The Modified Single Buyer Market

Market Rules (Draft)

Version 1.0

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1. Definitions

Ancillary Services	Services procured by the MO, that are necessary for the reliable and secure transport of power from Generators to consumers i.e. to maintain the short-term reliability of the power system. They include, for example, the various types of reserves, black start, reactive power, voltage control, regulation and load following services, as defined in the Transmission Grid Code.
Available Network Capacity	The capacity amount (in MW in either direction) which can continuously and reliably flow across a network between two points without imposing technical or safety hazards.
Balancing Charge	The charge used to determine the Balancing Payment to be made to the MO by an Eligible Producer that is out of balance.
Balancing Energy	Has the meaning given to that term in section 9.1.2.
Balancing Mechanism	The method used in determining the Balancing Energy quantity as described in Section 9.
Balancing Payment	Has the meaning given to that term in section 9.1.4.
Balancing Service	The action of providing Balancing Energy.
Bilateral Transaction	A transaction that is negotiated and entered into between a willing Buyer and a willing Seller, to trade electricity, under mutually acceptable terms, including price and quantity, for a specified period of time.
Board	Means the Electricity Control Board established by the Electricity Act, Act No 4 of 2007, or its successor in title.
Business Day	A Day which is not a Saturday, Sunday or an official Namibian Public Holiday and on which banks in Namibia are open for general business purposes.
Buyer	See Contestable Customer.
Constrained Schedule	The most recent schedule, prepared by the MO, detailing the planned production output from each Schedule Unit for each Trading Period for a Delivery Day, taking network and system constraints into account.
Contestable Customer (CC)	Means any of: • Contestable End Consumer • Contestable Distributor • An Exporter • A Trader
Contestable Distributor	Means a Distributor that is connected to - and purchases electricity at - a Contestable Supply Point.
Contestable End Consumer	Means an End Consumer that is connected to - and purchases electricity at - a Contestable Supply Point.
Contestable Quantity	Refers to the maximum quantity of electricity a Contestable End Consumer or Contestable Distributor is allowed to purchase from an Eligible Seller.

Contestable Supply Point	Refers to a Supply Point, as approved by the Regulator, where a Contestable Customer is allowed to buy energy from an Eligible Seller up to the Contestable Quantity.
Day	A period of 24 consecutive hours starting at 00h00 and ending at 24h00 Namibia time.
Delivery Day	Means the day when the scheduled energy as determined on the Trading Day is scheduled to be delivered.
Delivered Energy	The active energy produced by a Generator during a specific period at a specific point, measured in kWh
Delivery Point	A physical point on the electrical network, agreed with the MO, where energy shall be metered and delivered by a Generator or Importer.
Delivery Month	Means the calendar month in which the Delivery Day falls.
Dispatch	A process that calls for a specific level of output from a Generator or consumption from an End Customer.
Dispatch Instructions	The instructions from MO to an Eligible Producer or Contestable Customer, to vary the MW output production or consumption at a particular location, from the level it would have operated at.
Distributor	A legal entity that is licenced to own, operate and maintain a Distribution system.
ECB	The Electricity Control Board of Namibia or it's successor.
Eligible Generator (EG)	A legal entity licenced to generate electricity and which is registered with the MO and which can enter into bilateral wheeling transactions with Contestable Customers in the MSB market.
Eligible Producer (EP)	Means any of: • Eligible Generator, or • Importer
Eligible Seller (ES)	Means any of: • Eligible Generator, or • Trader, or • Importer
End Customer	A user of electricity that is connected to either the Transmission or Distribution systems.
Energy Banking Service	Allows an ES to bank energy with the MO and then withdraw it in a later period, subject to the relevant MO procedures.
Energy Imbalance	The difference between Delivered Energy and Final Dispatch Schedule.
Exporter	A legal entity with a license to export power from Namibia, registered with the MO, complying with Market Rules for the MSB Market.
Final Dispatch Schedule	Means the Revised Constrained Schedule adjusted for any valid Dispatch Instructions by the MO.
Generator	A legal entity holding a valid generation license to operate a power station.
Grid Code	Grid Code refers to a document (or set of documents) that legally establishes technical and other requirements for the connection to

	and use of an electrical system by all Market Participants in a manner that will ensure reliable, efficient, and safe operation.
Importer	A legal entity with a license to import power to Namibia, registered with the MO, complying with Market Rules for the MSB Market.
Levies	Charges imposed on end-customers via the regulated electricity Tariff to recover costs not directly related to the supply of electricity services. In Namibia this includes an Electricity Control Board levy and a National Electrification Fund levy.
Loss Factor	A factor for a particular network applied as a multiplier on consumption (withdraw) to determine delivery (injection) to the same network taking losses into account.
Losses/ Technical Losses	The technical or resistive energy Losses incurred on Transmission and Distribution networks due to the characteristics of the physical equipment usually associated with dissipation.
Market Operator/ Market Operations (MO)	NamPower, operating as the Market Operator, is responsible to carry out the following functions: Dispatch & Balancing, Market Operations, Planning & Procurement and Trading.
Market Participants (MP)	See Section 1).
Market Rules	Rules which govern the operation and management of the MSB Market.
Modified Single Buyer (MSB)	The “Modified Single Buyer” is the new market structure, adopted by the Government of the Republic of Namibia, in April 2019.
Network Capacity Reserve Arrangement	An arrangement between an Eligible Seller and a Network Owner for a firm wheeling path.
Network Congestion	Means a shortage of network capacity resulting in the curtailment of generation supply and or customer demand.
Network Operator (NO)	The licensed developer, operator, maintainer and administrator of the transmission or distribution systems in Namibia.
Nominated Percentage	Means the percentage of energy from each Eligible Seller to be sold to each Contestable Customer in every Trading Period.
Public Trader	The entity that covers all assets and agreements outside of the open market.
Reliability Service	The action of providing Ancillary and related services.
Revised Constrained Schedule	Means the Constrained Schedule adjusted for any error notifications by ESs and published by the MO.
Schedule Unit	Means one of the following: • A single generating unit that forms part of a centrally-dispatched Generator • A single power station if it is a self-dispatched Generator • A single substation identified by the MO as the point of power entry for an Importer.
Seller	See Eligible Seller.
Supply Point	A physical point on the electrical network where energy shall be metered and supplied to Distributors, End-Consumers and Exporters.

System Operator/ Systems Operations (SO)	The entity responsible for the integrity of the system, including restoration and back-up.
Tariff	A Tariff is a combination of charges applied to recover measured quantities such as consumption and capacity costs, as well as unmeasured quantities such as service costs.
Tolerance Band	The threshold which sets the allowance for deviations from the Final Dispatch Schedules.
Trader	A legal entity with a licence to buy electricity from Eligible Producer(s) and sell to Contestable Customer(s). A trader only facilitates energy trades and has no entitlement to the energy. A Trader is not permitted to buy from or sell to a Trader.
Trading Day	Means the day when the market is run and trading schedules are determined.
Trading Period	Is the smallest time-interval for which trading and settlement is performed. Currently it is a 60-minute interval starting on the hour (e.g. 00:00-00:60 using the format hh:mm).
Unsold Energy	Energy sold and delivered by the Seller but not consumed by the Buyer due to insufficient demand, shall be treated as Imbalance Energy.
Use of System charges	The regulated Tariff charged for the use of the system, which excludes Connection Charges and which includes network, reliability, Losses and/or service and administration charges. These can be levied as Transmission Use of System (TUoS) charges or Distribution Use of System (DUoS) charges. UoS charges also often contain Levies and subsidies which may be embedded or unbundled.
Wheeling Charge	A specific approved charge levied by a Distributor for the use of its network.

2. Acronyms and Abbreviations

a:	Annum
CC:	Contestable Customer
DAM:	Day Ahead Market in SAPP
DUoS	Distribution Use of System
ECB:	Electricity Control Board
EG:	Eligible Generator
EP:	Eligible Producers
ES:	Eligible Seller
GWh:	Gigawatt Hour
kV:	Kilovolt
kVA:	Kilo-volt-ampere
kW:	kilowatt
kWh:	kilowatt hour
LF:	Loss Factor
MO:	Market Operator
mo:	Month
MP:	Market Participant
MSB:	Modified Single Buyer
MW:	Megawatt
MWh:	Megawatt Hour
NAD:	Namibian Dollar
NO:	Network Operator
NP:	NamPower
POC:	Point of Connection
POD:	Point of Delivery
PPA:	Power Purchase Agreement
PSA:	Power Supply Agreement
RSC	Reliability Service Charge
SAPP:	Southern African Power Pool
SO:	System Operator
TBC	To Be Confirmed
TLF:	Transmission Loss Factor
TS:	Transmission System
TUoS	Transmission Use of System
UoS:	Use of System
VAT:	Value Added Tax

3. Purpose

The purpose of the Namibia MSB Market Rules is to set out the rules that will govern Bilateral Transactions between Eligible Sellers and Contestable Customers, under the Modified Single Buyer (MSB) Market Model.

4. Governance

1) The MSB Market Design was approved by the Government of the Republic of Namibia in April 2019.

2) The ECB is mandated by legislation, to be the administrative authority of the Market Rules.

3) The ECB shall ensure that the Market Rules are compiled, approved and implemented for the benefit of the electricity industry.

4) The ECB is also responsible for amending and updating the Rules as required, through a consultative process, and in accordance with a transparent rule change methodology[1].

5. Overview

5.1 Market Development

1) The MSB Market will continue to evolve to increase customer choice and competition and described in the Market Design:

    (a) Phase 1a – gives Transmission connected customers the opportunity to purchase up to 30% of their energy demand from Eligible Sellers (other than NamPower).

    (b) Phase 1b – allows all Customers connected at 1MVA and above the opportunity to purchase up to 30% of their energy demand from Eligible Sellers i.e. to become Contestable Customers. Traders will also be allowed to participate in the MSB Market from Phase 1b.

    (c) Phase 2 – allows all Contestable Customers to also purchase from Importers.

2) It is anticipated that future developments of the MSB may include:

    (a) A Day-ahead Market

    (b) An Intra-day Market

[1] The ECB to publish the Market Rule Change Methodology as a separate document.

(c) A Balancing Market

(d) Demand side participation

(e) Specific Ancillary Services products

3) It is further anticipated that the Namibian MSB Market will align with the SAPP market and utilise the SAPP trading platforms.

5.2 Trading Products and Services

1) These rules pertain to the services offered in Phase 1 of the MSB Market, that are required to facilitate bilateral trading.

2) In Phase 1, these services include:

(a) Scheduling of binding hourly bilateral energy trades between Eligible Sellers (ES) and Contestable Customers (CC), for each of the 24 hours of the Delivery Day, starting at midnight (00h00);

(b) Energy balancing in case of deviations by Eligible Producers (EP) and CCs from the agreed schedules;

(c) Voluntary Energy Banking by the MO, to deal with any planned excess generation by ES[2];

(d) Metering, invoicing and settlement.

3) In Phase 1, these rules do not govern:

(a) the procurement of Ancillary Services

4) In subsequent phases, including Phase 2, the Market Rules and services maybe be expanded to include:

(a) a facility to match short term trading

(b) a day-ahead, ancillary service and balancing trading platform

(c) access to regional trading

(d) financial trading platforms

5.3 Market Participants (MP) and Authorisations

1) The MP and their authorisation to participate in the MSB Market are shown below:

[2] Energy Banking procedures to be developed by the MO and approved by the Regulator.

Table 1: Market Participants & Authorisations

Participant	Authorisation
Market Operator (MO)	Included in Transmission License
System Operations (SO)	Included in Transmission License
Eligible Generator	Generation License
Contestable Customer	Approval from Regulator
Trader	Trading License
Importer	Import License
Exporter	Export License

5.4 Qualifying Requirements to Trade

1) All MP shall satisfy the following criteria before they are able to trade electricity bilaterally -

2) For all Generators:

    (a) Hold the necessary licences, permits and approvals in terms of the governing legislation, regulation, codes and standards in Namibia;

    (b) Must apply to - and obtain written permission from – the Network Operator (NO) to connect to the network (as appropriate for Transmission and Distribution);

    (c) Must apply to - and obtain written permission from – the SO that such a bilateral trading arrangement is technically feasible;

    (d) Must register with the MO as a MP;

    (e) Must enter into a Balancing Agreement with the MO for Energy Imbalances in the network;

    (f) Must pay the necessary financial security to the MO, in order to cover Energy Imbalances requirements;

    (g) Must agree to comply with the MSB Market Rules.

3) For all Exporters:

    (a) Hold the necessary licences, permits and approvals in terms of the governing legislation, regulation, codes and standards in Namibia;

    (b) Must apply to - and obtain written permission from – the SO that such a bilateral trading arrangement is technically feasible;

    (c) Must register with the MO as a MP;

(d) Must enter into a Balancing Agreement with the MO for Energy Imbalances in the SAPP;

(e) Must pay the necessary financial security to the MO, in order to cover imbalanced energy requirements;

(f) Must agree to comply with the MSB Market Rules;

(g) They shall export their electricity via the SAPP Markets – if an Exporter wishes to enter into a bilateral export transaction outside of the SAPP markets, regulatory approval is required from the ECB;

(h) In the case where an Exporter in a member of SAPP, they shall also comply with the "SAPP Markets: Book of Rules - Qualifying Requirements to Trade" and any other relevant SAPP Markets requirements;

(i) In the case of exports outside of the SAPP Markets, permission must be granted from the relevant Regulator of the country to which power is being exported.

4) For all Importers:

(a) Hold the necessary licences, permits and approvals in terms of the governing legislation, regulation, codes and standards in Namibia;

(b) Must apply to - and obtain written permission from – the SO that such a bilateral trading arrangement is technically feasible;

(c) Must register with the MO as a MP;

(d) Must enter into a Balancing Agreement with the MO for energy imbalances in the network;

(e) Must pay the necessary financial security to the MO, in order to cover imbalanced energy requirements;

(f) Must agree to comply with the MSB Market Rules;

(g) Comply with the "SAPP Markets: Book of Rules - Qualifying Requirements to Trade" and any other relevant SAPP Markets requirements.

5) For all Traders:

(a) Hold the necessary licences, permits and approvals in terms of the governing legislation, regulation, codes and standards in Namibia;

(b) Must register with the MO as a MP;

(c) Must agree to comply with the MSB Market Rules.

6) For Contestable Customers:

(a) Hold the necessary permits and approvals in terms of the governing legislation, regulation, codes and standards in Namibia;

(b) Must register with the MO as a MP;

(c) Must agree to comply with the MSB Market Rules.

6. Application of the Rules

1) The MSB Market Rules apply to all MP, taking into account the following exemptions -

   (a) All NamPower Generators licensed before 1st September 2019[3]

   (b) All IPP Generators licensed and having entered into a PPA with NamPower or a Distributor, before 1st September 2019

2) Any Generator that is exempted from the MSB Market Rules as per rule 6.1, will automatically become subject to the MSB Market Rules following any amendment to their licence, or renewal of their licence.

7. Network Capacity Management Rules

7.1 Network Access

1) MPs shall have non-discriminatory access to all electrical distribution and transmission equipment, subject to the NO's license conditions, including payment.

2) MP will declare their intention to make use of the integrated distribution and transmission networks in Namibia by submitting their bilateral trading nominations according to the rules and provisions set out in these Market Rules in general and section 8 in particular.

7.2 Network Capacity Reservation

1) The MSB Market shall allow an ES to reserve network capacity with the relevant network licensee(s) in exchange for a network capacity reserve charge, payable to the licensee.

2) The conditions (e.g. capacity, start and end dates, performance standards, deemed energy payments, etc.) and charges for network capacity reservations shall be set out in an agreement between the MP and the network licensee(s) and shall be disclosed as soon as possible to the MO.

[3] All NamPower generators licensed after this date, will be subject to the MSB Market Rules

7.3 Network Capacity Allocation and Congestion

1) The MO shall allocate the Available Network Capacity according to the following priority sequence:

    (a) All bilateral trading nominations subject to a Network Capacity Reserve Arrangement will be scheduled first;

    (b) All bilateral transactions that are not underpinned by a Network Capacity Reserve Arrangement will be scheduled second;

    (c) Scheduling of all bilateral trades are subject to technical and operational constraints as determined by the SO.

2) In the case of network congestion, the following shall apply:

    (a) The MO shall have the authority to constrain (up or down) the position of any MP in order to relieve network congestion;

    (b) The MO shall use its own discretion in deciding which MP(s) to constrain, but such discretion should take (i) least cost to the total system as well as (ii) equitable distribution of the constraint between MPs, into account;[4]

    (c) The impact of network congestion on settlements are described in section 9.

8. Bilateral Trading Nomination Rules

8.1 Market Participant General data

1) MPs shall submit General data as specified in Section 12.1.

2) The data shall be stored in the MO's database and will be used for communication purposes with the MPs.

3) It is the responsibility of the MP to keep the data up to date.

8.2 Market Participant Standing data

1) MPs shall submit their Standing data in accordance with the following Addenda:

    (a) Eligible Generator Standing Data (see Section 12.2);

    (b) Importer Standing Data (see Section 12.3);

    (c) Trader Standing Data (see Section 12.4);

    (d) Contestable End Consumer Standing Data (see Section 12.5);

[4] The MO shall design a procedure to manage congestion, which shall be approved by the Regulator.

(e) Distributor Standing Data (see Section 12.6);

(f) Exporter Standing Data (see Section 12.7).

8.3 Bilateral Nomination Instructions

1) The ES (not the CC) shall submit their bilateral trading nominations to the MO for every Delivery Day, in accordance with the data specification in Section 12.8, and which nomination shall be transmitted to the MO using the electronic communication as specified in Section 8.4.6.

2) Forward nomination of bilateral schedules is permitted for the number of trading days defined by the MO[5], however only nominations for the Delivery Day will be binding.

3) If no nomination is submitted by the ES for the Delivery Day, the MO will view this as if no bilateral transactions have been entered into.

4) The currency of trade is the Namibian Dollar.

5) The SO shall determine the available network capacity.

6) The MO shall allocate the Available Network Capacity between bilateral nominations, taking into account the priority allocation of network capacity as described in Section 7.3.

7) The bilateral nominations form shall be completed in full, in order to be valid.

8) Invalid or faulty nominations shall be rejected.

9) In case of rejection, the MO shall inform the relevant ES within the defined time periods as set out in the Section 8.4.7.

8.4 Bilateral Nomination Process

8.4.1 Bilateral Nomination Specification[6]

1) Volumes may vary for different hours of the day but may not exceed a Generator's or an Importer's licensed capacity in any hour.

2) Each hourly schedule is only valid for the nominated hour.

[5] To be specified by MO.

[6] See Section 12.8 for an example.

3) The smallest increment or decrement of bilateral trading nominations or schedules is 0.1 MWh (100 kWh).

4) Each nomination shall clearly state the volume of energy (in MWh per hour) that each EP and or Importer shall deliver per transaction in the accordance with Addendum 8.

5) Each nomination shall clearly state the amount of energy (in percentage per hour of the total nominated volume for that hour) to be allocated to each CC.

6) CC should be allowed to view (but not amend) their own mentioned nominations and schedules.

7) The percentage allocations specified in each hour shall always add to one hundred percent (100%). If not, the nomination shall be considered invalid.

8) A Trader is allowed to procure electricity from an EG or Importer (but not another Trader) and allocate it to a Contestable End Consumer, Contestable Distributor or Exporter (but not to another Trader).

9) Nominations for the Delivery Day will not be accepted after market closure, as per Table 2: Timing for Market Tasks.

10) The MO may request that ESs shall submit nominations several days in advance.

11) Nominations shall be submitted in accordance with the timelines set out in Section 8.4.7.

8.4.2 Verification of Bilateral Nominations

1) The MO shall confirm receipt of the ES's bilateral trade nomination submission upon receiving it, via an automated electronic notification (e.g. email).

2) The MO shall determine and publish a Constrained Schedule, using any one of the communication options describe in Section 8.4.6, but preferably by electronic means.

3) The MO shall inform the relevant ES and CC in the case of a non-compliant submission, including if the approved total Contestable Supply Quantity is exceeded, and shall indicate timelines for resubmission of nominations, as set out in Section 8.4.7.

8.4.3 Adjustments to Bilateral Nominations

1) The MO has the right to adjust (i.e. increase or decrease) any bilateral nominations to ensure system stability and reliability, as well as the protection of people and plant safety, according to the procedure approved by the Regulator.

2) The MO shall take the following into account when adjusting any nominations:

   (a) People and plant safety;

   (b) System reliability and security;

   (c) Allocation of available network capacity in accordance with the network capacity management rules described in Section 5.1;

   (d) Lowest overall cost.

3) The MO shall take the above adjustments into account in developing the Constrained Schedule and will inform the relevant ES and CC.

8.4.4 Final Dispatch Schedule

1) The MO is responsible for the dispatch of all generating plant and imports in order to meet the demand for electricity in real time.

2) The MO shall issue real-time dispatch instructions to Generators and Importers using either electronic dispatch instruction (e.g. automatic generation control), written instruction (e.g. email) or voice instruction (e.g. telephone) communication channels.

3) The Constrained Schedule, amended for Dispatch Instructions, shall give rise to the Final Dispatch Schedule which will form the basis of settlements.

8.4.5 Publication of Schedules

1) The MO shall develop and publish the Constrained Schedule taking into account bilateral trading nominations and network constraints.

2) Following the publication of the Constrained Schedule, the ES shall, if necessary, submit a notice of error.

3) The MO shall assess all notices of errors and publish a Revised Constrained Schedule.

4) The MO shall publish a Final Dispatch Schedule, taking into account all valid dispatch instructions by the SO.

5) The Constrained, Revised Constrained, Final Dispatch Schedules and any notice of error, shall be published using any of the communication options described in Section 8.4.6, according to the timelines set out in Section 8.4.7.

6) If the MO is unable to publish any of the above schedules according to the timelines in Section 8.4.7, the MO shall inform all MPs of the new timelines using any of the communication options set out in Section 8.4.6.

7) The Constrained Schedule, Revised Constrained Schedule and Final Dispatch Schedule shall be prepared and published in accordance with the example forms in Section 12.9.

8) The MO shall not be liable for additional costs or losses that may occur due to scheduling, unless it can be shown that MO acted in contravention of good utility practice or with gross negligence, as determined by the Regulator.

8.4.6 Bilateral trading data exchange options

1) Internet data submissions

    (a) The preferred method of data exchange is via the internet. The MO will create an internet portal, which will allow each ES to securely and confidentially enter and submit its bilateral trading nominations.

2) Electronic mail submissions

    (a) As a backup arrangement only, an ES may submit its bilateral trade nomination by electronic mail. The ES shall complete a standard bilateral trade nomination form (available from the MO), which shall be sent to the MO. It is the duty of the ES to confirm with the MO that the contents being transmitted have been received and are legible.

8.4.7 Failure of MO Systems

1) In the event of the unavailability of the MO systems, required to manage and administrate the market:

    (a) the MO shall immediately inform all MP

    (b) the MP shall follow the alternative operational procedures, developed by the MO, and agreed by the Regulator.

8.5 Bilateral Trading Timelines

1) The following table shows the timings for the different tasks for all markets:

Table 2: Timing for Market Tasks

No.	Activity	Timing	Responsible
1	Trading Day	The day before the Delivery Day	All
2	Specify Available Network Capacity	Up to 09:00 on Trading Day	SO
3	Submission of Bilateral Nominations for Delivery Day	Up to 10:00 on Trading Day	ES
4	Submission of Bilateral Nominations Gate Closure	10:00 on Trading Day	MO
5	Confirmation of Receipt of Bilateral Nominations	Up to 10:00 on Trading Day	MO
6	Verification, matching and adjustments of Bilateral Nominations	Up to 11:00 on Trading Day	MO
7	Constrained Schedule publication	11:00 on Trading Day	MO
8	Notification of error(s)	Up to 11:30 on Trading Day	ES
9	Revised Constrained Schedule publication for Delivery Day	12:00 on Trading Day	MO
10	Dispatch of generators and imports in accordance with Revised Constrained Schedule, least cost and technical requirements	Each hour of the Delivery Day	SO
11	Final Dispatch Schedule publication for Delivery Day	Delivery Day + 1 day at 10:00	MO
12	Metered values for Delivery Day	Delivery Day + 1 day at 12:00	MO
13	Balancing and Settlement calculations and publication of results. Publish invoices for Eligible Generators and Importers	Delivery Day + 1 day at 15:00	MO
14	Publish invoices for CCs	As specified in current supply conditions	CC
15	Payment of invoices by EGs and Importers	Delivery Month + 10 days	ES
16	Payment of invoices by CCs	As specified in current supply conditions	CC

9. Balancing Mechanism Rules

1) An Eligible Generator or Importer that deviates from their Final Dispatch Schedule will be automatically balanced by the MO.

2) The amount of balancing required will be determined by the MO.

3) A Balancing Charge may apply, subject to the rules set out below.

4) Bilateral transactions in the domestic Namibian market will attract internal Balancing Charges.

5) Bilateral transactions for Export will attract Balancing Charges subject to the Exporter's arrangement with the MO, which will be based on the prevailing SAPP market rules.[7]

9.1 Balancing for Internal Transaction

9.1.1 Tolerance Band

1) The MO shall measure all Energy Imbalances as the difference between the Delivered Energy less the Final Dispatch Schedule in every Trading Period. The MO shall apply the following Tolerance Band criteria in determining the Balancing Energy quantity that is used in calculating the Balancing Payment. The following tolerance limits shall apply:

    (a) The Lower Limit is defined as the lesser of:

        i) -0.5 MW, or

        ii) -2.5% of the EG's (or Importer's) Final Dispatch Schedule

    (b) The Upper Limit is defined as the greater of:

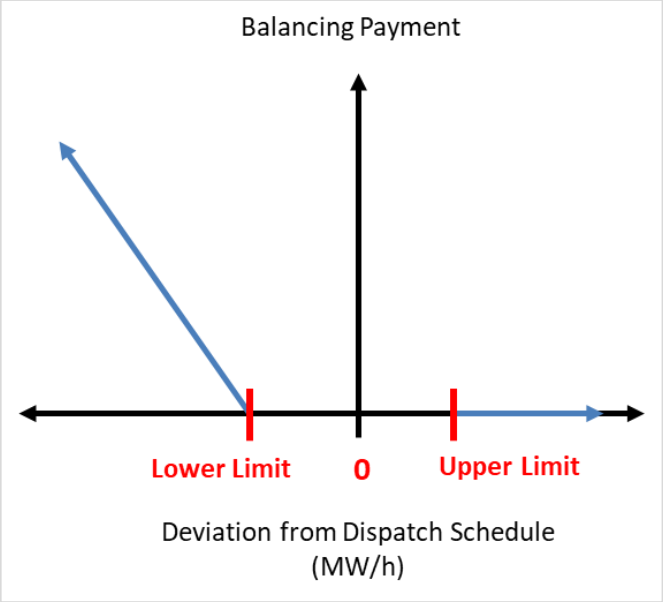
        i) +0.5 MW, or

        ii) +2.5% of the plant's Final Dispatch Schedule.

2) The figure below illustrates the relationships between deviation from the Final Dispatch Schedule and the Tolerance Band (which is the area between the Lower Limit and the Upper Limit).

[7] The MO will develop a procedure for the determination of balancing payments for SAPP imbalances, which is approved by the Regulator.

Figure 1: Balancing Payment Mechanism Diagram



9.1.2 Balancing Energy

1) The Balancing Energy quantity in every hour shall be determined as set out below:

Imbalance Energy = Delivered Energy – Final Dispatch Schedule

Lower Limit = Lower of (-0.5MW or -2.5% of Final Dispatch Schedule)

Upper Limit = Greater of (+0.5MW or +2.5% of Final Dispatch Schedule)

<u>If Imbalance Energy < 0, and</u>

Imbalance Energy > Lower Limit, then

Balancing Energy = 0, or

Imbalance Energy < Lower Limit, then

Balancing Energy = Imbalance Energy – Lower Limit

<u>If Imbalance Energy > 0, and</u>

Imbalance Energy < Upper Limit, then

Balancing Energy = 0, or

Imbalance Energy > Upper Limit, then

Balancing Energy = Imbalance Energy – Upper Limit

9.1.3 Balancing Charge

1) The following Balancing Charges shall apply in determining the Balancing Payment:

   For Balancing Energy below the Lower Limit:

   Lower Balancing Charge = 100% (hundred percent) of the NamPower retail energy TOU Tariff

   For Balancing Energy above the Upper Limit:

   Higher Balancing Charge = No charge shall apply

9.1.4 Balancing Payments

1) A Balancing Payment shall apply to Eligible Supplier in case the Balancing Energy in any hour is not nil. The payment shall be calculated in accordance with the following formulae:

   If Balancing Energy < 0:

   *Balancing Payment = -(Balancing Energy * Lower Balancing Charge)*

   If Balancing Energy > 0:

   *Balancing Payment = (Balancing Energy * Lower Balancing Charge)*

10. Metering and Settlements

10.1 Metering

1) Metering in the MSB Market shall be conducted in accordance with the rules and procedures established in the prevailing Transmission Grid Code and Distribution Grid Code.

2) Metering of a CC shall take place at each of the CC's designated Contestable Supply Points, as approved by the Regulator.

3) The MO shall collect or receive metering data from the metering database, for the purposes of settlements, using the methods described in the Codes.

4) Exporters will be subject to metering at a designated substation inside the borders of Namibia – the designated substation shall be identified and agreed in advance with the MO.

5) Importers will be subject to metering at a designated substation inside the borders of Namibia – the designated substation shall be identified and agreed in advance with the MO.

10.2 Services & Charges

1) The calculation of energy charges, loss charges, balancing charges, reliability charges, wheeling charges, levies and network use of system charges are subject to the approval of the Regulator and are summarised in the "Namibia Wheeling Framework".

2) Network Capacity Reserve charges shall be set out in an agreement between the EG or Importer and the relevant NO.

10.3 Settlement information

1) MO Settlement results shall be based on MPs metered data, the Final Delivery Schedule data, regulated tariffs and calculations.

2) The MO shall determine settlements for EGs and Importers as follows:
    (a) Balancing Payment (according to Section 9.1.4);
    (b) Losses quantity and payment (in accordance with the Namibia Wheeling Framework);
    (c) Customer Service charge (in accordance with the Namibia Wheeling Framework);
    (d) Point of Supply charge (in accordance with the Namibia Wheeling Framework).

3) The MO shall determine settlements for CCs and Exporters as follows:
    (a) Energy quantity and payment (in accordance with the Namibia Wheeling Framework);
    (b) Energy Rebates quantity and payment (in accordance with the Namibia Wheeling Framework);
    (c) Energy Add-backs quantity and payment (in accordance with the Namibia Wheeling Framework);
    (d) Use of System payment (in accordance with the Namibia Wheeling Framework);

(e) Losses quantity and payment (in accordance with the Namibia Wheeling Framework);

(f) Wheeling Charge (for Exporters) quantity and payment (in accordance with the Namibia Wheeling Framework);

(g) Reliability quantity and payment (in accordance with the Namibia Wheeling Framework);

(h) Customer Service payment (in accordance with the Namibia Wheeling Framework);

(i) Point of Supply payment (in accordance with the Namibia Wheeling Framework);

(j) Levies quantity and payment (in accordance with the Namibia Wheeling Framework).

4) The MO shall publish settlement results on a daily basis, on the first day after every Delivery Day at 15:00.

5) In Addition:

(a) Settlement for any export transactions into the SAPP Markets, will also be subject to the SAPP Markets Settlement process;

(b) Distributors will also determine settlement amounts in accordance with the tariff schedules approved by the Regulator;

(c) With respect to bilateral transactions, Distributors will also include charges for network use and wheeling as described in the "Namibia Wheeling Framework";

(d) The MO will make available to Distributors, the settlement data required in order to accurately allocate any transmission losses rebates or credits, as well as any bilaterally traded energy quantities, rebates or add-backs, for the benefit of Distributor connected CC or ES.

11. Financial Rules and Invoicing

11.1 Clearing Account

1) The MO shall nominate a clearing bank account in Namibia.

2) The account shall be in NAD.

3) The account shall be managed in accordance with the following:

(a) MPs shall make payments in accordance of the invoiced amounts into the nominated bank account before the last payment date i.e. the funds shall reflect in the MO's bank account before or on the last payment date;

(b) The MO shall maintain the bank account and verify and reconcile payments received from MPs.

11.2 Currency

1) The MO will prepare invoices and charges in Namibian dollars (NAD) in accordance with the settlement results, in the MSB Market.

2) Exporters may also be subject to the prevailing Financial Rules for Currency of Orders as described and defined in the SAPP Markets Rules.

11.3 Financial Security

11.3.1 Financial Security Requirements

1) Each EP and Importer[8], as security for the due payment of its imbalanced energy, shall:

(a) Deposit a cash collateral, in a securities account nominated by the MO or,

(b) Provide the MO with a bank guarantee from a bank of good credit standing acceptable to the MO.

2) The minimum security required equals the average monthly settlement amount for the three most recently published settlement reports provided that the security amount shall never be less than the NAD equivalent of USD 5 000 (five thousand US Dollars).

3) Exporters shall also comply with the SAPP Markets Financial Rules on Trading Security Requirements, as appropriate.

11.3.2 Managements of Financial Security

1) The *MO* shall:

(a) Designate a bank account for the purpose of managing security payments;

(b) Adjust the amount of security required for each EP and Importer, based on the most recent settlement reports;

(c) Monitor and ensure that the required security amount is maintained at all times;

[8] Treated as an EP at border of Namibia.

(d) Manage, facilitate and disqualify any MP from entering into any further bilateral trading transactions that are in breach of the minimum security requirements, and

(e) Be the only entity who is authorised to approve liquidations and transfers from this account.

2) Any interest accruing from this account will be credited to the relevant EP or Importer.

3) Payment of settlement amounts shall not be made from the security account.

4) Should a draw down on the security occur, additional security shall be lodged with the MO up to the minimum-security requirements before any further transactions by the EP or Importer are allowed to proceed.

5) EPs and Importers shall ensure that sufficient security is lodged with the MO before trading commences.

11.3.3 Withdrawal of Security

1) MPs shall be entitled to withdraw the security lodged in terms of Rule 11.3.1 during periods where it does not intend to trade bilaterally, provided, however, that no settlement amounts are owed to the MO. They shall provide the MO with 7 (seven) days' notice of its intention to withdraw the security.

2) Should an MP elect to withdraw its security, any associated administrative costs shall be payable by the EP or Importer.

3) The MP shall, when applicable, notify the MO of its intention to commence bilateral trading and that the necessary securities have been lodged.

11.4 Invoicing and Crediting

1) The MO will prepare invoices and credit notes for Eligible Sellers and Exporters at 15:00 on the next Business Day, following Delivery Day (Delivery Day + 1 Day at 15:00).

2) The MO will prepare invoices and credit notes for CCs as per NamPower's prevailing supply arrangements.

3) The invoices will be based on the Settlement results and include any relevant commercial terms.

4) Exporters may also be subject to the Invoicing and Crediting Rules as described in the SAPP Market Rules.

11.5 Payment Procedure

1) EPs and Importers shall ensure that all invoiced amounts and security requirements are paid in full into the clearing and settlement accounts respectively as described in the Bilateral Trading Timeline in Section 8.4.7.

2) Exporters and CCs shall settle the invoiced amounts in accordance with their respective supply agreements.

11.5.1 Failure to pay

1) Should an EP or Importer not provide sufficient funds into the clearing account, or fail to settle amounts stipulated on the invoice within ten (10) Business Days from issuing of invoice, the MO shall be entitled to claim against the security lodged by the defaulting EP.

2) The settlement amount shall attract interest, from the date of the invoice, at the lending rate (as quoted by Central Bank of Namibia) plus two hundred basis points compounded daily.

3) Non-payment by Exporters and CCs shall be dealt with in accordance with the Terms and Conditions, in their respective supply agreements.

11.5.2 Claiming against security

1) The MO shall notify the defaulting EP or Importer on the eleventh Business Day (11) following the day of issuing of the invoice as follows:
   a) That it intends to proceed to claim against the security;
   b) That all settlement amounts owing by the defaulting Seller will be recovered from the security account as soon as possible after the twelfth (12) Business day following the day of issuing of the invoice.

11.5.3 Disputed Invoicing

1) Should a MP be incorrectly invoiced by the MO, the MO shall as soon as practical, correct the MP's account, or reimburse the MP with the total amount overcharged, or debit the MP's account with the total amount undercharged. The amount debited shall be immediately due and payable. The amount credited or debited shall include the interest from the date of the invoice, compounded daily.

2) Should a MP dispute an invoice from the MO, the MP shall inform the MO in writing of the dispute and the grounds of the dispute, within 5 (five) Business Days of receipt of the disputed invoice.

3) Disputed invoices shall be resolved in accordance with the Dispute Resolution procedure, as developed by the MO and approved by the Regulator.

11.5.4 Payment procedure timeline

1) The timeline specified in Table 2: Timing for Market Tasks shall apply in respect of settlement reports, invoices and payments.

11.6 Auditing

1) An independent external financial auditor shall audit the Market Operator, on an annual basis and submit the results to the ECB.

2) An independent external technical auditor shall audit the Market Operator, on an annual basis and submit the results to the ECB.

12. Addenda

12.1 Addendum 1: Market Participant General Data

Addendum 1: Example of Market Participant General Data

Revision: 1.0

Short Name: [General name of market participant]
Long Name: [Name of market participant as printed on license/approval from Regulator]
ID No : [Identification number of market participant - issued by MO]
Submission Date: [dd-mm-yyyy]

Physical address:	[dd-mm-yyyy]
Postal address	[dd-mm-yyyy]
Market role(s)	[Generator, Distributor, Exporter, Importer, Trader, Customer]
Contact Person 1	[Full names of authorised contact persons]
Electronic mail address:	[email]
Fixed line telephone number:	[phone number]
Mobile phone telephone number:	[cell number]
Contact Person 2	[Format specified by MO]
Electronic mail address:	[Customer or Distribution or Transmission Connected]
Fixed line telephone number:	[A factor approved by the Regulator]
Mobile phone telephone number:	[Yes or No]
Market participant entrance date:	[dd-mm-yyyy]
Market participant exit date:	[Substation name]
Market participant status:	Active, Not-Active, Suspended, Terminated

12.2 Addendum 2: Example of an Eligible Generator Standing Data

Addendum 2: Example of Eligible Generator Standing Data

Revision: 1.0

Licensee:	[Name as printed on license from Regulator]
Licensee ID No :	[Issued by MO]
License Type:	Generator
Name of Generator:	[Name given by Licensee]
Generator ID No.:	[Issued by MO]
Dispatch:	Self
Submission Date:	[dd-mm-yyyy]

License Commenced on:	[dd-mm-yyyy]
License Expires on:	[dd-mm-yyyy]
Submission Date:	[dd-mm-yyyy]
Net Maximum Capacity:	[MW and not exceeding licensed value]
Technology:	[Description of technology]
GPS coordinates:	[Format specified by MO]
Connection Type:	[Customer or Distribution or Transmission Connected]
Generator Loss Factor:	[A factor approved by the Regulator]
Copy of PPAs (>12-months) submitted:	[Yes or No]
Network Reserve Capacity Status:	[Yes - reserved or No - not reserved]
- From Substation	[Substation name]
- To Substation	[Substation name]
- Start Date	[dd-mm-yyyy]
- End Date	[dd-mm-yyyy]
- Capacity	MW
- Other Conditions:	[Applicant to provide details]
- Copy of Agreement submitted	[Applicant to provide details]

12.3 Addendum 3: Example of an Importer Standing Data

Addendum 3: Example of Importer Standing Data

Revision: 1.0

Licensee:	[Name as printed on license from Regulator]
Licensee ID No :	[Issued by MO]
License Type:	Importer
Nominated Substation:	[Name substation where it is deemed that power will be imported]
Substation ID No.:	[Issued by MO]
Dispatch:	Self
Submission Date:	[dd-mm-yyyy]

License Commenced on:	[dd-mm-yyyy]
License Expires on:	[dd-mm-yyyy]
Submission Date:	[dd-mm-yyyy]
Net Maximum Import Capacity:	[MW and not exceeding licensed value]
GPS coordinates of Nominated substation:	[Format specified by MO]
Connection Type:	[Distribution or Transmission Connected]
Generation Loss Factor:	[A factor approved by the Regulator]
Copy of PPAs (>12-months) submitted:	[Yes or No]
Network Reserve Capacity Status:	[Yes - reserved or No - not reserved]
- From Substation	[Substation name]
- To Substation	[Substation name]
- Start Date	[dd-mm-yyyy]
- End Date	[dd-mm-yyyy]
- Capacity	MW
- Other Conditions:	[Applicant to provide details]
- Copy of Agreement submitted	[Applicant to provide details]

12.4 Addendum 4: Example of a Trader Standing Data

Addendum 4: Example of Trader Standing Data

Revision: 1.0

Licensee:	[Name as printed on license from Regulator]
Licensee ID No :	[Issued by MO]
License Type:	Trader
Submission Date:	[dd-mm-yyyy]

License Commenced on:	[dd-mm-yyyy]
License Expires on:	[dd-mm-yyyy]
Net Maximum Trading Capacity:	[MW and not exceeding licensed value]
Copy of PPAs (>12-months) submitted:	[Applicant to provide details]

12.5 Addendum 5: Example of a Contestable End-Consumer Standing Data

Addendum 5: Example of Contestable End-Consumer Standing Data

Revision: 1.0

Customer Name: [Name as printed on approval from Regulator]
Customer ID No : [Issued by MO]
Approval Type: Contestable End-Consumer
Approval Date: [dd-mm-yyyy]
Submission Date: [dd-mm-yyyy]

Characteristics of each Contestable Supply Point(s) to End Consumer

Seq	ID No	GPS Coordinates	Contestable Quantity	Approval Date	Network Supplier
1	[Issued by MO]	[Format specified by MO]	[Total MWh over past 12-months]	[dd-mm-yyyy]	[Name of network provider]
2					
3					
4					
5					
6					
7					
8					
9					
10					

12.6 Addendum 6: Example of a Contestable Distributor Standing Data

Addendum 6: Example of Contestable Distributor Standing Data

Revision: 1.0

Distributor Name: [Name as printed on license from Regulator]
Distributor ID No : [Issued by MO]
Licence Type: Distributor
Licensed Date: [dd-mm-yyyy]
Submission Date: [dd-mm-yyyy]

Characteristics of each Contestable Supply Point(s) to Distributor

Seq	ID No	GPS Coordinates	Contestable Quantity	Approval Date	Network Supplier
1	[Issued by MO]	[Format specified by MO]	[Total MWh over past 12-months]	[dd-mm-yyyy]	[Name of network provider]
2					
3					
4					
5					
6					
7					
8					
9					
10					

12.7 Addendum 7: Example of an Exporter Standing Data

Addendum 7: Example of Exporter Standing Data

Revision: 1.0

Exporter Name: [Name as printed on license from Regulator]
Exporter ID No : [Issued by MO]
Licence Type: Exporter
License Start Date: [dd-mm-yyyy as per license]
License End Date [dd-mm-yyyy as per license]
Submission Date: [dd-mm-yyyy]

Characteristics of each Contestable Supply Point(s) to Exporter

Seq	ID No	Nominated Substation	GPS Coordinates of Substation	Contestable Quantity	Approval Date	Network Supplier
1	[Issued by MO]	[Deemed point of export set by MO]	[Format specified by MO]	[Total MWh over past 12-months]	[dd-mm-yyyy]	[Name of network provider]
2						
3						
4						
5						
6						
7						
8						
9						
10						

12.8 Addendum 8: Example of a Bilateral Trading Nomination Form

Addendum 8: Example of a Bilateral Trading Nomination Form

Revision: 1.0

Name of Eligible Seller: [As printed on license from Regulator]
Identification No of ES: _____
License Type: [Generator, Trader or Importer]
Delivery Date: [dd-mm-yyyy]
Completed By: [Name of authorised person]

Hour	Eligible Seller(s) Delivery				Contestable Customer(s) Allocation			
	ES1 ID no. _____	ES2 ID no. _____	ES3 ID no. _____		CC1 ID no. _____	CC2 ID no. _____	CC3 ID no. _____	
	Schedule (MW)	Schedule (MW)	Schedule (MW)	Total (MW)	% of Total	% of Total	% of Total	% of Total
00-01				0.0				0.0%
01-02				0.0				0.0%
02-03				0.0				0.0%
03-04				0.0				0.0%
04-05				0.0				0.0%
05-06				0.0				0.0%
06-07				0.0				0.0%
07-08				0.0				0.0%
08-09				0.0				0.0%
09-10				0.0				0.0%
10-11				0.0				0.0%
11-12				0.0				0.0%
12-13				0.0				0.0%
13-14				0.0				0.0%
14-15				0.0				0.0%
15-16				0.0				0.0%
16-17				0.0				0.0%
17-18				0.0				0.0%
18-19				0.0				0.0%
19-20				0.0				0.0%
20-21				0.0				0.0%
21-22				0.0				0.0%
22-23				0.0				0.0%
23-00				0.0				0.0%

12.9 Addendum 9: Example of Consolidated Generator/Importer Schedule Notification

Addendum 9: Example of Consolidated Generator/Importer Schedule Notification

Revision: 1.0

Name of Eligible Seller: [As printed on license from Regulator]
Identification No of ES: _____
License Type: [Generator, Trader or Importer]
Delivery Date: [dd-mm-yyyy]
Published Date [dd-mm-yyyy hh:mm]

Hour	Total Schedule (MW)	Contestable Customer(s) Allocation			
		CC1 ID no. _____	CC2 ID no. _____	CC3 ID no. _____	
		% of Total	% of Total	% of Total	% of Total
00-01					0.0%
01-02					0.0%
02-03					0.0%
03-04					0.0%
04-05					0.0%
05-06					0.0%
06-07					0.0%
07-08					0.0%
08-09					0.0%
09-10					0.0%
10-11					0.0%
11-12					0.0%
12-13					0.0%
13-14					0.0%
14-15					0.0%
15-16					0.0%
16-17					0.0%
17-18					0.0%
18-19					0.0%
19-20					0.0%
20-21					0.0%
21-22					0.0%
22-23					0.0%
23-00					0.0%

12.10 Addendum 10: Example of Consolidated Contestable Supply Point Schedule Notification

Addendum 10: Example of Consolidated Contestable Supply Point Schedule Notification

Revision: 1.0

Name of Contestable Customer: [As printed on license from Regulator]
Identification No of Customer: _____
License Type: [Generator, Trader or Importer]
Delivery Date: [dd-mm-yyyy]
Completed By: [Name of authorised person]

Hour	Eligible Producer(s) / Importer(s) Delivery				Contestable Supply Point ID No.
	ID_1 no. _____	ID_2 no. _____	ID_3 no. _____		
	Schedule (MW)	Schedule (MW)	Schedule (MW)	Total (MW)	% of Total
00-01				0.0	100%
01-02				0.0	100%
02-03				0.0	100%
03-04				0.0	100%
04-05				0.0	100%
05-06				0.0	100%
06-07				0.0	100%
07-08				0.0	100%
08-09				0.0	100%
09-10				0.0	100%
10-11				0.0	100%
11-12				0.0	100%
12-13				0.0	100%
13-14				0.0	100%
14-15				0.0	100%
15-16				0.0	100%
16-17				0.0	100%
17-18				0.0	100%
18-19				0.0	100%
19-20				0.0	100%
20-21				0.0	100%
21-22				0.0	100%
22-23				0.0	100%
23-00				0.0	100%

12.11 Addendum 11: Example of Constrained / Revised Constrained and Final Dispatch Schedule Notification

Addendum 11: Example of Constrained / Revised Constrained and Final Dispatch Schedule Notification

Revision: 1.0

Name of Eligible Seller: [As printed on license from Regulator]
Identification No of ES: _____
License Type: [Generator, Trader or Importer]
Delivery Date: [dd-mm-yyyy]
Compliant Status: [Yes / No]
Published Date [dd-mm-yyyy hh:mm]

Hour	Eligible Seller(s) Schedule				Contestable Customer(s) Allocation			
	ES1 ID no. _____	ES2 ID no. _____	ES3 ID no. _____		CC1 ID no. _____	CC2 ID no. _____	CC3 ID no. _____	
	MW	MW	MW	Total (MW)	% of Total	% of Total	% of Total	% of Total
00-01				0.0				0.0%
01-02				0.0				0.0%
02-03				0.0				0.0%
03-04				0.0				0.0%
04-05				0.0				0.0%
05-06				0.0				0.0%
06-07				0.0				0.0%
07-08				0.0				0.0%
08-09				0.0				0.0%
09-10				0.0				0.0%
10-11				0.0				0.0%
11-12				0.0				0.0%
12-13				0.0				0.0%
13-14				0.0				0.0%
14-15				0.0				0.0%
15-16				0.0				0.0%
16-17				0.0				0.0%
17-18				0.0				0.0%
18-19				0.0				0.0%
19-20				0.0				0.0%
20-21				0.0				0.0%
21-22				0.0				0.0%
22-23				0.0				0.0%
23-00				0.0				0.0%

12.12 Addendum 12: Example of MO Invoice for EG or Importer

Example of Eligible Generator; Importer - Invoice/ Credit Note

Revision: 1.0

NamPower Company Data & Contact Details

Licensee ID No :	[Issued by MO]
Name of Generator:	[Name given by Licensee]
Generator Address:	[Address given by Licensee]
VAT Number:	[VAT number given by Licensee]
Generator ID No.:	[Issued by MO]
Account Number:	[Issued by MO]

Invoice Number:	[Issued by MO]
Date:	[dd-mm-yyyy]

Previous Meter Reading Date:	[Issued by MO]
Current Meter Reading Date:	[Issued by MO]
Delivery Day Date:	[dd-mm-yyyy]

Meter Number:	Reading:	Meter Production Units:	Final Dispatch Schedule Units:	Deviation:	Price:	Description:	Amount:
[Issued by MO]	[Settlement data]	[Settlement data]	[Issued by MO]	[Calculated]			
					[Issued by ECB]	[Balancing]	[Calculated]
					[Issued by ECB]	[Losses]	[Calculated]
					[Issued by ECB]	[Customer Service]	[Calculated]
					[Issued by ECB]	[Point of Supply]	[Calculated]
						[Subtotal]	[Calculated]
					15%	[VAT]	[Calculated]
						[Total]	[Calculated]

12.13 Addendum 13: Example of MO Invoice for CC or Exporter

Example of CC; Exporter- Invoice/ Credit Note

Revision: 1.0

NamPower Company Data & Contact Details

Customer ID No :	[Issued by MO]
Name of Customer:	[Name given by Customer]
Customer Address:	[Address given by Customer]
Customer VAT Number:	[VAT number given by Licensee]
Customer Account Number:	[Issued by MO]

Invoice Number:	[Issued by MO]
Date:	[Issued by MO]

Previous Meter Reading Date:	[Issued by MO]
Current Meter Reading Date:	[Issued by MO]

Meter Number:	Previous Reading Units:	Current Reading Units:	Consumption		Price:	Description:	Amount:
[Issued by MO]	[Settlement data]	[Settlement data]	[Calculated]				
					[Issued by ECB]	[MO Energy]	[Calculated]
					[Issued by ECB]	[MO Rebate]	[Calculated]
					[Issued by ECB]	[MO Add-back]	[Calculated]
					[Issued by ECB]	[UoS]	[Calculated]
					[Issued by ECB]	[Losses]	[Calculated]
					[Issued by ECB]	[Reliability]	[Calculated]
					[Issued by ECB]	[Customer Service]	[Calculated]
					[Issued by ECB]	[Point of Supply]	[Calculated]
					[Issued by ECB]	[NEF Levy]	[Calculated]
					[Issued by ECB]	[ECB Levy]	[Calculated]
						[Subtotal]	[Calculated]
					15%	[VAT]	[Calculated]
						[Total]	[Calculated]

12.14 Addendum 14: Roles and Responsibilities