ENERGY SAVINGS CERTIFICATE SEGMENT – BUSINESS RULES

PXIL has launched its new trading platform, PRATYAY (Earlier called PNEST)

These Business Rules shall be applicable w.e.f 20th January, 2020

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1. Introduction

The Business Rules framed hereunder shall be known as Power Exchange India Limited (PXIL) Energy Savings Certificate segment Business Rules.

These Business Rules shall be in addition to the provisions of the Central Electricity Regulatory Commission (Terms and Conditions for Dealing in Energy Savings Certificates) Regulations, 2016 referred to as the ESCerts Regulation hereon as amended from time to time and Detailed Procedure issued by BEE (Administrator)as per the ESCerts Regulations and as amended by Registry from time to time and Rules and Bye Laws of Power Exchange India Limited (PXIL), as may be applicable to Members and Clients.

2. Applicability

These Business Rules (read in conjunction with Rules and Bye Laws) shall be applicable to all Members and Clients in the Energy Saving Certificate segment of Power Exchange India Limited (alternately referred to as Exchange or PXIL). They shall be subject to jurisdiction of the Courts of Mumbai irrespective of the place of business of the Members.

3. Definitions

Words and expressions used in these Business Rules and not defined herein but defined in the Electricity Act, 2003 and the Energy Conservation Act, 2001, the Central Electricity Regulatory Commission (Terms and Conditions for Dealing in Energy Savings Certificates) Regulations, 2016 or any Applicable Laws shall have the same meaning assigned to them respectively in the Act, the Regulation or such other applicable laws as issued or amended from time to time.

The definitions are over and above those provided in the Rules and Bye Laws of the Exchange. For the context of these Business Rules, the definitions are to be read in conjunction with definitions as provided in Rules and Bye Laws of the Exchange.

3.1. Administrator

Administrator means the Bureau of Energy Efficiency (BEE).

3.2. Bureau

Bureau means the Bureau of Energy Efficiency as defined under the Central Electricity Regulatory Commission (Terms and Conditions for Dealing in Energy Savings Certificates) Regulations, 2016 or as amended from time to time or as modified by any Applicable Laws.

3.3. Certificate/ Energy Saving Certificate (ESCert)

Certificate means the Energy Saving Certificate issued by the Central Government in the Ministry of Power to the designated consumer in accordance with the procedures laid down by it under the provisions specified in ESCerts Regulations. The certificate shall be banked and extinguished as per PAT Rules, 2012 and its amendment from time to time.

3.4. Cycle

Cycle means a period as specified in PAT Rules, commencing from the 1st day of April of the starting year and ending on the 31st day of March of the target year. The first Cycle would covers the 3 year period commencing from the 1st April, 2012 and ending on the 31st March, 2015 and the second cycle covers the 3-year period from 1st April 2016 to 31st March 2019.

3.5. Designated Consumer

Designated consumer (or DC) means any consumer notified by the Central Government under clause (e) of the Section 14 of the EC Act, 2001 and for which a target is notified under the statutory orders issued by the Government of India from time to time;

3.6. Detailed Procedure

Detailed procedure means the Detailed Procedure issued by the Administrator as defined in the Central Electricity Regulatory Commission (Terms and Conditions for Dealing in Energy Savings Certificates) Regulations, 2016 as amended from time to time;

3.7. ECAct

ECAct means the Energy Conservation Act, 2001 (52 of 2001);

3.8. Eligible Entity

Eligible entity means any designated consumer registered with Registry who has been issued or deemed to have been issued ESCerts and desire to sell or purchase such ESCerts for compliance with the energy consumption norms and standards specified under clause (g) of section 14 of the EC Act as amended from time to time;

3.9. Energy Conservation Rules

Energy conservation Rules means the Energy Conservation (Energy Consumption Norms and Standards for Designated Consumers, Form Time within which, and Manner of Preparation and Implementation of Scheme, Procedure for Issue of Energy Saving

Certificates and Value of Per Metric Ton of Oil Equivalent Energy Consumed) Rules, 2012 and as amended from time to time;

3.10. ESCert Regulation

ESCert Regulation means the Central Electricity Regulatory Commission (Terms and Conditions for Dealing in Energy Saving Certificates) Regulations, 2016 as amended from time to time.

3.11. Registry

Registry means the agency designated by Government of India in the Ministry of Power to perform such functions as defined in these regulations with respect to ESCerts.

Provided that NLDC operating under Power System Operation Corporation Limited (POSOCO), shall function as registry for ESCerts, as notified by Government of India in the Ministry of Power vide Notification No. 10/4/2015 dated January 05, 2016, unless the Ministry of Power decides otherwise;

3.12. State Commission

State Commission means the State Commission referred to in the Electricity Act 2003 and includes a Joint Commission referred to in the Electricity Act 2003;

3.13. Target Year

Target year means the third financial year from the starting year during which a designated consumer shall achieve compliance with the energy consumption norms and standards prescribed under clause (g) of section 14 of the ECAct;

3.14. Year

Year means a financial year;

4. Membership

4.1. The Exchange shall have following categories of Members in Energy Saving Certificate Segment:

4.1.1. Trading and Self Clearing Member (TSCM):

TSCM shall be the Members admitted as such by the Exchange who shall be entitled to trade on Exchange only by their own account and shall also be bound to clear and settle all such trade done by them.

4.1.2. Trading cum Clearing Member (TCM):

TCM shall be the Members admitted as such by the Exchange who shall be entitled to trade on Exchange on behalf of their clients or on their own account and shall also be bound to clear and settle all such trades done by them.

4.1.3. Advisory Member (AM):

AM shall be the Members admitted as such by the Exchange who can provide advisory services to its clients, as provided in the Regulations or as amended from time to time. Such members shall not be entitled to either trade or clear.

Participation in the Energy Saving Certificate Segment would be allowed to entities registered as members in any of the categories mentioned above.

4.2. A Designated Consumer or an Eligible Entity may be restricted to specific member categories as may be prescribed by Exchange from time to time.

4.3. The Relevant Authority may authorize a Designated Consumer or an Eligible Entity to become a client of any other member in accordance with requirements as may be prescribed and as per requirements, if any, of the ESCert Regulation.

4.4. The rights and privileges of a member shall be subject to the Rules, Bye Laws, Business Rules and Circulars issued by Exchange from time to time.

4.5. Members and their clients who would be eligible to sell and buy certificates in their own name registered under this segment shall be allotted a unique code by the Registry.

4.6. The Relevant Authority may define other categories of members and may specify different norms including eligibility, admission and cessation of membership.

4.7. The Relevant Authority may specify pre-requisites, conditions, formats and procedures for application for admission, termination, re-admission, etc. of different categories of members and eligibility criteria for Trading /Clearing in all or any of the Contracts under the Energy Saving Certificate segment of the Exchange. The Relevant Authority may, at its absolute discretion, refuse permission to any applicant to be admitted as a Member or its clients.

4.8. Such fees, security deposit, contribution and other money as are prescribed by the Relevant Authority would be payable on or before admission as Member and for continued appointment thereof.

4.9. Relevant Authority may define different membership criteria including membership fee structure etc. Such criteria would be applicable on members as notified by the Exchange from time to time

5. Trading System

5.1. The Exchange shall provide an Automated Trading facility through a Trading System for Trading of all the Contracts admitted as applicable for a member with such rights as the Exchange may permit.

5.2. Trading on the Exchange shall be allowed only through Workstation(s) located at Member office(s) and/or through mobile devices like laptop, mobile, tablet PC, with pre registered processes that are equipped with secure web based browsing platforms as approved by the Exchange. Exchange may specify, from time to time, necessary security requirements and arrangements for browser based trading system access.

5.3. Each Member shall have a unique Member Code depending upon the type of membership category registered which shall be provided by the Exchange at the time of enrollment of the Member and which shall be used to log on (sign on) to the Trading System.

5.4. A Member shall have a non-exclusive permission to use the Trading System, as provided by the Exchange, in the ordinary course of business as a Member of the Exchange.

5.5. A Member shall not have any title rights or interest whatsoever with respect to Trading System, its facilities, software and the information provided by the Trading System.

5.6. The Exchange will provide the application software for installation of the Trading system or a secured web based access to the Trading system, or both, as may be decided by the Exchange, to the Member. The Member will pay to the Exchange, charges for installation and support (if any) as may be prescribed by the Exchange from time to time. The Exchange will upgrade/modify the application software to include additional features and functionalities, new products as may be required and provide the same to the Members, charges for the same (if any) will be paid by the Member as may be prescribed by the Exchange from time to time.

5.7. Access to the Trading System may be withdrawn or restricted by the Relevant Authority at any time without assigning any reason at its absolute discretion. The Member shall, at its own costs, install and use such equipment and software as specified by the Exchange from time to time for the purpose of accessing the Trading System.

5.8. A Member shall not, either by himself or through any other person(s):

    5.8.1. Use the software provided by the Exchange for any purpose other than the purpose as approved and specified by the Exchange.

    5.8.2. Use the software provided by the Exchange on any equipment other than the workstation e.g. laptop, mobile, tablets, etc. as approved by the Exchange.

    5.8.3. Copy, alter, modify or make available to any other person the software provided by the Exchange.

    5.8.4. Use the software in any manner other than the manner as specified by the Exchange.

    5.8.5. Attempt directly or indirectly to de-compile, disassemble or reverse engineer the same.

5.9. A Member shall not, either by itself or through any other persons on his behalf, publish, supply, show or make available to any other person or reprocess, retransmit, store or use the facilities of the Trading System or the information provided by the Trading System except with the explicit approval of the Exchange or in the ordinary course of business to complete the transactions on the Exchange.

5.10. The Exchange shall provide its services on a best effort basis. However the Exchange shall not be liable for failure or malfunctioning of the Trading System or any other support systems and or for any loss, damage, or other costs arising thereupon and/or on account of and in any way out of:

5.10.1. Failure of telecom network or systems including failure of ancillary or associated systems, or fluctuation of power, or other environmental conditions;

or

5.10.2. Accident, loss/damage arising due to transportation, neglect, misuse, errors, frauds of the Member or its Authorized Users or the agents or any third party; or

5.10.3. Any fault in any attachments, system or equipments (either supplied by the Exchange or approved by the Exchange) which forms or does not form part of the Trading workstation installation;

or

5.10.4. Acts of God, fire, flood, war, act of violence, or any other similar occurrence or for any reason beyond the control of Exchange; or any incidental, special or consequential damages

5.11. No Member shall deal on or access the Trading System or related facilities through another member or on behalf of another member, unless the prior approval of the Exchange in writing is obtained in this regard.

5.12. At the Member's end, connectivity requirements and requirement for other IT infrastructure will be prescribed by Exchange from time to time. In order to connect with the PXIL Trading System, the members shall ensure compliance to the respective circulars. Members shall also ensure to provide diversity in workstations and connectivity to safeguard against any unforeseen eventualities. There is no restriction unless specified by the Exchange on the number of terminals or web based interface that the Member can have or use. For enablement of each of the terminal, online or /offline application in the prescribed format would have to be submitted to the Exchange as intimated by the Exchange from time to time.

6. Dealings on the ESCert Trading Segment

6.1. Members and Users

6.1.1. Trading and/or Clearing Members shall only be entitled to appoint, (subject to such terms and conditions, as may be prescribed by the Relevant Authority) from time to time Approved Users to use the Trading System. An Approved User can be a client of the member or the member himself and/or his representatives or an Advisory Member.

6.1.2. Trading and/or Clearing Member will be issued a unique User login and a password to each of its Approved Users through which the Approved User shall have access to the Trading System. The Approved User will be asked to change his password when he signs on to the Trading System for the first time.

6.1.3. A Member or its Approved Users thereof shall maintain complete secrecy of their password(s).

6.1.4. Any trade or transaction done by use of password of any Approved User of the Member, shall be binding on such Member.

6.1.5. The Approved User shall be required to change his password at the end of the password expiry period. The Exchange shall prescribe the password expiry period and/or other security features from time to time.

6.2. Contracts

All the Contracts as detailed herein below are based on extant regulations and may change from time to time, as Prescribed by the Exchange, with any change in the Applicable Laws.

6.2.1. Energy Saving Certificates Market – Operations

6.2.1.1. Trading Days

The Exchange shall operate on various days as may be prescribed by Exchange from time to time, called the Trading Days, which shall abide by the requirements of ESCert Regulation and Detailed Procedure, as amended from time to time. The same will be intimated to the Members/clients by the Exchange from time to time.

6.2.1.2. Auction Trade Session

Auction Trade Sessions are specific times within the Trading Days during which the Energy Saving Certificate contracts would be available for Trading on the Exchange. The Auction Trade Session timings would be notified to the Members/clients by the Exchange from time to time.

Trading hours shall be as provided in the Detailed Procedure issued by the Administrator.

6.2.1.3.   Trading Cycle

Trading Cycle of the Exchange would be in accordance with relevant provisions of the ESCert Regulation and Detailed Procedure, as amended from time to time. The various steps in the Trading Cycle would be intimated to the Members/clients by the Exchange from time to time.

6.2.1.4.   Contract Specifications:

For the ESCert contract the detailed contract specifications are given in 'Annexure - I' of these Business Rules. These contract specifications will form an integral part of these Business Rules and shall be binding on all members and their clients transacting on the Exchange. Any contract entered into in violation of these norms or not conforming to the specifications laid down by the Exchange shall be considered as void.

6.2.1.5.   Number of Certificates bid for Buy/Sell :

Entities placing Sell bids of ESCerts onto the Exchange Trading system should ensure that the number of ESCerts placed for Sell are limited to such number of Certificates that exist with them on a given Trading Day, after taking into consideration the Sell bids that it has placed with any other Exchange.

Entities placing Buy bids of ESCerts onto the Exchange Trading system should ensure that the number of ESCerts placed for purchase is limited to such number of Certificates that needs to be purchased on a given Trading Day, after taking into consideration the Buy bids that it has placed with any other Exchange

As per the Detailed Procedure issued by Administrator, Exchange shall confirm with the Registry, the number of Certificates that can be bid by an Entity. Exchange shall cancel the bid in case any deviation is observed and/or intimated by Registry. Exchange will prescribe from time to time the procedure for confirmation from Registry as per the Detailed Procedure and advice from the Registry.

6.2.1.6.   Delivery of Purchase/Sell Certificate:

The delivery of Certificate transacted and cleared through the Exchange would be as prescribed by the Exchange from time to time under its Settlement procedure and

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as per the Detailed Procedure, as amended from time to time. The Settlement cycle in the ESCert contracts would be prescribed by the Exchange from time to time.

6.2.1.7. Issuance of Purchase/Sell Certificate:

An electronically printable Purchase/Sell Certificate would be issued to the all successful Buyers/Sellers within five days from the date of trading of such certificates or as stipulated by CERC or in line with the Approved Procedure issued by the Administrator. The Purchase/Seller Certificates would be as per Annexure III of this Business Rules or as stipulated by CERC or the Administrator or the Registry from time to time.

6.2.1.8. Levy of monies, charges, levies, taxes, etc.:

Any charges as prescribed by Regulator or by any other statutory entity, through the Detailed Procedure or through any other document binding on the ESCert contract would be paid by the Members for transactions on the Exchange.

6.2.1.9. Fulfillment of Contractual liability

Members can fulfill their contractual liabilities only through delivery of ESCerts by the Sellers and by payment of all monetary obligations to the Exchange by the Buyer.

6.2.1.10. Invalidation of a Traded Contract

The Exchange may, before sending the provisional trade to Registry, invalidate a matched Contract, if according to the Exchange; a Member has attempted to conclude the transaction in violation of the Rules, Bye-laws and Business Rules of the Exchange or with an intention of price manipulation, price rigging or price distortion or if so directed by the Registry or the Commission in accordance with Applicable Laws.

6.2.1.11. Settlement Guarantee

Subject to the Bye-Laws, the Exchange shall guarantee the settlement of all the trades done on the Exchange in accordance with the Bye-Laws of the Exchange. The settlement guarantee of the Exchange shall be confined to the extent as may be prescribed in the Applicable Laws from time to time.

6.2.1.12. Governing law & Jurisdiction

Every Contract executed as per Rules, Bye-laws and Business Rules of the Exchange shall take effect as a Contract made in Mumbai and shall be governed by the laws of India under the jurisdiction of the Courts of Mumbai.

6.2.1.13. Types of Orders

The Exchange shall introduce various types of orders as per the requirement of the market. Details of such other possible orders shall be notified by the Exchange from time to time.

6.2.1.14. Order Validation

The bids and offers entered by the Approved Users into the Trading system would be validated by the Exchange as per various parameters of price /quantity /margins etc. decided from time to time. Only after successful validation, the orders would be accepted by the Exchange.

Members shall be solely responsible for the accuracy of details of orders entered/modified into the Trading System including orders entered on behalf of their Clients.

6.2.1.15. Matching Rules

Matching Rules would be as per Annexure-II of these Business Rules. The Exchange reserves its right to modify or change the matching rules as per any of the methodology prescribed in Annexure-II to these Business Rules as would be felt relevant and necessary to do so, subject to the approval of Annexure-II by CERC.

6.2.1.16. Reports

During and at the end of Trading Session, the Exchange will give various reports to the members to inform them about their successful trades along with their obligation. Such reports would include the Final Obligation Report, Purchase Certificate and other relevant reports as decided by the Exchange from time to time.

After each trading session, the Exchange shall display the demand supply curves on its website to enable the eligible entities understand demand supply dynamics in the market.

6.2.1.17. Settlement

Based on the matching of Trades executed on the Exchange platform, the Registry would arrange for Extinguishment of Certificates as per the Detailed Procedure. The Registry will have the sole discretion to extinguish or redeem the certificates from Eligible Entity. Funds Settlement will be done by Exchange as Prescribed from time to time.

6.2.1.18. Order Management

Exchange will have the right to manage the orders as required in the best interest of the market or as per the instruction from the Registry or CERC.

7. Clearing and Settlement of ESCerts

7.1. Margin Requirements

Margin Requirements for the ESCert segment have been detailed in the Contract Specification attached as Annexure–I to these Business Rules. The Exchange may modify the requirements of the margin from time to time. Exchange may also levy any kind of additional margin as felt necessary for the market.

7.2. Settlement Cycle

The Settlement Cycle for the ESCert segment has been detailed in the Contract Specification attached as Annexure–I to these Business Rules. The Exchange may modify the settlement cycle as felt necessary for the market and in accordance with the requirements of the ESCert Regulation and the Detailed Procedure.

8. Clearing Bank

The Exchange shall designate banks as Clearing Banks for transfer of funds between Members and the Exchange. Exchange reserves right to include or exclude any banks as Clearing Bank.

Members shall submit undertaking to the bank to debit or credit the account as per Exchange's instruction. The undertaking shall be submitted as per the format specified by the Exchange from time to time.

9. Trading Members and Clients

Exchange may specify different norms for inclusion of Clients under any Member category as per the Applicable Laws. The eligibility criteria, norms, rights and obligations of Clients would be prescribed by Exchange from time to time.

10. Arbitration

Arbitration will be done as per Bye Laws of the Exchange.

11. Records, Annual Accounts and Audit

Members in ESCert Segment shall comply with and ensure compliance of Records, Annual Accounts and Audit as per the Rules, Bye Laws, Business Rules and Circulars of the Exchange as issued and amended from time to time.

12. Inspection

12.1. Inspection Authority

Where it appears to the Exchange so to do, it may appoint one or more persons as inspecting authority to undertake inspection of books of accounts, other records and documents of the Members for any of the purposes

a) The Inspecting authority appointed by the Exchange may be either its own officials or outside professionals.

b) When the Exchange appoints outside professionals as an inspecting authority, it shall notify to the Member the names and addresses of the professionals or firms so appointed as an inspecting authority at the time of inspection.

c) When outside professionals are appointed as an inspecting authority in respect of a Member and such professionals are already related in any other capacity with the Member then such member shall forthwith inform the Exchange of such relationship.

d) Where after appointment of any outside professional as an inspecting authority in respect of a Member, the Member or any of its associates engages the inspecting authority for its services in any other capacity, the inspecting authority shall not engage itself in such other professional capacity with the Member or any of its associates without prior consent of the Exchange.

The purposes of the inspection could be, namely:

a) to ensure that the books of accounts and other books are being maintained in the manner required;

b) to ensure that the provisions of Applicable Laws are being complied with;

c) to ensure that various provisions of Rules, Bye Laws, Business Rules and any other Circulars of the Exchange issued there under are being complied with;

d) to investigate into the complaints received from Clients, other members of the Exchange or any other person on any matter having a bearing on the activities of the Member;

e) to investigate suo-motu, for any reason where circumstances so warrant an inspection into the affairs of the Member in public interest;

f) to examine whether any notices, circulars, instructions or orders issued by the Exchange from time to time relating to Trading and other activities of Members are being complied with;

g) to comply with any of the directives issued in this behalf by any regulating authority including Government of India.

h) Any other activity at the discretion of Commission/Administrator/Registry/Exchange from time to time.

12.2. Notice

Before undertaking any inspection, the Exchange shall give a reasonable notice to the Member for that purpose.

Notwithstanding anything contained herein, where the Exchange is of the opinion that no such notice should be given, it may direct in writing that the inspection of the affairs of the Member be taken up without such notice.

Exchange officials or the inspecting authority who is directed by the Exchange to undertake the inspection, shall undertake the inspection and the Member against whom an inspection is being carried out shall be bound to discharge his obligations as provided by the Exchange from time to time.

12.3. Obligations of a Member on Inspection

It shall be the duty of every director, officer and employee of the Member, who is being inspected, to produce to the inspecting authority such books, accounts and other documents in his custody or control or arrange to produce where such books, accounts and other documents when they are in any other person's custody or control and furnish him such statements and information within such time as the said inspection authority may require.

The Member shall allow the inspecting authority to have reasonable access to the premises occupied by him or by any other person on his behalf and also extend reasonable facilities for examining any books, records, documents and computerized data in his possession or any other person and also provide copies of documents or other materials which in the opinion of the inspecting authority are relevant.

The inspecting authority, in the course of inspection shall be entitled to examine or record statements of any member, director, officer and employee of the Member or of any associate of such Member.

It shall be the duty of every director, officer and employee of the Member or where an associate is examined, such associate to give to the inspecting authority all assistance in connection with the inspection which the Member may be reasonably expected to give.

The inspecting authority shall be entitled to examine the records relating to the Member's financial affairs held with its bankers or any other agency which the inspecting authority may find relevant.

The inspecting authority shall have access to accounts and other records relating to the Member or such access as authorized by the Exchange to accounts and other records relating to any associate of the Member as are within the power of the Member to provide.

12.4. Submission of Report

The inspecting authority shall, as soon as possible submit an inspection report to the Exchange.

All documents, papers, returns or their copies submitted to the inspecting authority may be retained by it on behalf of the Exchange. It shall maintain complete confidentiality thereof and no disclosure of any information contained therein shall be made to any person, firm, company or authority unless required by any law for the time being in force and without approval of the Exchange in this regard.

a) The Exchange shall after consideration of the inspection report communicate the findings to the Member to give him an opportunity of being heard before any action is taken by the Exchange on the findings of the inspecting authority.

b) On receipt of the explanation, if any, from the Member the Exchange may call upon Member to take such measures as the Exchange may deem fit in public interest.

c) Notwithstanding anything contained herein, where the Exchange is of the opinion that no such hearing should be provided in certain circumstances, it may take action forthwith without giving an opportunity of being heard.

12.5. Collection and Dissemination of Information

The Exchange may call upon the members to furnish such information and /or explanation with regard to any constitution, dealings, settlement, account and/or other related matters.

The Exchange shall maintain the details of the members in confidence and that it shall not disclose to any person/ entity such details as mentioned or any other information pertaining to the Member except as required under the law or by any authority.

Notwithstanding anything contained in any of the regulations, the Exchange may at its discretion disseminate to other exchanges or regulatory authorities or to the general public, any information including information relating to any trades, dealings, settlement of dealings, accounting, disciplinary action initiated/taken against Members and/or other matters relevant for enforcement or regulatory purposes.

13. Conflict between Rules, Bye Laws and Business Rules

In event of any conflict between Business Rules and Bye Laws, the contents of Bye Laws shall supersede and in the event of any conflict between Rules and Bye Laws or Rules and Business Rules, the Rules shall supersede. Without prejudice to the generality of above, in case of any ambiguity or any confusion with regard to any of the provisions of Business Rules, the clarification given by Exchange shall be binding.

14. Annexure

Annexure I - PXIL Energy Saving Certificate Contract Specifications

1. Basic Contract Specifications.

Type of Market	Energy Saving Certificate Contract
Trading System	PXIL
Trading Methodology	Closed double-sided **uniform** price auction
Trading Days	Every Tuesday of the Week or any other day as specified by Commission/Administrator/Registry.
Auction Timings	13:00 hours to 15:00 hours on the day of Auction or as amended by Exchange from time to time
Minimum Bid Volume	1 Certificate [Equivalent to one (1) Metric Ton of Oil equivalent (MToE)]
Minimum Volume Quotation Step	1 Certificate [Equivalent to one (1) Metric Ton of Oil equivalent (MToE)]
Minimum Value Quotation step	Rs. 1 per Certificate or as defined by the Exchange from time to time
Settlement Price(s)	As per Matching Rules of Exchange detailed in Annexure II of these Business Rules

2. Orders

Eligible Entity can sell only those ESCerts which are authenticated and issued by the Central government to the designated consumer under sub-section (1) of section 14(A) of EC Act,

2001. Similarly eligible Entity is allowed to purchase ESCerts for compliance under provisions of PAT Rule, 2012.

The onus on placing orders will rest with the Eligible Entity, either directly or indirectly, and in case of any deviation, Exchange would reserve the right to levy penalty on the Eligible Entity, either directly or indirectly, in addition to those levied by Registry, Administrator and CERC if any.

Before matching of Trade, Exchange would confirm the quantum of ESCert to be purchased/sold by each eligible entity with the Registry and only on confirmation would the Trades get executed between Buyer and Seller. Exchange shall reject all those bids which are not in conformity with information received from Registry.

3. Auction Trade Session

The Auction Trade Session timings for ESCerts would be from 13.00 hrs to 15.00 hrs on every Tuesday of the week. The Auction Trade Session day/timings may be modified by the Exchange from time to time in accordance with the Detailed Procedure or the ESCert Regulation or any directives issued by Commission/Administrator/Registry and would be notified to the Members from time to time.

4. Trade Cycle

The following would be the Trade Cycle for the ESCert mechanism as per the Detailed Procedure.

a) The bidding window would open simultaneously on all the Power Exchange(s) designated for dealing in the ESCerts by CERC from 13:00 hrs to 15:00 hrs on the day of auction.

b) The Power Exchange(s) shall intimate the details of maximum Buy/Sell bids submitted by each eligible entity to the Registry by 15:30 hrs on the day of auction.

c) The Registry shall check and send a report to the power Exchange(s) providing information about permissible buy/sell quantity against each eligible entity that needs to be considered by 16:00 hrs.

d) The Power Exchange(s) shall determine the Market Clearing Price and the Market Clearing Volume taking into account the advice received from the Registry by 17.00 Hrs and send the final cleared trades to the Registry about ESCerts transacted during the sessions by 17:15 hrs.

e) The Registry shall send the 'Transaction Approval Acknowledgement' to the Power Exchange(s) by 17.30 hrs.

Any change in the above Trade Cycle would be intimated to the Members from time to time.

5. Margin

The payment security mechanism shall be as follows:-

a) Buyer: Members purchasing ESCerts through the Exchange's trading system may be required to place margins equivalent in value to the full amount of purchase including other fees, levies and charges in the form of cash or cash equivalents.

b) Seller: Members selling ESCerts through the Exchange's trading system may be required to place margins to cover the value of the required fees, levies and charges.

In case of default in payment, margins placed with the Exchange will be invoked to make good the default in payment. All other forms of margin collected by the Exchange till such time may also be impounded. Exchange may also impose margins from time to time on the Seller, as may be felt necessary. Exchange reserves its right to change the margin requirements from time to time as felt necessary.

6. Settlement

Billing Cycle would correspond to the Day of Trading (identified as 'T') and payment from Buyer will be taken on T-day basis. Seller will receive payment on (T + 1) day basis. Exchange reserves its right to change the settlement cycle from time to time as felt necessary. If there is banking holiday then billing cycle would be T+1 for taking from buyer(s) and T+2 day for making payment to seller(s)

7. Validity and Tenure

The Contract Period and validity will be notified by the Exchange from time to time.

8. Transaction Fee

Transaction Fee for Energy Savings Certificate Contract will be as notified by Exchange through subsequent circulars from time to time.

9. Default in Payment

In case of Default in payment by Member, the Exchange has the right to initiate appropriate action against such member(s)/client(s). The Exchange in such circumstance may levy a penalty.

10. Force Majeure

The delivery of certificates from Seller to Buyer shall be subject to "Force Majeure" conditions, as defined below.

"Force Majeure" means any event or circumstance or combination of events or circumstances, direct and/or indirect, which is or are beyond the control of a Party and that results in or causes the failure of that Party (the "non-performing party") to perform any of its obligations under this Agreement, and includes: -

a) Act of strike, war, invasion, armed conflict, blockade, revolution, riot, insurrection or civil commotion, terrorism, sabotage, fire, explosion or criminal damage;

b) Act of God, including lightning, cyclone, typhoon, flood, tidal wave, earthquake, landslide, epidemic or similar cataclysmic event;

c) The expropriation or compulsory acquisition by any Government or Governmental agency;

d) Technical problems or authenticity of certificates from Registry.

e) Change of Law

f) Regulatory intervention in the matter of Certificate Trading as also orders from CERC/ Administrator/ POSOCO/ Registry/SERCs/ Appellate Tribunal / High Courts/ Supreme Court or any other Statutory Authority particularly related to dealing in ESCert. This will also include regulations / orders already issued but yet to be conclusively enforced.

g) Any restriction / failure of ESCerts Registry System (D-CRM) and otherwise will be treated as force majeure without any liability on the Exchange.

Where a non-performing party is unable to perform its obligations under this Agreement by reason of Force Majeure, the non-performing party shall notify the other party as soon as practicable of the occurrence of Force Majeure, identifying the nature of the event or circumstance of Force Majeure, the expected duration of such Force Majeure, the particular obligations of the non-performing party which are affected by such Force Majeure and the period for which such obligations are expected to be so affected.

The obligations of the Parties under this Agreement shall be suspended only to the extent that:

a) Such suspension is of no greater scope and no longer duration than is required by the effects of the relevant event or circumstance of Force Majeure; and

b) The non-performing Party uses all reasonable efforts to remedy, as soon as practicable, its inability to perform the affected obligations.

Force Majeure conditions for minimum prescribed period of time as may be agreed by the Exchange in consultation with Regulator, Administrator and Registry.

11. Indemnification

Each Party shall indemnify, defend and hold harmless the other, its directors, members of the Board, partners, assigns, trustees, agents, officers and employees, against all claims, demand, judgments and associated costs and expense, related to property damage, bodily injuries or death suffered by third parties resulting from breach of its obligation by such Party under this Agreement except to the extent that any such claim has arisen due to a negligent act or omission, breach of contract or breach of statutory duty on the part of the other Party, its contractors, servants or agents.

Both the Parties agree to indemnify PXIL, Registry, Administrator and CERC against any claim for damages, losses and actions, including those relating to any injury to or to death of any person or damage to any property of any person demands, suits, recoveries, costs and expenses, attorney fees, against the third parties, arising out of or resulting from or attributable to the transactions on the Exchange.

12. Dispute Resolution

If any dispute or difference of any kind whatsoever ("Dispute") shall arise between the Parties in connection with or arising out of this Agreement or out of the breach, termination or invalidity of the Agreement hereof, the Parties shall resolve them by resort to the following in the order so mentioned:

a) Parties shall attempt to resolve the dispute or difference through mutual discussions within 15 days.

b) In case both the parties are unable to resolve the issue of dispute or difference, the matter will be referred to the Arbitration panel of PXIL. The following provisions shall then apply:

1. The rights and obligations of the Parties shall remain effective during the arbitration proceedings and the Parties shall continue to perform ;

2. The place of arbitration shall be Mumbai, India;

3. The language of the arbitration shall be English;

4. Any dispute submitted to arbitration shall be considered by three arbitrators from the Arbitration Panel of PXIL, two of whom shall be nominated by either party. If within 30 days of the receipt of a Party's notification of the appointment of an arbitrator, the other Party has not notified the first Party of the arbitrator it has appointed, the first party may apply for the appointment of the second arbitrator in accordance with the Arbitration Act. The third arbitrator will be nominated by the two existing arbitrators or, failing such nomination within 30 days of the

appointment of the second arbitrator, shall be appointed in accordance with the Arbitration Act.

5. Each party shall bear its own costs pursuant to Arbitration. The costs and fees payable to the arbitrators shall be equally shared by the Parties unless decided otherwise by the arbitrators pursuant to the award of Arbitration.

Notwithstanding the existence of any Dispute, whether referred to arbitration or not, the Parties hereto shall continue to perform their respective obligations under this Agreement throughout the Term of the Product.

13. Notices and Correspondence

All notices for billing and correspondence must be delivered personally, by registered or certified mail or facsimile to Exchange at the following addresses mentioned: *Power Exchange India Limited, Sumer Plaza, 9th floor, Unit no 901, Marol Maroshi Road, Andheri (East), Mumbai – 400 059, India.*

14. Authority

Both Parties agree, that they have all the legal power and authority to execute this Agreement and carry out the terms, conditions, provisions and covenants hereof.

15. Survival

The expiry or termination of this Agreement shall not affect any right of the party to receive payment as per the terms of this Agreement.

16. No Consequential or Indirect Loss

The liability of the Buyer and Seller shall be limited to that explicitly provided in this Agreement. Notwithstanding anything contained in this Agreement, under no event shall Buyer or the Seller claim from one another any indirect or consequential losses or damages.

17. No Waiver

No failure or neglect on the part of either Party to exercise any right or remedies under this Agreement and no single or partial exercise thereof shall preclude any further or other exercise of such rights and obligations. Further any delay or omission by either Party to exercise any right or power arising from any breach or default by the other Party in any of the terms and conditions or provisions of this Agreement shall not be construed to be a waiver of such breach or default or subsequent default of the same or other terms, conditions, provisions and covenants.

18. Governing Law

This Agreement shall be governed by and construed in accordance with laws of India.

Annexure II of ESCERT Business Rules

Matching Rules

Uniform Price Double sided Auction

1. Types of Orders

   1.1. Normal bids – For specific quantity at a specific price – Buyer would be willing to buy at or below the quoted price and Seller would be willing to sell at or above the quoted price.

   1.2. Block bids – Exchange may allow different types of Block bids as felt necessary from time to time like:

      1.2.1. "All or none" type of Block bids for number of Certificates

      1.2.2. Any other type of Block bids

   1.3. Other bids as may be notified from time to time

   1.4. Entities can submit multiple bids for Certificates. These bids would be stacked such that the order matching condition specified in clause 2.1 below is satisfied. In other words, if a Buyer bids as follows:

Price (Rs.)	Quantity
2,000	200
5,000	70
7,000	50

The above bidding implies the following:

Buyer will buy quantity of 50 if the MCP is Rs. 7,000 or below but greater than Rs. 5,000

Buyer will buy quantity of 120 (i.e. 50 + 70 =120 and not 70) if the MCP is Rs. 5,000 or below but greater than Rs. 2,000

Buyer will buy quantity of 320 (i.e. 50 + 70 + 200 =320) if the MCP is Rs. 2,000 or below.

If Seller submits the Order as under:

Price (Rs.)	Quantity
7,000	200
5,000	60
2,000	50

The above bidding implies the following:

Seller will sell quantity 50 if MCP is Rs. 2,000 or above but less than Rs. 5,000

Seller will sell quantity of 110 (i.e. 50 + 60 = 110 and not 60) if MCP is Rs. 5,000 or above but less than Rs. 7,000

Seller will sell quantity of 310 (i.e. 50 + 60 + 200 = 310 and not 200) if MCP is Rs. 7,000 or above

2. The Order matching rules will have the following features

    2.1. All purchase bids can have only non-increasing quantity for every increase in the bid price, and every sell bid will have only non-decreasing quantity for every increase in the bid price for a particular Contract.

    2.2. For every client placing a buy or sell bid, the quoted price-volume combination would be held constant till the next quoted price-volume combination, if provided. Thus a buy or sell quantity shall be assumed to remain constant between consecutive price points.

    2.3. All buy and sell bids would be aggregated to form demand and supply curves through which the Market Clearing Price (MCP) would be arrived at. In case of single buyer submitting multiple bids, the volumes would be as per example provided in clause no. 1.4. However in case of bids by multiple clients, the volume would be cumulative at the price ticks specified.

    2.4. Matching would have Price Priority. In case of bids with same price as MCP, matching would be done on a Quantity Pro-Rata basis. Any fractional matched bid occurring out of the same would be rounded off and balance if any, would be allocated on time priority i.e allocation will be given to the client who has bid earliest. (Please refer Illustration 1 as provided later for better understanding on the matching priority).

    2.5. Price Rounding off would be to the nearest defined price tick (as given in the Contract Specifications).

3. The Matching Rules would go through the following steps:

    3.1. All the BUY orders are summed up at each price tick to arrive at the Aggregate Demand (AD) per price tick

    3.2. All the SELL orders are summed up at each price tick to arrive at the Aggregate Supply (AS) per price tick

    3.3. Step curves for the Aggregate Supply and Aggregate Demand would be created through all the price ticks

    3.4. The intersection of AD and AS curves is determined to arrive at the Market Clearing Price (MCP) and Market Clearing Volume (MCV).

3.5.   In case of overlapping Supply and Demand Curves, the following rules would apply:

3.5.1.   In case of overlapping Supply and Demand curves for multiple volume points, the highest volume point will be Market Clearing Volume (MCV). This follows the principle of Maximum Executable Volume (for better understanding please refer to illustration 2 provided later)

3.5.2.   In case of overlapping Supply and Demand curves for multiple price ticks, the average of the lowest price tick and the highest price tick within which such overlap was applicable, will be the MCP. This follows the principle of fair price discovery (for better understanding please refer to illustration 3 provided later)

3.6.   Trade Generation

3.6.1.   Sell and Buy orders are sorted on the basis of price priority.

3.6.2.   All the Sell bids which have price less than or equal to MCP and all the Buy bids which have price more than or equal to MCP are successful.

3.7.   Trade Allocation

Trade Allocation for single bids would be as follows:

3.7.1.   Allocation principle in case of bids above MCP and below MCP

All buy bids above MCP are allocated the same number of certificates as their bid quantity. All sell bids below the MCP are allocated the same number of certificates as their bid quantity.

3.7.2.   Allocation principle in case of same price Bid as MCP

In case, multiple participants have bid at the same price as MCP, the trades would be allocated on pro-rata basis between all participants:

3.7.2.1.   If at the MCP, aggregate Sell quantity is less than aggregate Buy quantity, then the aggregate Sell quantity is apportioned on Quantity Pro-Rata basis to the Buyers (since all have bid with the same price) limited to the Buyer's bid. Fractional or balance quantity which would emerge after the apportionment would be re-apportioned to Buyer(s) on the basis of Time Priority till such Buyer's order is fulfilled. Any quantity remaining further would be allotted to the next Buyer in Time Priority (for better understanding of the same, kindly refer illustration 4 and illustration 5 as provided later).

3.7.2.2.   If at the MCP, aggregate Buy quantity is less than aggregate Sell quantity, then the aggregate Buy quantity is apportioned on Quantity Pro-Rata basis to the Seller (since all have bid with the same price) limited to the Seller's bid. Fractional or balance quantity which would emerge after the apportionment would be re-apportioned to Seller(s) on the basis of time priority till such

Seller's order is fulfilled. Any quantity remaining further would be allotted to the next Seller in time priority (for better understanding of the same, kindly refer lustration 6 and 7 as provided later).

3.7.2.3.   When for a price tick Aggregate Sell is equal to Aggregate Buy, then Sell side would be apportioned to buy quantity since the Sell and Buy would be consumed fully. Fractional quantity which would emerge out of the pro-rata would be apportioned to Buyer(s) on the basis of time priority till such Buyer's order is fulfilled. Any quantity remaining would be given to the next Buyer in time priority (for better understanding of the same, kindly refer to illustration 1 provided later).

Trade Allocation for multiple bids would be as follows:

In case of multiple bids by a participant, the bids would be cleared without violating the condition as specified in Point No.1.4. If a buyer has bid as follows:

Price (Rs.)	Quantity
3,300	20
3,000	40
2,000	100

The bids would be considered as follows in the trading system:

Price (Rs.)	Quantity
3,300	20
3,000	20
2,000	60

In the above example, if MCP discovered is Rs. 2500, then the buyer would be allocated 40 certificates and not 60 certificates.

Allocation principle in case of bids above MCP and below MCP would be according to Rule 3.7.1. If there are multiple bids at the same price as the MCP, allocation would be according to Rule 3.7.2.

Single and multiple bids would be considered together for matching while maintaining the above specified rules.

The Matching Rules have been illustrated below:

Illustration of Matching priorities in Uniform Price Auction

1. **Aggregate demand more than aggregate supply with bids received at same price from buyers**

Suppose during a trading session the following bids are received:

Participant	Price (Rs.)	Qty	Time
Buyer 1	2,500	1,500	12:10
Buyer 2	3,000	1,000	12:50
Buyer 3	2,500	1,500	13:55
Buyer 4	2,500	1,500	13:59
Seller 1	1,500	3,000	12:10
Seller 2	3,000	2,000	12:50

According to Rule 3.1 & Rule 3.2 the aggregate demand & aggregate supply at each price tick is computed as:

Price (Rs.)	Aggregate Demand	Aggregate Supply
1,500	5,500	3,000
2,500	5,500	3,000
3,000	1,000	5,000

Accordingly, the Aggregate demand is 5,500 and aggregate supply is 5,000.

According to Rule 3.4, the intersection of the AD and AS curves determines the MCP and MCV.
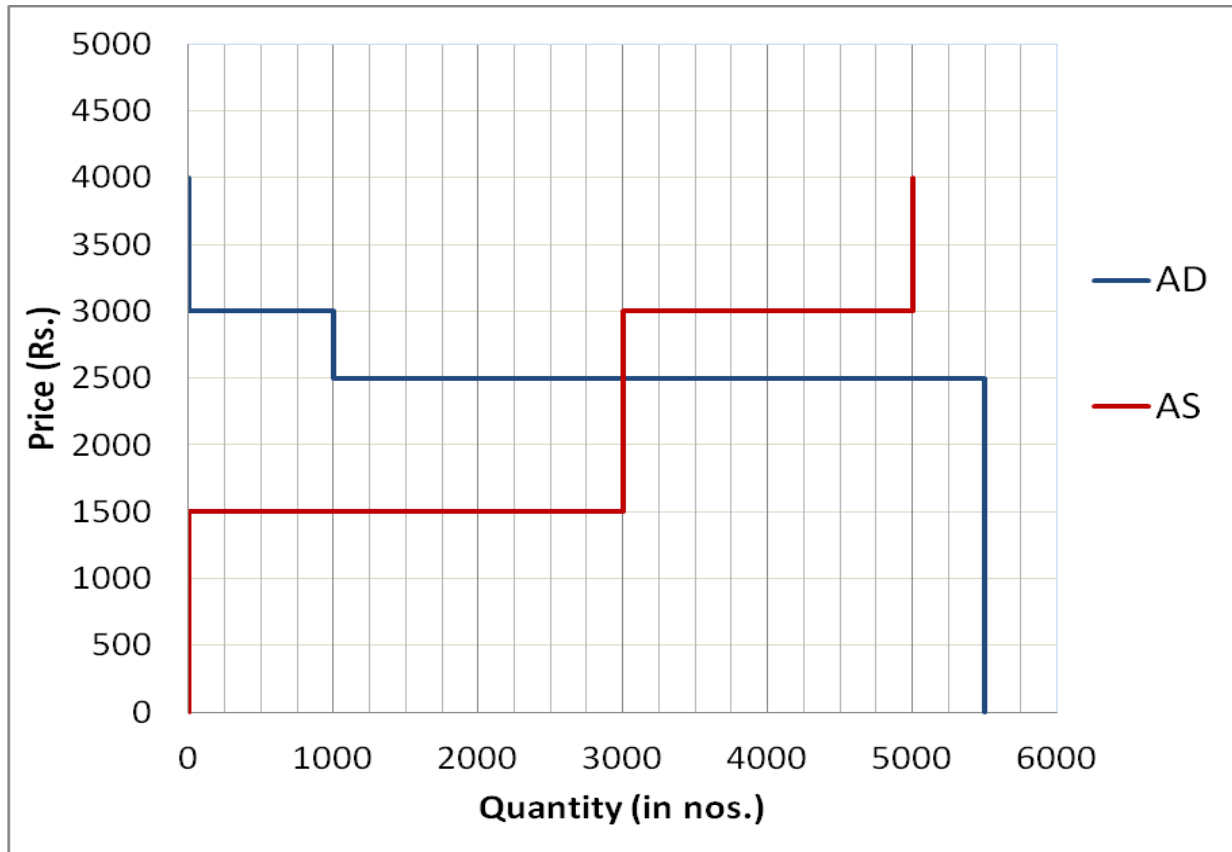
The MCP is Rs. 2,500 and the MCV is 3,000

According to Rule 3.6.1 and 3.6.2, sorting of Orders is done on price priority and all buy bids above or equal to MCP and all sell bids below or equal to MCP qualify for trade generation.

Participant	Price(RS)	Qty	Time	Participant	Price(Rs.)	Qty	Time
Buyer 2	3,000	1,000	12.50	Seller 1	1,500	3,000	12.10
Buyer 1	2,500	1,500	12.10				
Buyer 3	2,500	1,500	13.55				
Buyer 4	2,500	1,500	13.59				
Subtotal		**5,500**				**3,000**	

In this case, we have aggregate buy of 5,500 certificates and aggregate sell of 3,000 certificates, thus aggregate buy is more than aggregate sell. According to Rule 3.7.1, all the sell bids would be cleared equal to their bid quantity, but in case of buy bids, only Buyer 2

will be cleared equal to the bid quantity. The remaining three buyers i.e. Buyer 1, Buyer 3 and Buyer 4 have bid at the same price as MCP and hence would be allocated on pro-rata basis according to Rule 3.7.2.1

Buyer	Qty	Seller	Qty
Buyer 2	1,000	Seller 1	3,000
Buyer 1	(1,500/4,500)*2,000= 666.67		
Buyer 3	(1,500/4,500)*2,000= 666.67		
Buyer 4	(1,500/4,500)*2,000= 666.67		

As decimal certificates cannot be allotted, rounding off the values in the above table would be as follows:

Participant	Quantity round off	Time	Participant	Qty
Buyer 2	1,000	12:50	Seller 1	3,000
Buyer 1	667	12:10		
Buyer 3	667	13:55		
Buyer 4	667	13:59		

As seen above, rounding off the trades leads to allocation of 1 additional certificate than the MCV and hence that extra allocation is deducted from the trades allocated to the buyer who was last to submit bid among the buyers (to maintain the time priority) as per Rule 3.7.2.3. In this case, Buyer 4 was the last among the buyers during the session, hence he is allotted 1 less than the actual allocation, i.e. Buyer 4 would be allocated 666 certificates.

Post matching the final allocation to participants would be:

Participant	Qty	Participant	Qty
Buyer 2	1,000	Seller 1	3,000
Buyer 1	667		
Buyer 3	667		
Buyer 4	666		
Subtotal	**3,000**		**3,000**

2. Exact overlapping at multiple volume points for aggregate demand & supply curves

Suppose we get the following bids during a session:

Participant	Price (Rs.)	Qty	Time
Buyer 1	3,300	40	12:10
Buyer 2	3,000	60	12:15
Seller 1	3,000	60	12:45
Seller 2	2,500	20	13:00

According to Rule 3.1 and 3.2, the aggregate supply & aggregate demand at each price tick is computed as:

Price (Rs.)	Aggregate demand	Aggregate supply
2,500	100	20
3,000	100	80
3,300	40	80

In this case, the Aggregate demand is 100 and Aggregate supply is 80. According to Rule 3.4, the intersection of the AD and AS curves determines the MCP and MCV.
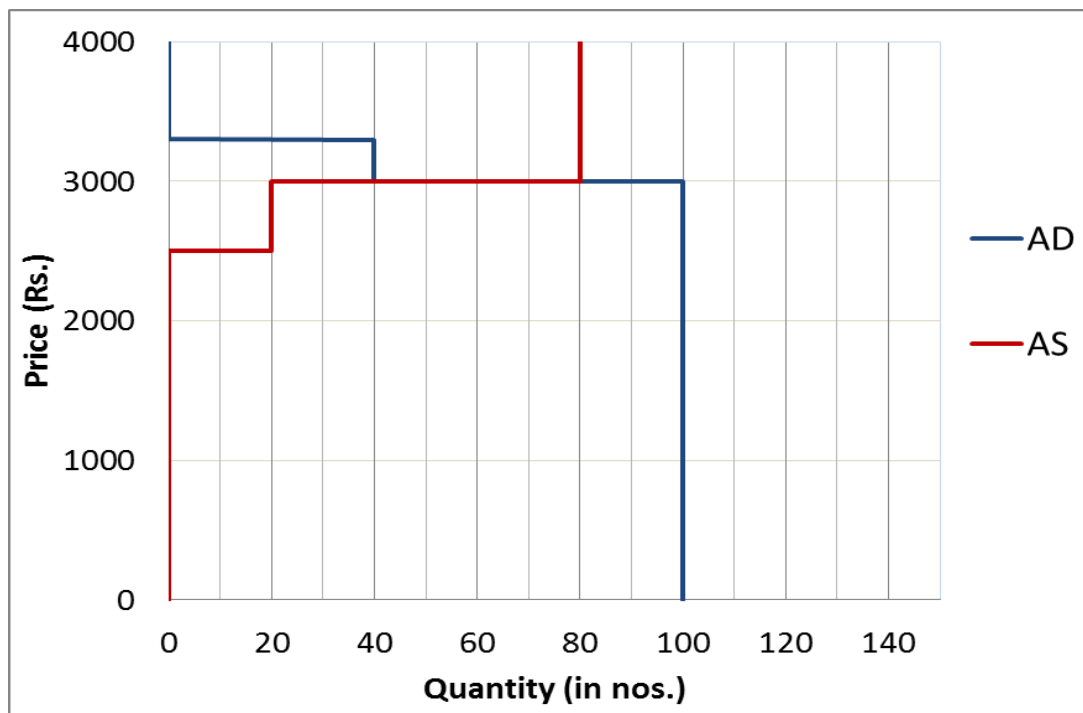
From Rule 3.5.1, in case of overlapping of the AD and AS curve at multiple volume points, the MCV will be at the highest volume point:

thus, MCP is Rs. 3,000 and MCV is 80

According to Rule 3.6.1 and 3.6.2, sorting of Orders is done on price priority and all buy bids above or equal to MCP and sell bids below or equal to MCP qualify for trade generation.

Participant	Price (Rs.)	Qty	Time	Participant	Price (Rs.)	Qty	Time
Buyer 1	3,300	40	12:10	Seller 2	2,500	20	13.00
Buyer 2	3,000	60	12:15	Seller 1	3,000	60	12:45
Subtotal		**100**				**80**	

In this case, we have aggregate buy of 100 certificates and aggregate sell of 80 certificates, thus aggregate buy is more than aggregate sell. According to Rule 3.7.1, all the sell bids would be cleared equal to their bid quantity, but in case of buy bids, only Buyer 1 will be cleared equal to the bid quantity as he had bid above the MCP and the remaining quantity would be cleared from Buyer 2.

According to Rule 3.7.1, the final allocation to the participants would be:

Participant	Qty	Participant	Qty
Buyer 1	40	Seller 1	20
Buyer 2	40	Seller 2	60
subtotal	**80**		**80**

3. **Exact overlapping at multiple price points for aggregate demand and supply curves**

Suppose we get the following bids during a session

Participant	Price (Rs.)	Qty	Time
Buyer 1	2,500	140	12:10

Participant	Price (Rs.)	Qty	Time
Buyer 2	3,000	50	12:50
Buyer 3	2,500	140	13:55
Buyer 4	2,500	140	13:59
Seller 1	2,000	260	12:10
Seller 2	1,500	210	12:50
Seller 3	3,000	280	13:45

According to Rule 3.1 and 3.2, aggregate supply & aggregate demand at each price tick is computed

Price (Rs.)	Aggregate Demand	Aggregate Supply
1,500	470	210
2,000	470	470
2,500	470	470
3,000	50	750

In this case, the Aggregate Demand is 470 and Aggregate supply is 750. According to Rule 3.4, the intersection of the AD and AS curves determines the MCP and MCV.
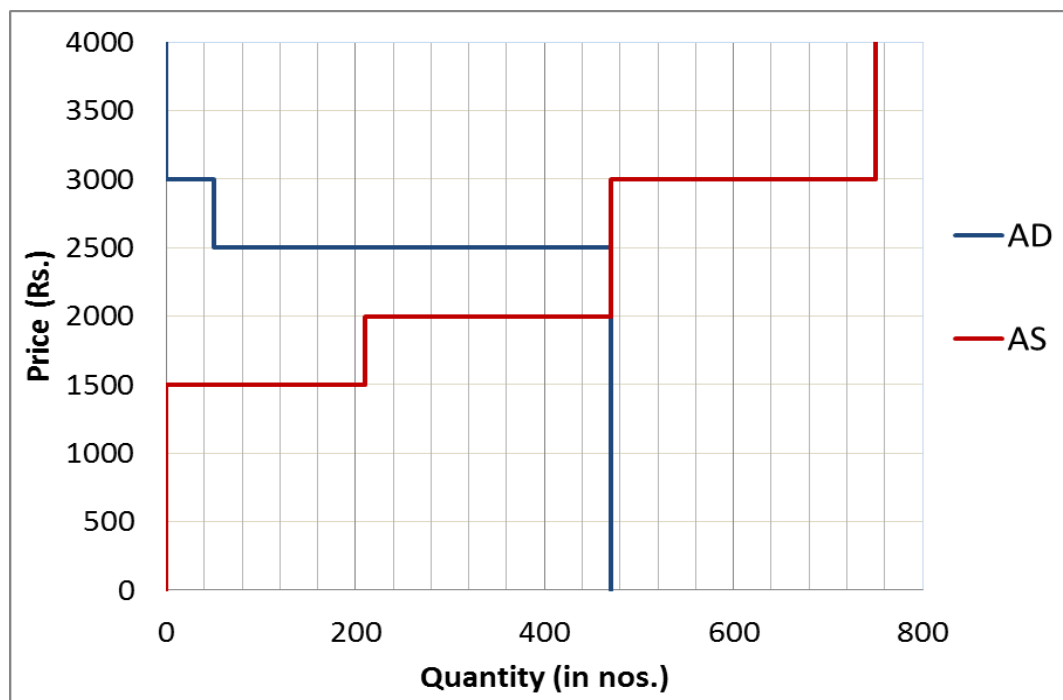
From Rule 3.5.2, in case of overlapping of the AD and AS curve at multiple price points, the MCP will be the average of the highest price tick and the lowest price tick of the overlap hence,

the MCP is Rs. 2,250 (being average of 2,000 & 2,500) and MCV is 470

According to Rule 3.6.1 and 3.6.2, sorting of Orders is done on price priority and all buy bids above or equal to MCP and all sell bids below or equal to MCP qualify for trade generation.

Participant	Price (Rs.)	Qty	Time	Participant	Price (Rs.)	Qty	Time
Buyer 2	3,000	50	12:50	Seller 2	1,500	210	12.50
Buyer 1	2,500	140	12:10	Seller 1	2,000	260	12:10
Buyer 3	2,500	140	13:55				
Buyer 4	2,500	140	13:59				
Subtotal		**470**				**470**	

In this case, both aggregate buy and sell are equal hence according to Rule 3.7.1 the quantities get allocated as submitted in the bid. Thus, the final allocation to participants would be as follows:

Buyer	Qty	Seller	Qty
Buyer 2	50	Seller 2	210
Buyer 1	140	Seller 1	260
Buyer 3	140		
Buyer 4	140		
subtotal	470		470

4.   **Aggregate supply less than Aggregate Demand**

Suppose we get the following bids during a session

Participant	Price (Rs.)	Qty	Time
Buyer 1	2,000	40	12:00

Participant	Price (Rs.)	Qty	Time
Buyer 1	2,500	30	12:10
Buyer 1	3,000	15	12:20
Buyer 2	2,000	30	13:30
Buyer 2	2,700	20	13:40
Buyer 3	3,300	35	12:30
Buyer 4	3,200	50	13:50
Buyer 5	3,250	30	13:55
Seller 1	1,500	100	12:20
Seller 2	1,700	50	12:30
Seller 3	2,000	60	13:30

According to Rule 3.1 and 3.2, Aggregate Supply & Aggregate Demand at each price tick is computed.

Price (Rs.)	Aggregate Demand	Aggregate Supply
1,500	250	100
1,700	250	150
2,000	250	210
2,500	180	210
2,700	150	210
3,000	130	210
3,200	115	210
3,250	65	210
3,300	35	210

In this case, the Aggregate Demand is 250 and Aggregate supply is 210. According to Rule 3.4, the intersection of the AD and AS curves determines the MCP and MCV.
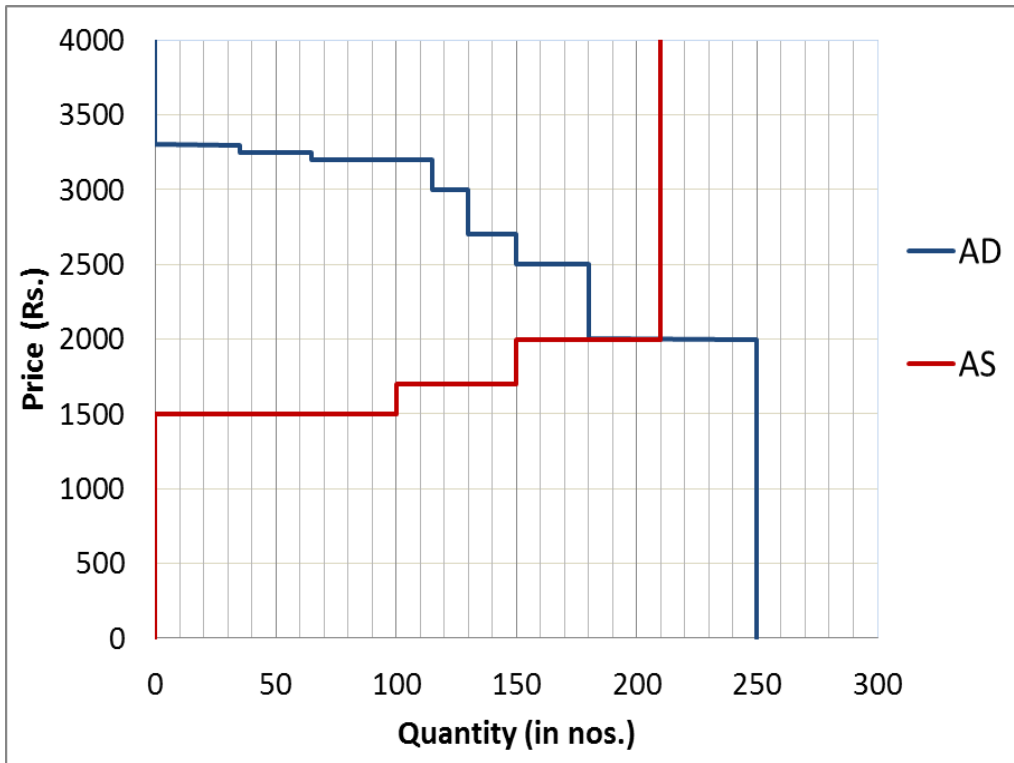
The MCP is Rs. 2,000 and MCV is 210 .

According to Rule 3.6.1 and 3.6.2, sorting of Orders is done on price priority and all buy bids above or equal to MCP and sell bids below or equal to MCP qualify for trade generation.

Participant	Price (Rs.)	Qty	Time	Participant	Price (Rs.)	Qty	Time
Buyer 3	3,300	35	12:30	Seller 1	1,500	100	12:20
Buyer 5	3,250	30	13:55	Seller 2	1,700	50	12:30
Buyer 4	3,200	50	13:50	Seller 3	2,000	60	13:30
Buyer 1	3,000	15	12:20				
Buyer 2	2,700	20	13:40				
Buyer 1	2,500	30	12:10				
Buyer 1	2,000	40	12:00				
Buyer 2	2,000	30	13:30				
Subtotal		**250**				**210**	

In this case, we have aggregate buy of 250 certificates and aggregate sell of 210 certficiates, thus aggregate buy is more than aggregate sell. According to Rule 3.7.1, all buy bids equal to

and above Rs.2,000 are cleared equal to the bid quantity i.e. 35 certificates of Buyer 3, 30 certificates of Buyer 5, 50 certificates of Buyer 4, 45 certificates of Buyer 1 offered above Rs. 2000 and 20 certificates of Buyer-2, thus 180 certificates are allocated above the of Rs. 2000. The remaining 30 certificates now need to be allocated among the two buyers who had submitted bids at Rs. 2000, here, Buyer 1 has bid for 40 additional certificates and Buyer 2 has bid for 30 additional certificates, thus there are 70 certificates at Rs. 2,000. Following Rule 3.7.2.1, the certificates from Buyer 1 and Buyer 2 would be allocated on pro-rata basis as follows:

Participant	Qty
Buyer 1	(40/70) * 30 = 17.14
Buyer 2	(30/70) * 30 =12.85

Since decimal certificates cannot be allotted, rounding the values in the above table, we get the following allocation:

Participant	Quantity round off
Buyer 1	17
Buyer 2	13

Post matching the final allocation to the participants would be:

Buyer	Qty	Seller	Qty
Buyer 3	35	Seller 1	100
Buyer 5	30	Seller 2	50
Buyer 4	50	Seller 3	60
Buyer 1	15+30+17=62		
Buyer 2	20+13=33		
Subtotal	**210**		**210**

5.   Aggregate Supply less than Aggregate Demand

Suppose we get the following bids during a session

Participant	Price (Rs.)	Qty	Time
Buyer 1	2,000	10	12:00
Buyer 2	2,500	40	12:10
Buyer 3	2,000	10	12:30
Buyer 4	2,500	35	12:40
Seller 1	2,000	15	12:50
Seller 2	2,000	30	13:00

According to Rule 3.1 and 3.2, Aggregate Supply & Aggregate Demand at each price tick is computed

Price (Rs.)	Aggregate Demand	Aggregate Supply
2,000	95	45
2,500	75	45

In this case, the Aggregate Demand is 95 and Aggregate Supply is 45. According to Rule 3.4, the intersection of the AD and AS curves determine the MCP and MCV
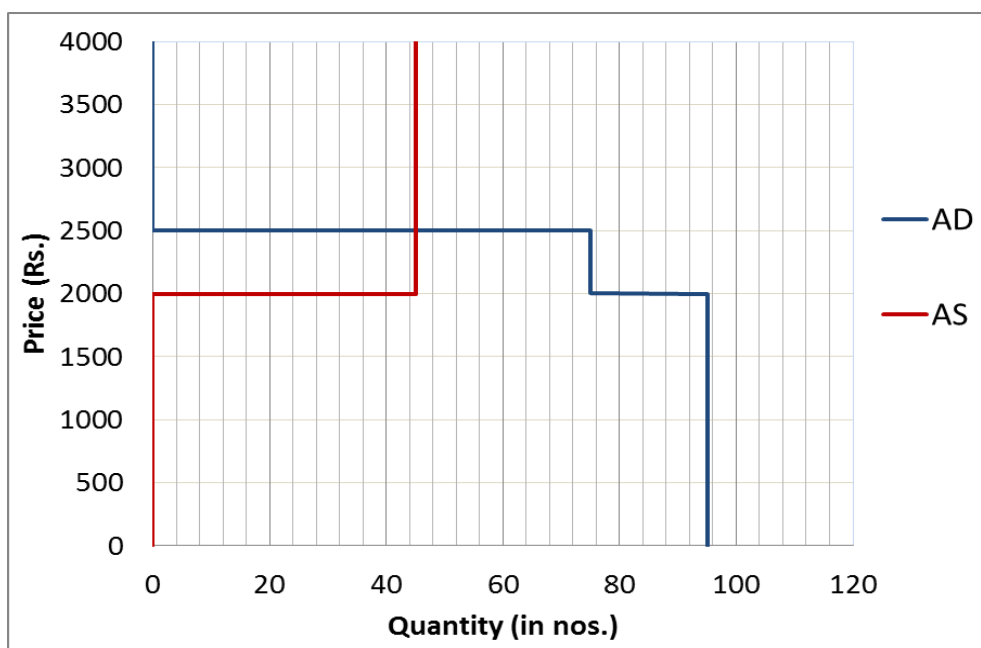
The MCP is Rs. 2500 and the MCV is 45.

According to Rule 3.6.1 and 3.6.2, sorting of Orders is done on price priority and all buy bids above or equal to MCP and sell bids below or equal to MCP qualify for trade generation.

Participant	Price (Rs.)	Qty	Time	Participant	Price (Rs.)	Qty	Time
Buyer 2	2,500	40	12:10	Seller 1	2,000	15	12.50
Buyer 4	2,500	35	12:40	Seller 2	2,000	30	13.00
Sub total		**75**				**45**	

In this case, we have aggregate buy of 75 certificates and aggregate sell of 45 certficiates, thus aggregate buy is more than aggregate sell. According to Rule 3.7.1, all sell bids would be cleared equal to the bid quantity but as the buy bids are at same price, they would be pro-rated as per Rule 3.7.2.1.

Buyer	Qty	Quantity round off
Buyer 2	(40/75)*45 = 23.99	24
Buyer 4	(35/75) * 45 =20.99	21
Sub total	**45**	**45**

Post matching the final allocation would be:

Buyer	Qty	Seller	Qty
Buyer 2	24	Seller 2	30
Buyer 4	21	Seller 1	15
subtotal	**45**		**45**

6. Aggregate Demand less than Aggregate Supply with Multiple Bids at Same Price
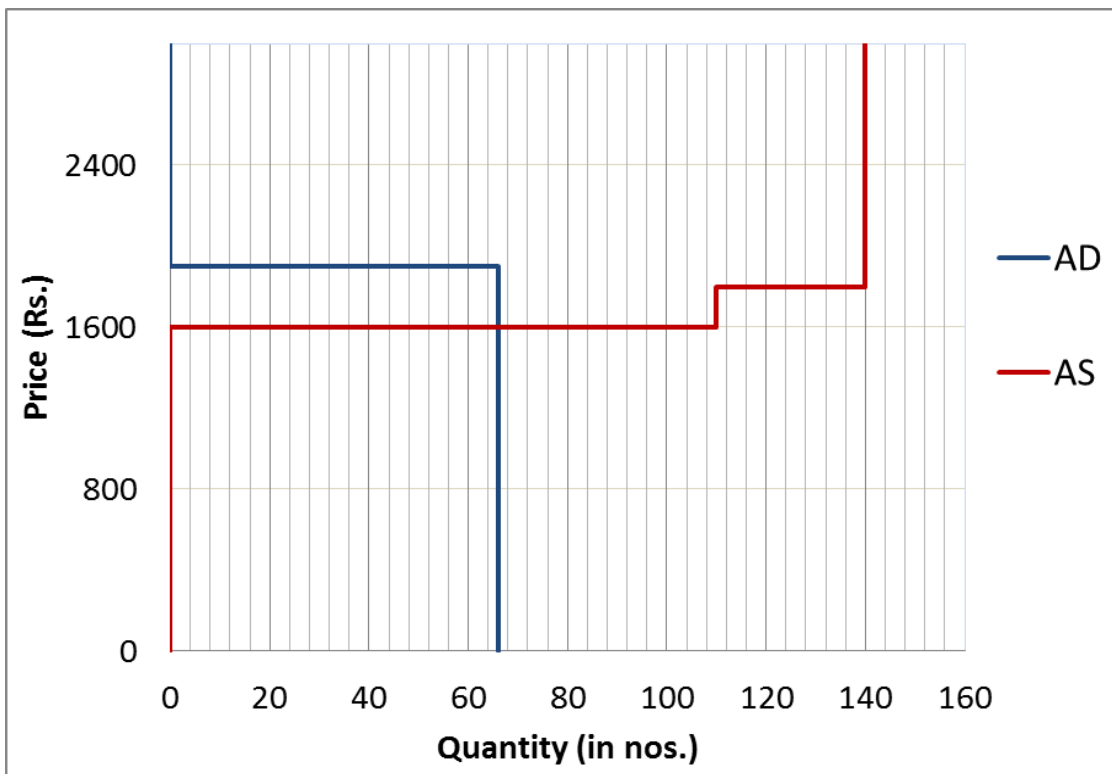
Suppose we get the following bids during a session

Participant	Price (Rs.)	Qty	Time
Buyer 1	1,900	15	12:00

Participant	Price (Rs.)	Qty	Time
Buyer 2	1,900	26	12:10
Buyer 3	1,900	25	12:30
Seller 1	1,600	60	12:50
Seller 1	1,800	30	13:00
Seller 2	1,600	50	13:10

According to Rule 3.1 and 3.2, Aggregate Supply & Aggregate Demand at each price tick is computed.

Price (Rs.)	Aggregate Demand	Aggregate Supply
1,600	66	110
1,800	66	140
1,900	66	140

In this case, the Aggregate Demand is 66 and Aggregate supply is 140. According to Rule 3.4, the intersection of the AD and AS curves determines the MCP and MCV.

The MCP is Rs. 1,600 and the MCV is 66.

According to Rule 3.6.1 and 3.6.2, sorting of Orders is done on price priority and all buy bids above or equal to MCP and sell bids below or equal to MCP qualify for trade generation.

Participant	Price (Rs.)	Qty	Time	Participant	Price (Rs.)	Qty	Time
Buyer 1	1,900	15	12:00	Seller 1	1,600	60	12:50
Buyer 2	1,900	26	12:10	Seller 2	1,600	50	13:10
Buyer 3	1,900	25	12:30				
Sub total		66				110	

In this case, we have aggregate buy of 66 certificates and aggregate sell of 110 certficiates, thus aggregate buy is less than aggregate sell. According to Rule 3.7.1, all buy bids would be cleared equal to the bid quantity but as the sell bids are at same price, they would be pro-rated as per Rule 3.7.2.2.

Seller	Qty
Seller 1	(60/110) * 66 = 36
Seller 2	(50/110) * 66 = 30
Sub total	66

Post matching the final allocation to the participants would be

Buyer	Qty	Seller	Qty
Buyer 1	15	Seller 1	36
Buyer 2	26	Seller 2	30
Buyer 3	25		
Subtotal	66		66

7. **Aggregate demand less than aggregate supply with multiple sell bids at same price**
Suppose we get the following bids during a session

Participant	Price (Rs.)	Qty	Time
Buyer 1	2,500	50	12:10
Buyer 2	2,600	100	12:15

Participant	Price (Rs.)	Qty	Time
Buyer 3	2,700	20	12:40
Buyer 4	2,800	30	13:45
Seller 1	2,000	50	12:00
Seller 2	2,000	100	12:30
Seller 3	2,000	50	12:45
Seller 4	2,000	20	12:59
Seller 5	2,000	30	13:25
Seller 6	2,000	50	13:56

According to Rule 3.1 and 3.2, aggregate demand & aggregate supply at each price tick is as computed .

Price (Rs.)	Aggregate demand	Aggregate supply
2,000	200	300
2,500	200	300
2,600	150	300
2,700	50	300
2,800	30	300

In this case, the aggregate demand is 200 and the aggregate supply is 300. According to Rule 3.4, the intersection of the AD and AS curves determines the MCP and MCV.
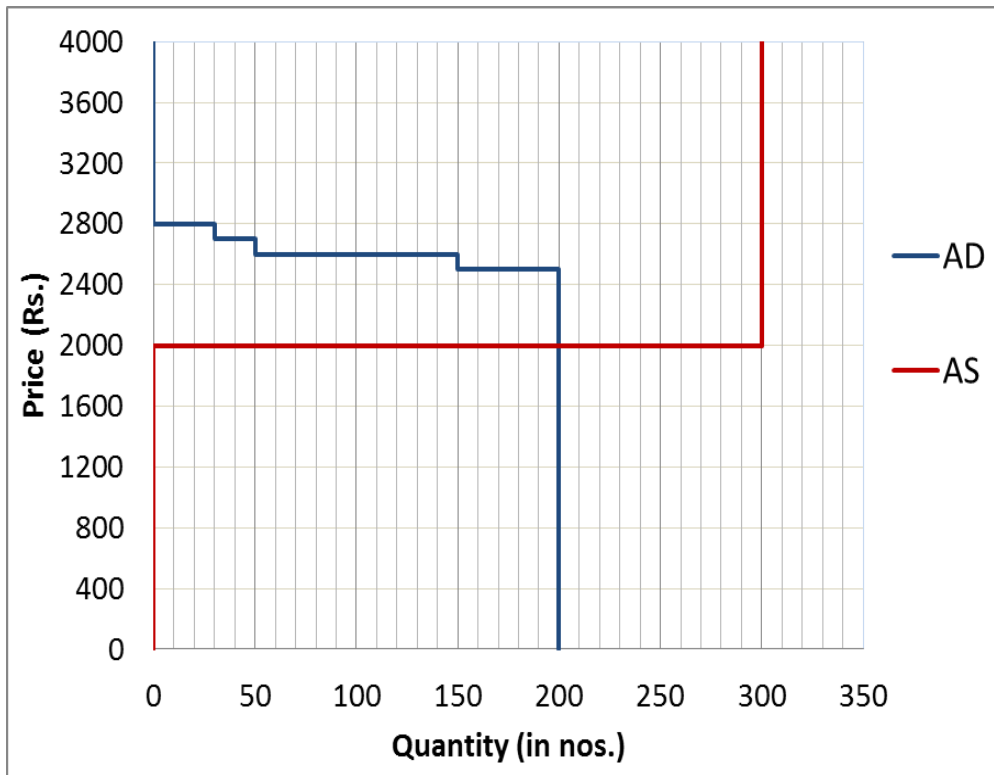
The MCP is Rs. 2,000 and the MCV is 200.

According to rule 3.6.1 and 3.6.2, sorting of Orders is done on price priority and all buy bids above or equal to MCP and sell bids below or equal to MCP qualify for trade generation.

Participant	Price (Rs.)	Qty	Time	Participant	Price (Rs.)	Qty	Time
Buyer 4	2,800	30	13:45	Seller 1	2,000	50	12:00
Buyer 3	2,700	20	12:40	Seller 2	2,000	100	12:30
Buyer 2	2,600	100	12:15	Seller 3	2,000	50	12:45
Buyer 1	2,500	50	12:10	Seller 4	2,000	20	12:59
				Seller 5	2,000	30	13:25
				Seller 6	2,000	50	13:56
Sub total		**200**				**300**	

In this case, we have aggregate buy of 200 certificates and aggregate sell of 300 certificates, thus aggregate buy is less than aggregate sell. According to Rule 3.7.1, all buy bids would be

cleared equal to the bid quantity but as the sell bids are at same price, they would be pro-rated as per Rule 3.7.2.2

Seller	Qty
Seller 1	(50/300) * 200 = 33.33
Seller 2	(100/300) * 200 = 66.66
Seller 3	(50/300) * 200 = 33.33
Seller 4	(20/300) * 200 = 13.33
Seller 5	(30/300) * 200 = 20
Seller 6	(50/300) * 200 = 33.33

As decimal certificates cannot be allotted, the above values are rounded off to the nearest integer.

Seller	Qty	Quantity round off
Seller 1	(50/300)*200 = 33.33	33
Seller 2	(100/300) *200 = 66.66	67
Seller 3	(50/300)*200 = 33.33	33
Seller 4	(20/300)*200 = 13.33	13
Seller 5	(30/300)*200 = 20	20
Seller 6	(50/300)*200 = 33.33	33
Subtotal		199

After rounding (as seen above), total allocated sell quantity is 199 and hence remaining quantity of 1 certificate is allotted to the seller who bid the earliest i.e. to Seller 1 (to maintain time priority) as per Rule 3.7.2.3.

Post matching the final allocation of the participants would be

Buyer	Qty	Seller	Qty
Buyer 1	50	Seller 1	34
Buyer 2	100	Seller 2	67
Buyer 3	20	Seller 3	33
Buyer 4	30	Seller 4	13

		Seller 5	20
		Seller 6	33
Subtotal	**200**		**200**

8. Aggregate Demand equal to Aggregate Supply with bids received at same price

Suppose we get the following bids during a session

Participant	Price (Rs.)	Qty	Time
Buyer 1	2,800	25	12:00
Buyer 2	2,800	30	12:10
Buyer 3	2,800	22	12:20
Seller 1	2,000	19	12:50
Seller 2	2,000	23	13:00
Seller 3	2,000	35	13:10

According to Rule 3.1 and 3.2, aggregate supply & aggregate demand at each price tick is computed

Price (Rs.)	Aggregate demand	Aggregate Supply
2,000	77	77
2,800	77	77

In this case, the Aggregate Demand is 77 and Aggregate supply is 77. According to Rule 3.4, the intersection of the AD and AS curves determines the MCP and MCV.
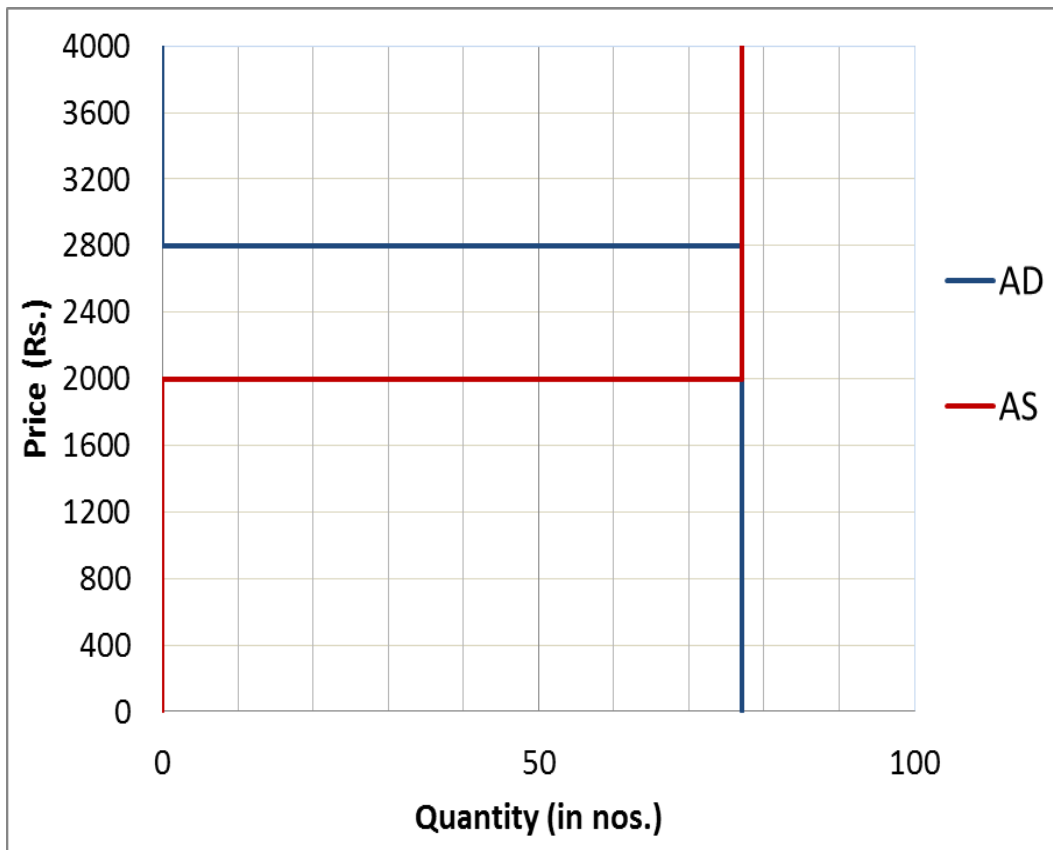
From Rule 3.5.2, in case of overlapping of the AD and AS curves at a particular volume, the price will be taken as average of the lowest price tick and the highest price tick.

Thus the MCP is Rs. 2,400 and MCV is 77

According to rule 3.6.1 and 3.6.2, sorting of Orders is done on price priority and all buy bids above or equal to MCP and all sell bids below or equal to MCP qualify for trade generation .

Participant	Price (Rs.)	Qty	Time	Participant	Price (Rs.)	Qty	Time
Buyer 1	2,800	25	12:00	Seller 1	2,000	19	12:50
Buyer 2	2,800	30	12:10	Seller 2	2,000	23	13:00
Buyer 3	2,800	22	12:20	Seller 3	2,000	35	13:10
Sub total		**77**				**77**	

According to Rule 3.7.1, the final allocation to the participants would be

Buyer	Qty	Seller	Qty
Buyer 1	25	Seller 1	19
Buyer 2	30	Seller 2	23
Buyer 3	22	Seller 3	35
Subtotal	**77**		**77**

Annexure III of ESCERT Business Rules

Forms, Agreements and other documents related to Membership for ESCERT Contract under the Energy Saving Certificate Segment will be notified by Exchange from time to time.

ESCERT Purchase/Sell Certificate Format as applicable for eligible entity after completion of declaration of Auction Result.

![PXIL - Transforming Power Markets]

POWER EXCHANGE INDIA LIMITED

Certificate of Purchase/Sell of Energy Savings Certificate [ESCerts]

Number C - PX/   **Issued On -** [DD_MM_YYYY]

Serial No. - PXI/

[number] Certificates

Session ID

This certifies that _____ **[ESCerts Buyer/Seller]** _____ is the holder of **[number issued]** _____

non transferable Energy Savings Certificate (s) bought/Sold on _____ day of _____ 2017,

Power Exchange India Limited.

This certificate represented hereby is issued and shall be held subject to all the provisions of the regulations of Honorable CERC as amended from time to time and the Bye - laws, Rules and Business Rules of *Power Exchange India Limited.*

Note: - This is a computer generated statement hence doesn't require signature.