of the Transmission system.

The Market Procedures developed by the SMO will detail the way this information needs to be supplied.

- 10.2.2. The SMO will review the data furnished and it validate it. If deemed appropriate it will require the Market Participant to correct it and/or to submit additional information it considers appropriate.

10.3. DAY AHEAD ECONOMIC DISPATCH

- 10.3.1. Each day, the SMO shall produce, before 16:00 Malawi's time, a day-ahead security constrained economic dispatch to:
- a) Plan and schedule sufficient generation and transmission capacity to meet expected load and reserve requirements, within reliability, security and quality of service constraints, as indicated in Part V (System Operation Code) of the Grid Code and its associated procedures, and taking into consideration any eventual import or export;
 - b) Plan, when necessary, load shedding;
 - c) Inform the results to each Market Participant and TL, to know in advance their expected operation and have the necessary conditions and equipment available and ready; and
 - d) Inform the Market Participants the Nodal Marginal Prices at each bus of the Transmission system (Nodal Marginal Prices).
- 10.3.2. The SMO shall perform an economic dispatch to determine the optimal use of available generation resources and transmission capacity to supply the forecasted load, within the required security and quality of service requirements and taken into account operational constraints (including spinning and load following reserves) and Take-or-pay contracts. To produce such day ahead dispatch, the SMO shall use a security constrained dispatch model which minimizes the total operational cost, subject to:
- a) Load forecast at each connection node;
 - b) Generation availability;
 - c) Generation Prices, reflected in the Contracts registered by the SB, for thermal generators;
 - d) The "water value" for hydraulic generation plants;
 - e) Fuel and environmental constraints;
 - f) the daily water requirements as coordinated with the relevant water authorities and/or other water users;
 - g) (Eventually) importation / exportation offers received from neighbouring countries and/or agreed energy interchanges contained in the relevant Interconnection Agreements.
 - h) Required Ancillary Services, as per Part V (System Operation Code) of the Grid Code;
 - i) The characteristics, losses and constraints of the transmission system.
- 10.3.3. The security constrained dispatch model shall be capable to minimize the overall generation cost of the Malawi system and to provide the Marginal Prices at each node of the Transmission System, for each hour of the following day, taking as an input the Value of Water, determined in the Weekly Ahead dispatch.

10.4. ADMINISTRATION OF SHORTAGES

- 10.4.1. The SMO may plan and instruct a Market Participant to shed load if the Day Ahead Dispatch or Real Time Dispatch shows shortage of energy in the system as a whole or in one or more specific regions in the system, due to insufficient generation or insufficient transmission capacity. All Market Participants are obliged to comply with the curtailment schedules, load shedding plans and instructions of the SMO, in accordance with the Market Rules.
- 10.4.2. In case of expected prolonged shortages, the criteria to be applied to determine the load shedding each Market Participant have to execute will be determined by MERA. The SMO will be responsible to implement such criteria, determining the amount and timing of load shedding to be produced by each Market Participant.
- 10.4.3. During real time operations, the SMO may instruct curtailments that were not planned the day ahead, to solve emergencies or unanticipated conditions in order to maintain the security and integrity of the system.

10.5. REAL TIME OPERATION AND DISPATCH INSTRUCTIONS

- 10.5.1. The SMO has the responsibility of monitoring and coordinating in real time the operation of the system, reliability, security and quality of service, as indicated in Part V (System Operation Code) of the Grid Code. To be able to fulfil these functions, each Market Participant is obliged to inform immediately any modification to the day ahead expected conditions that may affect generation schedules, loads, reserve, ancillary services, reliability or security in the system.
- 10.5.2. Each Market Participant is obliged to follow dispatch and operation instructions received from the SMO, unless doing so could endanger the security of its equipment or its staff. For the avoidance of doubt, significant or persistent deviations between the actual generation of a GENCO and the generation indicated in the dispatch, shall be considered a breach of the instructions, even if no specific claim has been done by the SMO in this regard. Penalties may be imposed on a Market Participant if the Market Participant fails to use its best endeavour to act in accordance with dispatch instructions issued by the SMO.

10.6. CALCULATION OF SYSTEM MARGINAL PRICE

10.7. EX-POST DISPATCH

- 10.7.1. After the end of each day, the SMO shall evaluate the deviations between actual conditions and conditions expected in the day ahead dispatch, and how such deviations affected generation scheduling, reserve and quality of service.
- 10.7.2. The SMO shall prepare and publish periodic reports with such ex-post dispatch analysis, describing the deviations, causes and impact on energy balance and security and quality.
- 10.7.3. The SMO shall calculate the hourly energy price, as the variable cost of the unit with higher variable cost that has been economically (i.e. non constrained) dispatched.

PART 5: COMMERCIAL METERING SYSTEM

SECTION 11: METERING REQUIREMENTS

11.1. GENERAL CONSIDERATIONS

11.1.1. The Commercial Metering System shall include the following:

- a) Meters and auxiliary devices (the Metering Equipment) located at the Connection Points of Market Participants and at interconnectors;
- b) Mechanisms to test, calibrate or audit metering.
- c) Mechanisms implemented by the SMO, to collect, validate and organise the metered energy and maximum demand;
- d) Transitory provisions to be used in case the facilities installed do not comply with the prescriptions stated in this Market Rules.

11.1.2. The technical characteristics of the Commercial Metering System should be compliant with the prescriptions stated in PART V (Metering Code) of the Grid Code

SECTION 12: METERING RESPONSIBILITIES

12.1. RESPONSIBILITY OF THE MARKET PARTICIPANT

12.1.1. The Market Participant shall agree with the SB the location of the Commercial Metering System at the Connection Point, following the prescriptions indicated in the Grid Code. It shall also agree with the Transmission Licensee the arrangements on the location for installing the Metering Equipment of the main metering system and the backup or verification metering systems for each Connection Point.

12.1.2. Market Participant shall be responsible to:

- a) Install, check, take over, audit, replace and uninstall the Commercial Metering System and the equipment serving for metered data collection and transmission.
- b) Manage, operate and maintain the equipment of the Commercial Metering System and the system of metered data collection and transmission at each Connection Point.
- c) Co-operate with the SB, the TL and the SMO to manage, transfer, confirm the metered data; to keep the metered data confidential; and inspect, verify and resolve the failures in the metering system.

12.2. RESPONSIBILITY OF THE SINGLE BUYER

12.2.1. The SB shall agree with the Market Participants the location of the Commercial Metering System at the Connection Point, following the prescriptions indicated in the Grid Code

12.2.2. The Single Buyer shall :

- a) Collect and utilize the metered data to produce the settlement process
- b) Develop and maintain a Metering Database with all the characteristics of the Metering Installation as well as the metered values utilized for settlement purposes
- c) Cooperate with the TL, the SMO and the Market Participants in management and operation of the Commercial Metering System, metered data collection, processing and storage
- d) Collaborate with the Transmission Licensee in the testing, certification and sealing of the Metering Installations.

12.3. RESPONSIBILITY OF THE SMO

12.3.1. The SMO shall be responsible for:

- a) Investing, managing and operating the hardware and software of the metered data collection, processing and storage system.
- b) Providing, managing and operating the communication lines for the metered transfer connected the communications port of the metered data collection equipment at the metering point.
- c) Providing the metered data for the SB taking responsibility for the sufficiency and accuracy of the metered data used for settlement purposes.

12.4. RESPONSIBILITY OF THE TRANSMISSION LICENSEE

12.4.1. The Transmission Licensee shall:

- a) Test and seal the Metering Installations;
- b) Set parameters and password levels for the meter; manage and provide password levels of the meters corresponding to the administrative levels.
- c) Periodically collect the metered data for those Connection Points which does not have direct communication with the SMO.

SECTION 13: METER READING AND DATA VALIDATION

13.1. METER READING

13.1.1. All capacity and energy calculations for the Market Settlement System shall be measured through the Commercial Metering System.

13.1.2. Collection and validation of metering data for the Market Settlement System shall be made on monthly basis.

13.1.3. In admitting new Market Participants or authorising a new Connection Point, the SMO shall ensure that:

- a) each Connection Point has a Meter and associated Metering Equipment and communication system as prescribed in Part V (Metering Code) of the Grid Code ;
- b) each Meter, Metering Equipment and communication system complies with the characteristics and requirements established in these Rules, or the Market Participant submits a reasonable plan to comply with these requirements within the next six months and the SMO approves this plan.

13.1.4. SMO shall read and validate all metering data used for settlement purposes, at each Connection Point. When possible, meter reading will be performed remotely, through a Meter Collection system located at the SMO, which remotely access the information stored in the Meters or Data Registers.

13.1.5. During the Single Buyer Phase, the SMO shall be responsible for establishing the detailed processes and timetable for the TL and/or the Market Participants to read and send the metering data. All Market Participants are obliged follow these indications and to send in accordance the metering data to the SMO within the established deadline.

13.1. METERING DATABASE

13.1.1. The SMO shall create, maintain and administer a Metering database containing the following information:

- a) Name and unique identifier of the Connection Point, Metering Installations;

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- b) The date on which the Metering Installation was commissioned;
 - c) The connecting parties at the Metering Installation;
 - d) Maintenance history schedules for each Metering Installation;
 - e) Type and form of the meter at the Metering Installation;
 - f) Fault history of a Metering Installation; and
 - g) Commissioning documents for all Metering Installations.
- 13.1.2. Information relating to raw and, eventually, adjusted values for each settlement period shall be stored on Metering database and shall be retained for at least five years for audit trail purposes.
- 13.1.3. In the event of test results revealing that data in the Metering database is inconsistent with the data in the meter, the SMO shall inform all affected market Participants and corrections shall be made to the official Metering data.

13.2. RETRIEVAL AND ACCESS TO METERING DATA

- 13.2.1. The reading activities that are required for each Commercial Metering System shall be carried out with a periodicity of, at least, one month by one of the following methods:
- a) Method 1: The Transmission Licensee reads the data of Meters belong to its management area to the local data acquisition server. Then, these data will be transmitted automatically to the SMO;
 - b) Method 2: The SMO will connect directly to Metering Installation's meters to read the data and synchronize timing for all meters
- 13.2.2. At the beginning of each year, the SMO will publish a schedule indicating when the dates and times in which the Metering data retrieval will take place and the associated calendar for the settlement process.
- 13.2.3. The meter data retrieval process shall be a secure process whereby meters or recorders are directly interrogated to retrieve billing information from their memories. No electronic access to the meters shall be granted to any Market Participant or any other Party unless special permission has been granted by the SMO;
- 13.2.4. Metering data and passwords are confidential information and shall be treated as such at all times.

13.3. DATA VALIDATION

- 13.3.1. On reception of the metering information, the SMO has the responsibility of organizing, validating and, when necessary, correcting metered data received from the Transmission Licensee or Market Participants, in order to establish the meter quantities of each Market Participants for the settlement process.
- 13.3.2. Each Market Participant must inform the SMO as soon as possible any failure, inaccuracy or defect in a metering device it has become aware of. On notification of failure of a metering device, the SMO and the Market Participant shall implement the alternate metering mechanism.
- 13.3.3. If in the testing, collection and/or validation of metering a problem or failure is identified in a Main Meter, for the settlement process the SMO shall use as commercial data in the corresponding Connection Point the following:
- a) If the Connection Point has a Redundant Meter, the data metered by the Redundant Meter except when such Redundant Meter also has a quality problem or error or failure;
 - b) If the Connection Point has Verification Meters, the data metered by the Verification Meters except when any of such Verification Meters also has a quality problem or error or failure;

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- c) If the Connection Point does not have a Redundant or a Verification Meter, or there is a quality problem or error or failure on the Redundant or Verification Meters, the energy calculated with the hourly reading of the SMO in its SCADA system.
- 13.3.4. The SMO shall inform in the Settlement Document all problems, errors or failures in the Commercial Metering System, and for each case the replacement data used to calculate the energy for the Settlement Statement.

PART 6: SETTLEMENT, BILLING AND PAYMENT DURING THE SINGLE BUYER PHASE

SECTION 14: MARKET SETTLEMENT

14.1. MARKET QUANTITIES

- 14.1.1. Using the Commercial Metering System, at the end of each month the SMO shall calculate and communicate to the SB:
- a) For each Market Participant,
 - a.1) the energy and, when applicable, generation capacity bought during the month at each Connection Point where the Market Participant is a DISCO or a Bulk Supply Customer;
 - a.2) the energy and, when applicable, generation capacity sold during the month at each Connection where the Market Participant is a GENCO;
 - a.3) the energy and, when applicable, generation capacity bought or sold during the month, due to unbalances, at each Connection Point where the Market Participant is a GENCO having a Take-or-pay Contract.
 - b) The energy bought and sold through International Agreements or regional Contracts during the month; and
 - c) The daily and monthly availability of each generator or generation plant, as it corresponds, for each GENCO;
- 14.1.2. The SB will include this information in the Settlement Statement as a reference for the parties, in settlement of the generation capacity payments or compensations for actual availability below the contracted target availability, when applicable.

14.2. SETTLEMENT OF MARKET TRANSACTIONS

- 14.2.1. The market settlement system shall include the calculation of the market transactions among the Market Participants and the SB.
- 14.2.2. The Market Transaction of a Market Participant for a month shall be calculated by the SB:
- a) The result of the Market Transactions of the month, calculated as stated in PART 3: (Commercial Transactions); plus
 - b) Any deviation in the Take-or-pay contracts between contracted and delivered/withdrawn electricity. These differences will be settled at the hourly price calculated by the SMO
 - c) Any amount payable to the Market Participant due to corrections to Market Transactions in previous Final Settlement Statements; minus
 - d) Any amount payable by the Market Participant due to corrections agreed or approved to Market Transactions in previous Final Settlement Statements.
- 14.2.3. Where the Market Transaction calculated for a Market Participant is positive, it shall represent such sum as being payable to the Market Participant and such sum of money is referred to under these Rules as a "payment".
- 14.2.4. Where the Market Transaction calculated for a Market Participant is negative, it shall represent such sum as being payable by the Market Participant and such sum of money is referred to under these Rules as a "charge".

14.3. SETTLEMENT OF REGULATED CHARGES

14.3.1. In addition to the settlement of Market Transactions, the SB will calculate:

- a) The payments to the TL according with the tariffs approved by MERA;
- b) The payments to the SMO according with the tariffs approved by MERA

14.4. PRELIMINARY SETTLEMENT STATEMENT

14.4.1. Not later than ten (10) Working Days after the beginning of each month, the SB shall send through electronic mail to each Market Participant the preliminary Settlement Statement.

14.4.2. The preliminary Settlement Statement shall include,

- a) The energy and, when applicable, generation capacity bought or sold in each Contract where the Market Participant is a party, and total contracted quantities of the Market Participant;
- b) The Market Transactions (payment or charge) of that Market Participant in the month;
- c) The charges for transmission and SMO services; and
- d) Sufficient supporting data to enable each Market Participant to verify the settlement calculations.

14.4.3. If a Market Participant reasonably believes there is an error or discrepancy in the preliminary Settlement Statement, the Market Participant shall notify the SB within five (5) Working Days of receiving the preliminary Settlement Statement.

14.4.4. If the SB receives a complaint of an error or discrepancy, the SB shall review the preliminary Settlement Statement, consulting the SMO if the discrepancy is associated with the quantities calculated by the SMO. If the SB considers that the complaint is correct and that the preliminary Settlement Statement contains an error or discrepancy, the SB shall notify all Market Participants whose final statements will be affected within five (5) Working Days of the date on which the error or discrepancy first came to the attention of the SB. The SB shall correct the error or discrepancy in the final Settlement Statement. If it corresponds, the SMO shall update its registers where the calculated quantities are reflected.

14.5. FINAL SETTLEMENT STATEMENT

14.5.1. Not later than [twenty (20)] Working Days after the beginning of each month, the SB shall send to each Market Participant the final Settlement Statement, establishing for each Market Participant:

- a) Quantities contracted: total bought or sold in contracts by the Market Participants.
- b) Market Transactions payment or charge;

14.5.2. The final Settlement Statement shall include the same type of information as the preliminary Settlement Statement, in particular sufficient supporting data to enable each Market Participant to verify the calculation of payments and charges of the Market Participant.

14.6. COMPLAINTS TO THE FINAL SETTLEMENT STATEMENT

14.6.1. Up to sixty (60) days after receipt of a final Settlement Statement, a Market Participant can notify the SB if the Market Participant disputes the final Settlement Statement concerning either:

- a) The registered quantities, or

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- b) the settlement amount in Market Transaction.
- 14.6.2. The SB and the Market Participant shall use reasonable endeavours to resolve the complaint within fifteen (15) Working Days. If the SB and the Market Participant do not reach an agreement, they shall refer the case to MERA for its final decision.
- 14.6.3. If the Market Participant and the SB reach an agreement or the dispute is resolved by MERA in any way, which causes the settlement amount to differ from the settlement amount in the final Settlement Statement that caused the dispute, the SB shall include the correction in the settlement amount and Settlement Statement of the month after the dispute was solved or the agreement made. The adjustment made to the settlement amount shall include the interests for the period from the payment date applicable to the disputed final Settlement Statement until the payment date of the final Settlement Statement that includes the correction.
- 14.6.4. If within sixty (60) days of sending a final Settlement Statement, the SB or the SMO becomes aware of an error in the metered quantities or the settlement amount in a final Settlement Statement, the SB shall notify the affected Market Participants and include the settlement amount corrections in the Settlement Statement of the month when the error was identified.

14.7. SETTLEMENT MARKET PROCEDURES

- 14.7.1. The SB shall develop templates and procedures with the timetable and detailed mechanisms to exchange settlement information and administer complaints. These procedures will also describe the Payments Calendar for each calendar year showing:
- a) the dates on which the SMO will issue Preliminary Settlement Statement to all Market Participants;
 - b) the dates by which all Market Participants are required to notify the SMO of any dispute in relation to their Preliminary Settlement Statement;
 - c) the dates on which SMO will issue Final Settlement Statement to all Market Participants;
 - d) the dates on which the SMO will issue Invoices to Market Participants from whom money is owed;
 - e) the dates when Market Participants from whom money is owed are required to make payments into the SB Bank Account, in accordance with the Invoices; and
 - f) the dates when the Market Participants to whom money is owed in accordance with Invoice will receive payments from the SB Bank Account,
- 14.7.2. The SMO may change the content or format of the templates or procedures indicated in Article 14.7.1 upon prior written notification to Market Participants and approval of MERA.
- 14.7.3. On July 1st of each year, the SB shall publish on the Website, the dates for the Payments Calendar for the following calendar year.

14.8. EXCEPTIONAL CONDITIONS

- 14.8.1. In the case of emergencies or failure of the settlement software, the SB will issue an estimated settlement and/or modify the schedule of the settlement process. In this case, the SB will inform these changes to all Market Participants as soon as practicable.
- 14.8.2. The SB must consult with Market Participants to use the best possible estimated data.

SECTION 15: INVOICING AND PAYMENT

15.1. BILLING OF MARKET TRANSACTIONS

- 15.1.1. With the final Settlement Statement, the SB shall issue within 10 Working Days of each month,
- a) The invoice for the previous month to each Market Participant that has a negative Market Transaction amount, indicating the charge that the Market Participant shall pay. This amount shall be coincident with the Final Settlement Statement, which at the same time will act as a description of the detailed calculation;
 - b) A request for invoicing, for the previous month, to each Market Participant with a positive Market Transaction, indicating the payment due to that Market Participant. The amount reflected in the invoices to be received shall be coincident with the final Settlement Statement, which at the same time will act as a description of the details of calculations;
 - c) A formal communication to the Market Participants of the amounts accrued by the SMO and the TL. These amounts shall be coincident with the final Settlement Statement, which at the same time will act as a description of the details of calculations.
 - d) A formal communication to the Market Participants of the amounts accrued by the SB, according with the tariffs approved by MERA. This amount shall be coincident with the final Settlement Statement, which at the same time will act as a description of the details of calculations.

15.2. PAYMENT SYSTEM

- 15.2.1. The payment system will be through a system of Bank Accounts and a transfer mechanism administered by a Bank assigned this responsibility, for the purposes of facilitating settlements and the collection and payment of the Market Transactions, TL charges and the SMO charge.
- 15.2.2. Each Market Participant, the TL and the SMO shall have and maintain an account in the Bank assigned for the administration of the transfers for the payment system. Each Market Participant shall inform the SB the name and number of this account as a condition to register and be authorised as a Participant. No Market Participant shall effect any change to its bank account without giving a prior written notice to the SB of no less than 30 Business Days.
- 15.2.3. The SB shall maintain an account in the Bank, for the administration of the payment system.

15.3. TRANSFER SYSTEM

- 15.3.1. The SB shall calculate a proportionality factor for each Market Participant "i" with a negative Market Transaction as:

$$PF_i = \frac{\text{Market Transaction Payment}_i}{\sum_k \text{Market Transaction Payment}_k}$$

Where k are all Market Participants with a positive Market Transaction

- 15.3.2. The SB shall send to the Bank responsible for the administration of the payment system, a summary of the final Settlement Statement identifying:
- a) Market Transactions for each Market Participant:
 - a.1) If the Participant has a negative Market Transaction, the payment due to be deposited in the SB Bank Account; or

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- a.2) If the Participant has a positive Market Transaction, the proportionality factor with which the Bank shall transfer to that Market Participant account the money deposited in the SB Bank Account.
 - b) Payment to the TL for transmission services;
 - c) Payment to the SMO for system operation and market administration.
- 15.3.3. When the final Settlement Statement assigns a Market Transaction charge to a Market Participant and that Market Participant receives an invoice, no later than 2.00 p.m. five (5) Working Days after receiving the invoice, the Participant shall deposit in the SB Bank Account the charge, whether or not the Market Participant disputes or continues to dispute the amount payable.
- 15.3.4. Transfers to TL and the SMO will be performed according with the Settlement Statements no later than 3.00 p.m. five Working Days after receiving the letter of credit.
- 15.3.5. When the final Settlement Statement assigns a Market Transaction payment to a Market Participant and the Market Participant receives a letter of credit, upon a payment to the SB Bank Account and after paying the TL and the SMO, the Bank shall transfer a payment according to the proportionality factor included in the final Settlement Statement, up to a maximum value corresponding to the total Market Transaction payment.

15.4. NON PAYMENT

- 15.4.1. The Bank shall notify the SB the payments made and Market Participants that did not pay totally or partially the charges established in the final Settlement Statement.
- 15.4.2. Upon notification from the Bank of a non-payment, the SB shall instruct the Participant to comply with the payment obligations not later than the next Working Day.
- 15.4.3. If after this deadline, the Participant still has not paid to the SB Bank Account to cover the full settlement amount due, the SB shall follow the following procedure:
- (a) Require the Participant to provide a security deposit and execute it after non payment
 - (b) Inform MERA about the non-payment by the Market Participant
- 15.4.4. A Market Participant shall pay interests on any unpaid settlement amount due and payable under these Market Rules. The rate of interest payable shall be [xxx] interest rate calculated on a daily basis from the date payment was due, up to and including the date on which payment is made.

SECTION 16: AUDITS

16.1. MARKET TRANSACTIONS AUDIT

- 16.1.1. At least once every year, the SMO shall contract an independent auditor to conduct an operational audit of the market administration services, including metering, the settlement system, calculation of the market transactions and any procedures relevant to SMO services in accordance to the Market Rules.
- 16.1.2. If within this deadline the SMO has not contracted an auditor, MERA may contract such an auditor to be paid by the SMO.
- 16.1.3. The auditor shall use an independent and qualified team to carry out the audit.
- 16.1.4. The purpose of the periodic operational audit of the SMO and the SB will be:

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- a) Assess the non-discrimination, efficiency, transparency and predictability of the SMO services;
 - b) Assess load forecasts, market transactions calculation, metering data management and settlement used by the SMO to perform its functions;
 - c) Review the efficiency and consistency of the Market Procedures and SMO and SB practices which are covered by the Market Rules in relation to trading, pricing and settlement systems, security and quality of service, and make recommendations on problems and improvements.
- 16.1.5. After the first audit, each new audit will include reviewing changes or actions taken by the SMO after the recommendations and observations of the previous audit;
- 16.1.6. The auditor shall prepare an Audit Report of the SMO and a separate one of the SB, with the results and recommendations of the audit. This report will be sent to MERA and each Market Participant, and published in the website of the SMO.

Section 17: ENFORCEMENT

17.1. COMPLIANCE

17.1.1. The SMO shall comply with the Market Rules and the Grid Code.

17.1.2. The SMO shall ensure compliance to these Rules by all Market Participants, the TL and the SB.

17.1.3. Any Market Participant that has evidence that another Market Participant or the TL or the SB has violated or is violating provisions of the Market Rules or the Grid Code may file a complaint with the SMO.

17.2. PROCEDURES CONCERNING ALLEGED BREACHES OF THESE RULES

17.2.1. If the SMO considers, on the basis of its own information or upon receipt of written information from any person, that a Market Participant may have breached or may be breaching any Rule and/or Condition, and that in the circumstances it may be appropriate that an enforcement action would be taken against that Market Participant, the SMO shall notify the Market Participant of:

- a) Details of the alleged breach and of the time within which the breach must be remedied;
- b) Details of the evidence on the basis of which the SMO considers that the Participant may have breached or may be breaching these Rules and/or the Grid Code, as the case may be;
- c) The time within which the Market Participant may make written representations in response to the allegations; and
- d) The right of the Participant to request a meeting with the SMO to discuss the matter.

17.2.2. Following expiry of the time specified pursuant to Rule 17.2.1.c), and after consideration of any representations made by the Participant the SMO:

- a) Determine that the Participant has not breached these Rules or the Grid Code, as the case may be;
- b) Subject to Rule 17.2.3, determine that the Market Participant is in breach of these Rules and/or the Grid Code, as the case may be;
- c) Request that the Market Participant provides further information in relation to the alleged breach; or
- d) Conduct such further investigation into the matter as the SMO determines appropriate.

17.2.3. Where the Market Participant has requested a meeting pursuant to Rule 17.2.1.d), the SMO shall provide the Market Participant with a reasonable opportunity to meet with the SMO to discuss the allegations. In such case, the SMO shall not make the determination noted in Rule 17.2.2.b) until such reasonable opportunity has been given, and shall take into consideration the submission made by the Market Participant during such meeting.

17.2.4. A Market Participant shall comply with any request for information made by the SMO pursuant to Rule 17.2.2.c).

17.2.5. Where the SMO determines that a Market Participant has breached these Rules and/or the Grid Code, as the case may be, the SMO may order the Market Participant breaching these Rules and/or the Grid Code, as the case may be, to do any one or more of the following:

- a) Direct the Market Participant to do, within a specified period, such things as may be necessary to comply with these Rules and/or the Grid Code, as the case may be;
- b) Direct the Market Participant to cease, within a specified period, the act, activity or practice constituting the breach;
- c) Impose additional or more stringent record-keeping or reporting requirements on the Participant;

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- d) Take such other action as may be provided for in these Rules or the Grid Code in respect of the Rule or Condition that has been breached by the Participant.

17.3. SUSPENSION ORDERS AND DISCONNECTION ORDERS

17.3.1. Each of the following is an Event of Default in relation to a Market Participant:

- a) The Market Participant fails to comply with an order of the SMO pursuant to Rule 17.2.5;
- b) The SB does not receive payment in full of any amount claimed by the SB to the Market Participant after the due time for payment of that claim;
- c) A licence, permit or other authorisation necessary according with the Electricity Law granted by MERA is suspended, revoked or otherwise ceases to be in full force and effect;
- d) The Participant ceases or threatens to cease to carry on its Licensed activities or a substantial part of its Licensed activities;
- e) The Participant states that it is unable to pay from its own money its debts when they fall due for payment;
- f) An administrator, liquidator, trustee in bankruptcy or person having a similar or analogous function under the laws of any relevant jurisdiction is appointed in respect of the Market Participant, or any action is taken to appoint such person;

17.3.2. A Market Participant shall notify the SMO immediately upon becoming aware of any circumstance that may give rise to or of the occurrence of an Event of Default.

17.3.3. Where an Event of Default has occurred in relation to a Market Participant, the SMO shall issue to the Market Participant a Default Notice specifying the alleged default and requiring the Market Participant to remedy the default within such time as may be specified in the Default Notice;

17.3.4. Where the SMO issues a Default Notice to a Market Participant pursuant to Rule 17.3.3 in respect of an Event of Default, the SMO shall notify MERA and the TL:

- a) of the issuance of the Default Notice;
- b) of the time within which the Market Participant may remedy the default as specified in the Default Notice; and
- c) where applicable, once the default specified in the Default Notice has been remedied by the Participant.

17.3.5. If an Event of Default is not remedied within the time specified in the Default Notice or within such longer period as may be agreed to in writing by the SMO, the SMO may issue to the Participant a notice indicating the Market Operator's intention to issue:

- a) A Suspension Order to the Market Participant suspending or restricting all or any of the Market Participant's rights to participate in the Market; or
- b) A Disconnection Order to TL directing the disconnection of the relevant facilities or equipment of the suspended Market Participant.

17.3.6. Pursuant to the notice referred to in Rule 17.3.5, the Market Participant shall have the right to request, within 5 days or 2 Business Days, whichever is longer, a hearing before the SMO to show cause why the Suspension Order, the Disconnection Order, or both, as the case may be, should not be issued.

17.3.7. The SMO shall lift a Suspension Order if the event which triggered its issuance is remedied and there are no other Events of Default in existence with respect to the Suspended Market Participant, provided that the SMO may, as a condition of lifting a Suspension Order, impose such conditions on the authorisation of the Market Participant to participate in the Market as the SMO deems appropriate including, but not limited to:

- a) establishing a lower trading limit in respect of the Participant than would otherwise be the case under these Rules and the Grid Code;

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- b) establishing a more frequent continuing schedule of payments than would otherwise be the case under these Rules, and the Grid Code; or
 - c) imposing more stringent prudential requirements than would otherwise be the case.
- 17.3.8. Following the issuance of a Suspension Order to a Participant pursuant to this Rule the Market Operator may do one or more of the following to give effect to the Suspension Order:
- a) withhold the payment of any amounts otherwise due to the Suspended Participant under these Rules and the Grid Code; or
 - b) make such further order or issue such directions to the Suspended Participant as the Market Operator determines appropriate.
- 17.3.9. The TL that receives a Disconnection Order from the SMO, on the date and at the time specified in the Disconnection Order or on the expiry of the period specified in Default Notice, whichever is later, will disconnect the facilities or equipment, as the case may be, of the Suspended Participant referred to in the Disconnection Order.

17.4. TERMINATION ORDERS AND DISCONNECTION ORDERS

- 17.4.1. The SMO may by a Termination Order terminate a Market Participant's right to participate in the Market where a Suspended Participant is the subject of a Suspension Order that provides for the suspension of all of the Suspended Participant's rights to participate in the Market Operator Administered Market:
- a) if the Suspended Participant has not remedied the Event of Default which triggered the issuance of the Suspension Order to the satisfaction of the SMO within 30 Business Days of the date of issuance of the Suspension Order; or
 - b) where the Suspended Participant has notified the Market Operator that it is not likely to remedy such Event of Default.
- 17.4.2. Notwithstanding that a Market Participant may have remedied breaches of these Rules or the Grid Code, the SMO may by Termination Order terminate a Participant's right to participate in the Market if a Participant has been found to be in breach of these Rules or the Grid Code on a persistent basis.
- 17.4.3. Where the SMO intends to issue a Termination Order, the SMO shall give the Participant notice of its intention to do so, such notice to specify:
- a) the grounds upon which the Termination Order is proposed to be issued and details of any evidence on which the SMO is relying in support of its intention to issue the Termination Notice;
 - b) the time within which the Market Participant may make written representations as to why the Termination Order should not be issued; and
 - c) the right of the Participant to request a hearing before the Market Operator to show cause why the Termination Order should not be issued.
- 17.4.4. Where the SMO gives to a Market Participant the notice referred to in Rule 17.4.3, it shall notify MERA and the TL of the giving of the notice.
- 17.4.5. Following expiry of the time specified in Rule 17.3.4.b), and after consideration of any representations made by the Participant pursuant thereto, the SMO may:
- a) Issue the Termination Order; or
 - b) Restrict all or any of the Market Participant's rights to participate in the Market.
- 17.4.6. Where the SMO issues a Termination Order, it shall at the same time issue a Disconnection Order to the TL with a copy to the Market Participant, for disconnection of the facilities or equipment from the Transmission system.
- 17.4.7. Upon a Termination Order being made in respect of a Market Participant, all of the rights of the Terminated Participant to participate in the Market shall be terminated.

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- 17.4.8. The SMO shall, immediately following the issuance of a Termination Order, publish the Termination Order on the Website and issue a public announcement that the rights of the Terminated Participant to participate in the Market have been terminated and that a Disconnection Order has been issued in respect of the Terminated Participant.
- 17.4.9. A Terminated Participant shall remain subject to and liable for all of its obligations and liabilities as a Market Participant which were incurred or arose under these Rules and the Grid Code prior to the date on which it ceases to be a Market Participant regardless of the date on which any claim relating thereto may be made.

PART 7: TRANSITIONAL ISSUES

SECTION 18: METERING DURING THE TRANSITIONAL STAGE

18.1. METERING SYSTEM ADEQUACY REPORT

- 18.1.1. All Market Participants shall promptly inform the SMO the list of their Commercial Metering Systems, already in service at the Effective Date, which do not comply with the provisions stated in this Market Rules, along with a plan and time schedule required to correct the detected deficiencies.
- 18.1.2. The SMO will review the proposed plan, seek for any additional clarification required, and may require changes in order to guarantee adequacy and accuracy of the overall settlement process. Once agreed, the plan will be binding to the involved Market Participant and the SMO shall have the right to monitor and audit its effective execution.
- 18.1.3. The SMO will consolidate all the proposed plans and, within [six (6) months] from the Effective Date, and will produce and submit to MERA a comprehensive Metering System Adequacy Report indicating:
- a) The list of the Connection Points already in service that do not fully comply with the requirements stated on this Market Rules.
 - b) The agreed plans to correct the detected deficiencies.
 - c) An overall evaluation of the impact of the detected deficiencies on the adequacy and accuracy of the settlement process.
- 18.1.4. Until the moment all the Connection Points fully agree with the provisions of this Market Rules, the SMO will update the Metering System Adequacy Report every [six (6)] months showing:
- a) The changes produced in the Commercial Metering System during the last period, to comply with the above mentioned provisions
 - b) A comparison between the plan agreed with the SMO and the actually executed one, during the last period
 - c) The additional time required to eliminate all the detected deficiencies.
- 18.1.5. MERA may request modifications in the plans or time schedules agreed if it considers them inadequate, they may compromise the adequacy of the settlement process or the achieved progress seems insufficient. The modifications requested by MERA will become mandatory to the SMO and the involved Market Participants.

18.1. METERING AND SETTLEMENT DURING THE TRANSITIONAL PERIOD

- 18.1.1. Until the moment the Commercial Metering System will be in place, the SMO shall put in place a transitory metering and settlement system, based on the Meters and Metering Equipment deployed in the Transmission and Distribution Systems.
- 18.1.2. Within 2 months of the approval of these Market Rules, the SMO will design such metering and settlement system and it will submit it to MERA for approval.