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PAT Scheme User Manual

Volume V

for

CERC/POSOCO



BUREAU OF ENERGY EFFICIENCY



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Acknowledgment

The 'PAT User Manuals' is prepared to provide all the procedures and guidance drawn from the Energy Conservation Act, Rules and Regulations pertaining to the PAT scheme, in a simple and lucid language. The dedicated versions for various stakeholders, labelled in different "volumes" enables the user to understand their roles and responsibilities in great details.

The shaping if these PAT User Manuals would not have been possible without the able and constant guidance of Shri Abhay Bakre, Director General, BEE, and support of Shri R K Rai, Secretary, BEE and the Directors, especially Shri Sunil Khandare, Shri Saurabh Diddi, Shri Milind Deore, and Ms. Vineeta Kanwal.

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I sincerely hope that efforts put in by the development team are useful for all the stakeholders in taking this scheme to the further heights.

Ashok Kumar
Deputy Director General - BEE

Preface

World is witnessing climate change at an unprecedented pace. In India too, the effects of climate change are quite visible. India has been able to foresee this quite early and the Energy Conservation Act (EC Act) was enacted in 2001, for promotion of energy conservation and energy efficiency.

Bureau has been implementing several programmes on the promotion of energy efficiency in India under the ambit of the EC Act, 2001. One such scheme which proved to be a gamechanger in the Indian energy efficiency scenario was the Perform, Achieve and Trade (PAT) scheme. The PAT is part of National Mission for Enhanced Energy Efficiency (NMEEE) being implemented with regulations framework under the EC Act, 2001. The scheme focussed primarily on enhancing the energy efficiency of large energy intensive sectors through accelerated adoption of efficient and low-carbon technologies. Six cycles of PAT scheme have been launched till April, 2020, covering 1073 industries from 13 industrial and service sectors.

While implementing the PAT Scheme, it was felt necessary to provide all the stakeholders with user manual for effective discharge of their responsibilities. GIZ has been an active partner in the PAT scheme and also assisted in preparation of the PAT user manuals.

With the continued guidance of the Ministry of Power, BEE acknowledges the efforts of all the stakeholders in the journey of PAT so far and wishes more success in the coming years. I hope PAT user Manuals will guide the stakeholders to understand the procedures, Rules, Regulations and will assist them in smooth implementation of the scheme.

Abhay Bakre
Director General - BEE

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Introduction to PAT Scheme

The Ministry of Power launched the National Mission for Enhanced Energy Efficiency (NMEEE) under the National Action Plan on Climate Change (NAPCC) with the objective to strengthen the market for energy efficiency through implementation of innovative business models in the energy efficiency sector. NMEEE consist of four initiatives to enhance energy efficiency which are: Energy Efficiency Financing Platform (EEFP); Market Transformation for Energy Efficiency (MTEE); Framework for Energy Efficient Economic Development (FEEED) and Perform Achieve and Trade (PAT).

The Perform, Achieve and Trade (PAT) Scheme is a programme focused on reducing energy consumption and promoting enhanced energy efficiency among energy intensive industries in the country. BEE is the implementing agency for the PAT scheme across the country. PAT is a market-based mechanism in which identified energy intensive industries and other establishments (called Designated Consumers) are given targets for reducing their Specific Energy Consumption (SEC). The SEC targets for each plant are different and are set by BEE based on energy efficiency performance and classification, e.g., similar processes, CPP/Non CPP, etc. The DCs need to achieve the SEC targets in a 3-year period which is called a PAT cycle. DCs which over-achieve the given SEC target will get incentives in the form of energy saving certificates. These certificates are tradeable and can be bought by other DCs which are unable to achieve their targets. Alternately, the DCs unable to achieve the target would have to pay the penalty, at the price determined and notified by the BEE, which is the price of metric tonne of oil equivalent.

The price of these certificates is determined by the market.

The PAT scheme in its first cycle, operationalized in April 2012 covered 478 industries known as 'Designated Consumers (DCs)' from 8 sectors: Aluminium, Cement, fertilizer, Pulp & Paper, Thermal Power Plant, Chlor-Alkali, Iron & Steel and Textile. Since 2016, PAT is under rolling cycle and new industries and new sectors get added every year. Subsequently new industries and new sectors like Railways, Petroleum Refinery, Petrochemical, DISCOM, Hotels (under commercial buildings) and Airports are also being covered under PAT. As of April- 2019, 956 No. of DCs from 13 energy intensive sectors are notified as Designated Consumers based on their annual energy consumption as given in Table 1.

For the trading of ESCerts, Central Electricity Regulatory Commission (CERC) is the Market Regulator and Bureau of Energy Efficiency is the Administrator. POSOCO (Power System Operation Corporation limited) has been designated as Registry for making DCs as eligible entities for trading of ESCerts and book-keeping of ESCerts. There are two Power Exchanges i.e. IEX and PXIL where trading of ESCerts shall take place. CERC has already approved the Procedure for Transaction of Energy Savings Certificates (ESCerts).

KEY WORDS

Administrator means the Bureau of Energy Efficiency

Commission means the Central Electricity Regulatory Commission (CERC) is a statutory body functioning under section 76 of the Electricity Act, 2003.

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 cover a period of 3 years commencing from the 1st April, 2012 and ending on the 31st March, 2015.

Designated Consumers (DCs) - "Every energy intensive industry and other establishments whose annual energy consumption is equal to or greater than the threshold limit specified in the central Government notifications (referred in Table 1), shall be deemed to become Designated Consumer and consequently he shall be considered liable under Section 26 (Energy Conservation Act, 2001) for imposition of penalty for his failure to comply with obligations of DC."

EC Act means the Energy Conservation Act, 2001.

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.

ESCerts means the Energy Savings Certificates issued by the Central Government in the Ministry of Power to the designated consumer under subsection (1) of section 14(A) of EC Act, 2001.

Exchange or trade of ESCerts means sell or purchase of ESCerts under the Perform, Achieve

and Trade (PAT) scheme on Power Exchanges, and includes delivery of ESCerts.

Banking and Extinguishment of ESCerts: The ESCerts after being submission by DC to BEE for achieving compliance with the energy consumption norms and standards in a relevant PAT cycle will stand expired and will be extinguished subsequently by Registry. After the compliance of each PAT cycle, the balance ESCerts (if any) in the account of the eligible entity will be treated as Banked ESCerts of concerned PAT cycle.

POSOCO means Power System Operation Corporation Limited as constituted by the Ministry of Power (Notification No. 11/20/2005-PG Dated 4th July 2008) and who is authorized to function as a Registry for ESCerts.

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 4 vide Notification No. 10/4/2015 dated January 05, 2016, unless the Ministry of Power decides otherwise.

DCRM Dynamic - Customer Relationship Management

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 EC Act.

Transaction of ESCerts means Sale or purchase of ESCerts under the Perform, Achieve and Trade (PAT) scheme on Power Exchanges, and includes delivery of ESCerts.

Sectors	Minimum Annual Energy Consumption [Threshold] in Metric Tonne of Oil Equivalent (toe)	Reference Notifications
Aluminium	7500	S.O. 394 (E) dated 12th March 2007
Chlor-Alkali	12000	
Fertilizer	30000	
Textile	3000	
Thermal Power Plant	30000	
Cement	30000	
Cement Grinding Units	10000	S.O. 2147(E) dated 17th June 2020
Iron & Steel	20000	S.O. 394 (E) dated 12th March 2007 amended vide S.O.968(E) dated 22nd February 2019
Paper & Pulp	20000	
Petroleum Refinery	90000	S.O. 394 (E) dated 12th March 2007 amended vide S.O. 3542 (E) dated 29th December 2015 (Annexure 4B)
Electricity Distribution Companies (DISCOMs)*	86000	
Railways#		S.O. 394 (E) dated 12th March 2007 amended vide S.O. 3542 (E) dated 29th December 2015 (Annexure 4B), amended vide S.O. 2022(E) dated 8th June, 2016, amendment vide S.O. 2147(E) dated 17th June 2020
(a) All Zonal Railways (Traction)	70000	
(b) Workshops	750	
Petrochemical (Gas Crackers and Naphtha Crackers)	100000	S.O. 3600 (E) dated 15th November 2017 (Annexure 4D)
Hotels (under Commercial Buildings or Establishments)	500	S.O.1388 (E) dated 2nd May 2017 (Annexure 4C) amended vide S.O.968(E) dated 22nd February 2019
Airports (under Commercial Buildings or Establishments)	500	S.O. 2147(E) dated 17th June 2020
<p>* Energy consumption of DISCOMs shall be considered equivalent to the total of Aggregate Technical & Commercial (AT&C) losses, which is equivalent to 1000 million kWh.</p> <p># The notification for eight production units of Railways is done by their name.</p>		

Table 1: Industry wise Threshold for Notification of Designated Consumers (DCs)

PURPOSE

This user manual is prepared to enlist the activities to be taken up by Central Electricity Regulatory Commission (CERC) and Power System Operation Corporation Limited (POSOCO) for smooth implementation of the PAT Scheme in the country. This user manual will standardize and simplify the procedure to be followed by CERC and POSOCO under the PAT requirement.

SCOPE

This user manual is applicable to the CERC and POSOCO only. The user manual covers the detailed list of activities to be taken up by CERC and POSOCO as defined under EC Act, PAT Notification and CERC approved Procedure for Transaction of ESCerts, 2017.

User Manual for CERC & POSOCO to meet Compliance under EC Act and PAT requirements

ACTIVITY 1

Issuance/Entitled to purchase of Energy Saving Certificates by Central Government (MoP) to DC and Verification of same by Registry

(Ref: PAT Rule 12)

1.1 Issue of Energy Saving Certificates by Central Government (MoP) to DC

1.1.1 The DC will submit verified Performance Assessment Document (PAD) that is 'Form A', Form B, M&V Report and other supporting documents to SDA with a copy to BEE within 4 months of completion of the target year. The BEE on satisfying itself about the correctness of Verification report of DC, will send its recommendations to the Central Government for 'issue or to purchase' of energy savings certificates. A copy of Form A is enclosed as Annexure I and Form B as Annexure II.

1.1.2 The Central Government on the receipt of the recommendations from BEE will issue ESCerts of required value to the concerned DC within 45 days from the date of receipt of such recommendation from BEE. The Formula for determining the exact number of energy Savings Certificates to be issued or entitle to purchase by the DC is given as Annexure III.

1.1.3 The DC whose verified energy consumption is less than the prescribed norms & standards will be entitled to issue of ESCerts.

1.1.4 The ESCerts will be issue in Electronic Form. BEE has developed an online IT platform termed as PATNet portal to facilitate the issuance of ESCerts by MoP.

1.1.5 MoP shall issue ESCerts in electronic form with the unique ESCert number assigned to each ESCert as per format given in Annexure IV.

1.1.6 The energy savings certificates issued to the DC in PAT cycle period shall remain valid till the completion of the compliance period of his next PAT cycle. In case of ESCerts purchased by the Designated Consumer, in terms of the Regulations and the Procedures, such ESCerts shall remain valid until the completion of the compliance period of the his next PAT cycle from the date of issue of such ESCerts, or until the submission of such ESCerts to the Administrator (BEE), whichever is earlier.

1.1.7 The DC who have been issued ESCerts during the current PAT cycle may sell them through power exchange or use them for the purpose of banking until his compliance cycle.

1.1.8 The DC whose verified energy consumption is equal to or more than the prescribed norms & standards will not be entitled to issue of ESCerts. However, such DCs will be eligible to buy E-Certs for use them to meet their own compliance in the current or his next PAT cycle.

1.1.9 All the DCs to whom MoP has issued/ entitled to purchase ESCerts have to get themselves registered with

POSOCO for becoming 'eligible entities' to participate in trading/transaction of ESCerts.

1.2 Verification of the ESCerts by Registry

1.2.1 Subsequent to issuance of ESCerts by MoP, at the time of registration, Registry (POSOCO) shall cross-check the ESCerts in the account of each designated consumer, wherever applicable. BEE (Administrator) shall share the list of the ESCerts issued by MoP with Registry.

ACTIVITY 2

Registration of a Designated Consumer (DC) with Registry (POSOCO) as 'Eligible Entity' for transaction of ESCerts

2.1 Submission of application for registration by Designated Consumer to the registry (POSOCO)

2.1.1 All the DCs to whom MoP has issued/entitled to purchase ESCerts have to get themselves registered with POSOCO for becoming 'eligible entities' to participate in trading/transaction of ESCerts.

2.1.2 The Designated Consumer shall submit the application for registration to Registry to become Eligible Entity as per the date intimated by the Administrator (BEE).

2.1.3 The DCs need to submit the application for registration to the registry (POSOCO) through PATNet portal as per the format given in Annexure V. The DC shall also submit the application in physical form duly signed by authorised signatory to POSOCO. The application for registration shall contain the following information.

- i. PAT Cycle Details
- ii. Owner(s) Details
- iii. Details of Fees and Charges
- iv. Declaration

v. Organisation Documents as attachments

vi. Details of issued / entitled ESCerts

vii. Any other relevant information as prescribed by Administrator / Registry

2.1.4 The checklist for the submission of Application for Registration is also given in Annexure VI. The Procedure for submission of documents to the Registry is given in Annexure VII.

2.2 Scrutiny of the submitted application by the Registry (POSOCO)

2.2.1 The Registry (POSOCO) shall undertake the Registration of all DCs as 'Eligible Entity' for each PAT cycle after receiving the requisite details from the DC. After receipt of application, the Registry shall undertake preliminary scrutiny on the basis of details provided. The Registry (POSOCO) to ensure that the Application Form is complete in all respect along with necessary documents and applicable registration fees and charges and inform the applicant regarding the completeness of the application within 7 working days.

2.2.2 The applicant shall furnish the details as requested by the Registry within 7 working days so as to enable the Registry to undertake the registration of the applicant.

2.2.3 In case the applicant fails to furnish the information requested by the Registry within the stipulated time frame, the Registry may abandon the registration of the applicant and refund the Registration Fee.

2.2.4 If the application is complete in all respects, including payment of fee and charges, then Registry shall proceed to register the Designated Consumer within 15 working days from the date of receipt of complete Application and issue the 'Certificate of Registration'

to the concerned Designated Consumer as 'Eligible Entity', subsequent to submission of Registration Fee.

- 2.2.5 If the application is rejected by Registry, the reasons for rejecting the application shall be communicated to the concerned designated consumer through PATNet Portal and an email shall also be sent in the registered email id of the Designated Consumer.
- 2.2.6 While considering any application for Registration, the Registry shall verify and ascertain availability of the following information:
- Permanent Account Number (PAN)
 - Tax Deduction and Collection Account Number (TAN)
 - Corporate Identity Number (CIN)
 - Service Tax Number
 - Details of payment of registration fees/charges
 - Hard Copy of Application signed and stamped on each page and declaration of Applicable Clauses given in online application on letter head of the concerned Designated Consumer
 - Authorisation Letter
 - Details of ESCerts issued or entitled to purchase

2.3 Release of 'Certificate of Registration' to DC by POSOCO and allow dealing in ESCerts

- 2.3.1 After completion of the registration process, the Registry shall release the electronic 'Certificate of Registration' to the respective Designated Consumer and share the list of Eligible Entities for each PAT Cycle with the Power Exchange(s) and Administrator. A copy of 'Certificate of Registration' format is given as Annexure VIII.
- 2.3.2 Registry shall allow dealing in ESCerts after Registration of Designated Consumers as an eligible entity as

per the provisions of Procedures and Regulations.

- 2.3.3 As per the clause 12(4) of PAT Rules, bilateral trading even within the same corporate group is not permitted and accordingly, inter-sector self-retention / transfer of ESCerts is also not permitted.
- 2.3.4 During the cross checking of ESCerts to be traded, the Registry shall check the account of respective eligible entities i.e. both buyers and sellers.
- 2.3.5 For the trading of the ESCerts, a separate Dynamic - Customer Relationship Management (D-CRM) is developed and maintained by Administrator where POSOCO as a Registry and the Power Exchange(s) will have login facilities. Trading related reports, cross-check and confirmation reports, etc., will be generated on this platform and the same shall be exchanged between Registry and the Power Exchange(s) as per procedure(s) for dealing of energy savings certificates, transfer and other residual matters.

ACTIVITY 3

Process of Transaction of ESCerts - Interface Activities between Entities (Power Exchanges & Registry, Administrator & Registry, Registry & Designated Consumer) and Timelines

3.1 Interface Activities between Entities for Transaction of ESCerts: The entities involved in the Transaction of ESCerts shall interact with the online platform viz., PATNet portal and D-CRM developed by Administrator wherein Login facility shall be provided to the Registry, the Power Exchange(s) and Designated Consumers along with the SDAs and EmAEAs. The activity wise description of the procedure of transaction of ESCerts is discussed below and given also given in Figure 1.

- 3.1.1 The Eligible Entity shall place their Sell / Buy bids on Power Exchange(s)

- in the manner as defined in respective Power Exchange(s) Business Rules approved by the Commission. The Eligible Entity may place their sell / buy bids on the Power Exchange(s) simultaneously. The sum of the sell Bids as placed by the Eligible Entity on the Exchanges shall be less than or equal to the total quantity of ESCerts available for transaction in its Registry account.
- 3.1.2 During the time the bidding window opens in the Power Exchange(s), the seller / buyer shall place their Sell / Buy bids through the trading platform of the respective Power Exchange(s).
- 3.1.3 Upon receipt of Sell/Buy bids till closure of trading window, as provided in bye-laws of respective Exchanges, each Power Exchange shall collate the Sell/Buy bids and send it to Registry through their account on D-CRM for verification of quantity of ESCerts put for sell/buy against the quantity of ESCerts available for transaction with the concerned eligible entity in their Registry account.
- 3.1.4 The Registry, on receipt of sell / buy Bids from each Power Exchange shall cross-check the cumulative Sell/ Buy bids placed by an Eligible Entity on the Power Exchange(s) with the Registry regarding the quantity of ESCerts available for transaction in their account maintained on PATNet Portal.
- 3.1.5 Upon receipt of report from the Registry, the Power Exchange(s) shall aggregate all the buy bids and the confirmed sell bids and discover the Market Clearing Price (MCP) and Market Clearing Volume (MCV) through the closed double-sided uniform price auction for that particular trading session of ESCerts. After end of the bid matching and transaction finalisation phase, each Power Exchange shall upload the confirmation report on D-CRM providing the ESCerts sell and buy volume for each eligible entity who have successfully transacted ESCerts in that particular trading session.
- 3.1.6 Upon receipt of confirmation report from each Power Exchange, the Registry shall send the transaction approval acknowledgement to the Power Exchange(s).
- 3.1.7 Registry shall update the following details of the concerned eligible entities after successful trading session:
- Opening Balance (No. of ESCerts)
 - ESCerts traded on the Power Exchange(s)
 - Closing Balance (No. of ESCerts)
- 3.1.8 Transaction of ESCerts shall be based upon First-In-First-Out (FIFO) principle.
- 3.2 Timelines for Transaction of ESCerts
- 3.2.1 The Buy Bids on Power exchange(s) may be placed by any Eligible Entity who wants to comply with the prescribed energy norms and standards for the current and / or the next cycle as per the scope of trading for transaction of ESCerts.
- 3.2.2 Transaction of ESCerts shall be undertaken on Power Exchange(s) in accordance with the Rules/Byelaws of the Power Exchange(s) approved by the Commission. All valid and eligible offers for ESCerts received by the Power Exchange(s) shall be considered for trading to be carried out on every Tuesday on weekly basis.
- 3.2.3 In the event of a public holiday or bank holiday falling on Tuesday, trading shall take place on the next working day.
- 3.2.4 Power Exchange(s) shall place the list of bank holidays and public holidays on their website and any changes in the trading date shall be communicated by the Power Exchange(s) to the stakeholders. If there are other

exigencies warranting change in the day for trading, the Bureau can make such change as considered necessary under intimation to all concerned.

- 3.2.5 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 trading.
- 3.2.6 The Power Exchange(s) shall intimate the details of maximum offer placed for dealing by each eligible entity to the Registry by 15:30 hrs on the day of trading session.
- 3.2.7 The Registry shall cross-check the combined maximum bid volume in the Power Exchange(s) for each eligible entity against the quantity of ESCerts available in their respective Registry account. The Registry shall confirm the availability of the ESCerts in the respective eligible entity's Registry account by 16:00 hrs.
- 3.2.8 The Power Exchange(s) shall discover the Market Clearing Price and the Market Clearing Volume taking into account the cross-checked report received from the Registry by 17:00 hrs.
- 3.2.9 The Power Exchange(s) shall send the final cleared transaction by eligible entities, including details of purchase of ESCerts through 'Confirmation Report' to the Registry by 17:15 hrs.
- 3.2.10 Registry shall send the 'Transaction Approval Acknowledgement' to the Power Exchange(s) by 17:30 hrs.

3.3 Pricing of ESCerts

- 3.3.1 The denomination of one ESCert as mentioned in the Energy Conservation Rules shall be equal to energy consumed in terms of one metric Ton of Oil Equivalent (mtoe).
- 3.3.2 The market price of ESCerts shall be as discovered through the process of bidding at the respective Power Exchange.

3.4 The eligible entities to be barred from transaction of ESCerts by power exchange in case of wrong bidding of ESCerts

- 3.4.1 The ESCerts issued to the eligible entity may be placed for dealing in any of the Power Exchanges as the ESCerts holder may consider appropriate and such ESCerts shall be available for dealing in accordance with the rules and bylaws of such Power Exchange.
- 3.4.2 In any dealing session, an eligible entity shall not place sale bids in excess of total ESCerts held in its Registry Account.
- 3.4.3 The Registry shall cross-check the cumulative sale bids placed on Power Exchanges with availability of ESCerts in respective Registry account(s) and in case breach of this sub-regulation is noticed, the Registry shall intimate the Power Exchanges to treat such eligible entities as defaulter and any bid submitted by such eligible entity shall not be considered by the Power Exchange for the purpose of price discovery. The bids submitted by such bidders shall become void and ineffective if the total sell bids submitted by eligible entity on both the Power Exchanges are more than the available ESCerts in the Registry account. For example, the different cases of wrong bids are given below:
 - Case 1: If the quantity of ESCerts offered for Selling is less than or equal to quantity of ESCerts available for transaction in Eligible Entity's Registry Account, A Confirmation Report through their account on D-CRM to the respective Power Exchange(s), Or
 - Case 2: If the quantity of ESCerts offered for Selling, exceeds the quantity of ESCerts available for transaction in Eligible Entity's Registry Account, Registry shall intimate the respective Power Exchange(s) to treat such Eligible

Entity as 'Defaulter' and any bid submitted by such entity shall not be considered by Power Exchange(s)

- Case 3: If the cumulative Buy bids exceeds the quantity of ESCerts entitled to be purchased for compliance in that PAT cycle, Registry shall allow the Power Exchange(s) to accept the bid for higher number of ESCerts

3.4.4 Eligible entities with more than three cases of default specified in sub-regulation 10(7) in a cycle shall be barred from transaction of ESCerts for next six months, notwithstanding any penalty due to be imposed as per the provisions of the Energy Conservation Act, 2001.

ACTIVITY 4

Banking and Extinguishment of ESCerts by the Registry

- 4.1 The DC for the purpose of compliance with the energy consumption norms and standards during the target year, in the relevant cycle needs to furnish the status of compliance to the SDA with a copy to BEE in 'Form D' after the completion of the Trading of ESCerts in the relevant PAT cycle. A copy of Form D is given in Annexure IX. Once the DC submit its compliance report in Form D to SDA with a copy to BEE, the BEE will review the same.
- 4.2 The ESCerts after being submission by DC to BEE for achieving compliance with the energy consumption norms and standards in a relevant PAT cycle will stands expired. The BEE will inform the details of such submitted ESCerts to Registry for Extinguishment and such ESCerts will be invalidated. The process of Extinguishment of ESCerts by Registry is given in Figure 2.
- 4.3 However, after the compliance of each PAT cycle, the balance ESCerts (if any) in the account of the eligible entity shall be treated as Banked ESCerts of concerned PAT cycle and BEE shall intimate Registry regarding the balance ESCerts in the account of the eligible entity of concerned PAT cycle.

ACTIVITY 5

Power to remove difficulties to the Administrator in consultation with Registry

- 5.1 If any difficulty arises in giving effect to any provision of CERC approved Procedure for Transaction of ESCerts or interpretation of the Procedures; the Administrator in consultation with Registry may make such provisions or propose amendments, not inconsistent with the provisions of ESCerts Transaction Regulations, upon seeking due approval from the CERC, as may appear to be necessary for removing the difficulty.

ACTIVITY 6

Functions, Roles and Responsibilities of Different stakeholders involved in Transaction of ESCerts

6.1 Eligible Entity

- DC shall apply online on PATNet Portal and coordinate with the Registry for registration.
- DC shall be responsible to submit the information in a timely manner to comply with requirements for Registration under ESCerts Transaction Regulations.
- DC's for each PAT Cycle shall pay the fees as determined from time to time. Further, if eligible entity deducts TDS against the PAN of Administrator / Registry, in such cases eligible entity shall submit the TDS certificates to the Administrator / Registry.
- In case of change in the legal status or name of eligible entity, DC shall send a request to Administrator within 15 days of the change.
- The administrator shall make desired changes regarding legal status within 7 days on PATNet Portal and communicate the same to Registry and Power Exchange(s) with a copy to the Eligible Entity.

- DC's shall submit report of compliance of energy efficiency norms and standards to the Administrator as per the specified timelines.
- Adhere to directions given by the Commission, Administrator, Registry and the Power Exchange(s) from time to time.
- Place sell or buy bids for Energy Savings Certificates on the Power Exchange(s) as per the prescribed timelines.
- Discharge the following functions in the process of ESCerts transaction
 - After the compliance of each PAT Cycle, on intimation from the Administrator about extinguishment of ESCerts for the considered Eligible Entity, Registry account of the concerned Eligible Entity, and thereafter the balance ESCerts, if any, shall be treated as Banked ESCerts of concerned PAT cycle.
 - Inform the eligible entities about the details of extinguished ESCerts and balance ESCerts through PATNet portal
 - Any other function, as suggested by Commission in consultation with Administrator
 - Submit records and MIS reports to the Commission on quarterly basis

6.2 Registry

- Comply with the directions issued by the Commission from time to time
- Issue electronic Certificate of Registration to the DC within the stipulated time
- In case of rejection, intimate reasons of rejection within the stipulated time
- Intimate registration of Designated Consumer as eligible entity to the following through PATNet Portal / D-CRM:
 - a. Concerned Designated Consumer
 - b. Administrator
 - c. Power Exchange(s)
- Collect fees and charges from eligible entities as may be prescribed in the Order to be issued by the Commission in compliance with ESCerts Transaction Regulations
- Assist in development of D-CRM and for maintaining secure database of ESCerts and records of transaction of ESCerts
- Formulate protocol for sharing of information related to transaction of Energy Savings Certificates in 'electronic form' with Power Exchange(s) and Administrator
- Maintain records with respect to the transaction of Energy Savings Certificates based on information received from Power Exchanges(s)
- After each trading session, the Registry shall update dashboard of the concerned eligible entity

6.3 Administrator

- Administrator shall after due scrutiny of the status of ESCerts provide the hard copy of the list of Designated Consumers with number and details of ESCerts
- Provide the details of those DC's whose records are updated in the PATNet Portal on account of change of name/ legal status to the Registry and the Power Exchanges(s)
- Administrator owns the servers and software(s) utilised for PATNet and trading of ESCerts and also act as a web administrator for PATNet portal and D-CRM
- Depute an in-house IT support staff to the Registry for providing IT assistance in D-CRM during initial phase of implementation of ESCerts Transaction Regulations
- Provide information related to DC's for each PAT Cycle, Disaster Recovery Mechanism, Software Requirement specification (SRS) document Interface details of PATNet portal and D-CRM, details of any changes

in the Rules, Notifications and other details to the Registry

- Online IT platform (PATNET portal) will provide access to the officials of the Designated Consumers, State Designated Agencies, and Bureau of Energy Efficiency
- Ensure that the D-CRM used by the Registry, Administrator and the Power Exchange(s) would ensure generation and preservation of electronic trail of all transactions
- All changes in D-CRM to be done by Administrator and informed to Registry in writing
- Provide assistance to the Commission, Registry and Power Exchange(s) in matters involving transaction of ESCerts on the Power Exchange(s)
- Disseminate relevant market information to Designated Consumer, Registry, Power Exchange(s) etc.
- After the compliance of each PAT Cycle, Administrator shall intimate Registry regarding the extinguishment of ESCerts of the concerned Designated Consumers and the balance ESCerts in the account of the eligible entity shall be treated as Banked ESCerts of concerned PAT Cycle
- Help manual for interface activities shall be prepared by the software developer and the same shall be provided to the Registry
- Ensure the accountability of the software developer for maintaining integrity and probity of the scheme
- Discharge such other functions as may be assigned under there Procedure and Regulations

6.4 Power Exchange

- Formulate Rules and Byelaws for transaction of ESCerts on the Power Exchange(s) in accordance with the provisions of EC Act, PAT Rules, ESCerts Transaction Regulations and issuance of same after taking due approval frm the Commission
- In line with the ESCerts Transaction Regulations, Exchanges shall adopt double sided closed auction with uniform pricing
- Develop IT platform compatible with the PATNet portal and D-CRM for enabling online transaction of ESCerts
- Permit the transaction of Energy Savings Certificates only to the Eligible Entities
- Determine the market clearing price and the market clearing volume. The transaction results shall be published and made available to Eligible Entities
- Shall send reports for transaction confirmation and financial obligation, invoices including financial settlement i.e. the generated pay-in and pay-out for the executed transaction to the Eligible Entity.
- Shall issue the purchase certificate to the Buyers and details of the same shall be shared with the Registry
- After each trading session, shall display ESCerts demand supply curves on their website to enable the eligible entities understand demand supply dynamics in the market

The summary of role of various stakeholders in dealing with ESCerts is given in Table 2

Table 2: Role of various stakeholders in dealing of ESCerts

Stakeholder	Role in Dealing with ESCerts
Ministry of Power	<ul style="list-style-type: none"> - Issuance of ESCerts - Direct DCs to purchase ESCerts
BEE	<ul style="list-style-type: none"> - Review DC compliance report on submission by DC - Database of ESCerts/Banking of ESCerts - Provide assistance to the Commission, Registry and Power Exchange(s) in matters involving transaction of ESCerts on the Power Exchange(s)
Registry (POSOCO)	<ul style="list-style-type: none"> - Facilitation of trading of ESCerts - Updation of account of DC - Maintain records with respect to the transaction of ESCerts - Extinguishment of ESCerts
CERC	<ul style="list-style-type: none"> - Market Regulator for trading of ESCerts
DCs	<ul style="list-style-type: none"> - Registration with Registry to become eligible entities for trading of ESCerts - Place sell or buy bids for ESCerts on the Power Exchange(s)
Power Exchanges	<ul style="list-style-type: none"> - Permit the transaction of ESCerts only to the Eligible Entities

Key Contacts:

Contact details of concerned officials for PAT and Contact Details of PATNeT Officials are given on the BEE Website <https://beeindia.gov.in>.

Table 3: Key Documents and Submission Timelines for PAT Cycle

Key Documents	Description	Activity	Where to Submit	Timeline and Frequency of submission	Dates for PAT Cycle	Reference Copy
Action Plan	Contains brief description of identified energy saving measures by DC which would be implemented during PAT cycle to comply with SEC targets	To be submitted by DC	To SDA with a copy to BEE	Once in 3 years; within 3 months from relevant PAT Notification	30th June	-
Form 1 (sector specific Proforma)	Contains status of production and energy consumption of DC as per sector specific proforma	To be submitted by DC	To SDA with a copy to BEE	Yearly submission; within 3 months of the end of a Financial Year	30th June	
Form 2	Contains details on action taken on recommendations made by AEA in the energy audit report for improving energy efficiency of the DC	To be submitted by DC	To SDA with a copy to BEE	Once in 3 years; within 3 months of the submission of Energy Audit Report by the AEA to DC		
Form 3	Contains details of energy efficiency improvement measures implemented, investment made, energy savings achieved, progress made in the implementation of other recommendation during a FY	To be submitted by DC	To SDA with a copy to BEE	Yearly submission; within 3 months of the end of a Financial Year	30th June	
Form A (Performance Assessment Document)	Covering the performance of DC during relevant PAT cycle on energy conservation specifying the compliance with the SEC targets verified by EmAEA during Monitoring & Verification process	To be submitted by DC along with Form B and other documents	To SDA with a copy to BEE	Within 4 months of completion of target year	31st July	Enclosed as Annexure I

Key Documents	Description	Activity	Where to Submit	Timeline and Frequency of submission	Dates for PAT Cycle	Reference Copy
Form B	EmAEA Certificate of Verification of achievements of energy conservation norms and standards by the DC	To be submitted by EmAEA	To DC & BEE	Within 4 months of completion of target year	31st July	Enclosed as Annexure II
M&V Report	Details of the verification process, results of assessment and EmAEA opinion along with supporting documents, conclusion relating to DC compliance with energy consumption norms and standards etc. as per BEE format; prepared by EmAEA for DC	To be submitted by DC along with Form A, B and other relevant documents	To SDA with a copy to BEE	Within 4 months of completion of target year	31st July	Enclosed as Annexure X
Submission of Comments on Form A, Form B to BEE	The SDA will review the Verified Form A which contains the performance of DC during relevant PAT cycle on achievement of SEC target and may convey its comments if any on Form A to the BEE	To be submitted by concerned SDA	To BEE	Within 45 days of the last date of submission of Form A by DC	15th September	
Recommendation of ESCerts to MoP, Gol	The recommendation will specify the exact number of energy Savings Certificates to be issued or entitle to purchase by each DC to meet the compliance	To be submitted by BEE	To Central Government, MoP, Gol	Within 2 months from the date of the receipt of the comments from SDA	15th November	
Form C	EmAEA Certificate of Check-Verification of achievements of energy conservation norms and standards by the DC	To be submitted by EmAEA	To BEE	Within 1 year from the date of submission of compliance report	31st March	
Eligible Entity Registration Form	Application Form for Registration of Designated Consumer (DC) to become Eligible Entity (EE)	To be submitted by DC	To Registry	After intimation from BEE		Enclosed as Annexure V

Checklist	Checklist for Registration Application to become Eligible Entity	To be done by DC	To Registry	After intimation in procedure duly approved by CERC		Enclosed as Annexure VI
Procedure for Submission of	Procedure for Submission of documents to the Registry	To be done by DC	To Registry	After intimation in procedure duly approved by CERC		Enclosed as Annexure VII
Certificate of Registration	The Certificate of Registration given to DC as Eligible Entity for Trading of ESCerts	To be issued by Registry	To DC	Within 15 days after receiving the complete Application		Enclosed as Annexure VIII
Form D	Contains details of status of compliance of DC with the energy conservation norms and standards	To be submitted by DC	To SDA with a copy to BEE	Within 8 months from last date of submission of Form A by DC to SDA with a copy to BEE	31st March	Enclosed as Annexure IX
TOE threshold limit	13 DC sectors with toe threshold limit					Table 1
ESCerts Calculation method	Formula for determining the exact number of energy Savings Certificates to be issued or entitle to purchase by the DC					Enclosed as Annexure III

Figure 1: Process flow diagram with each activity of POSOCO/CERC under PAT Scheme

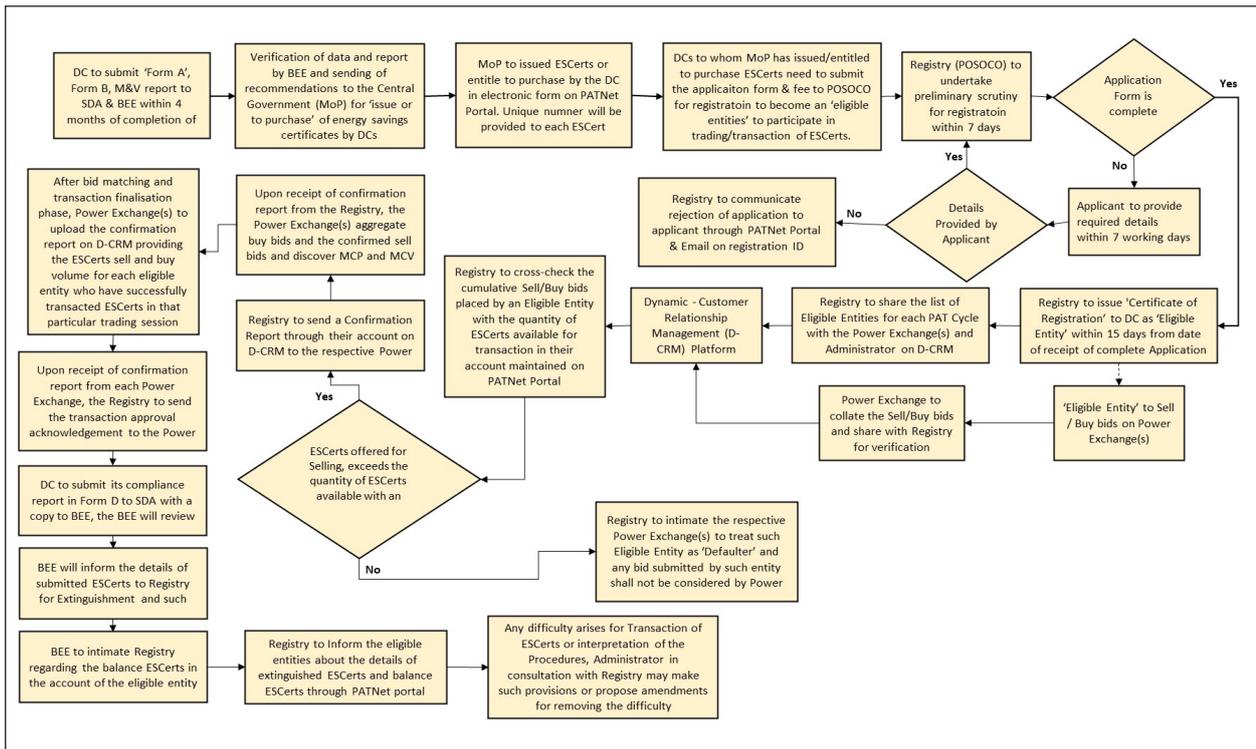
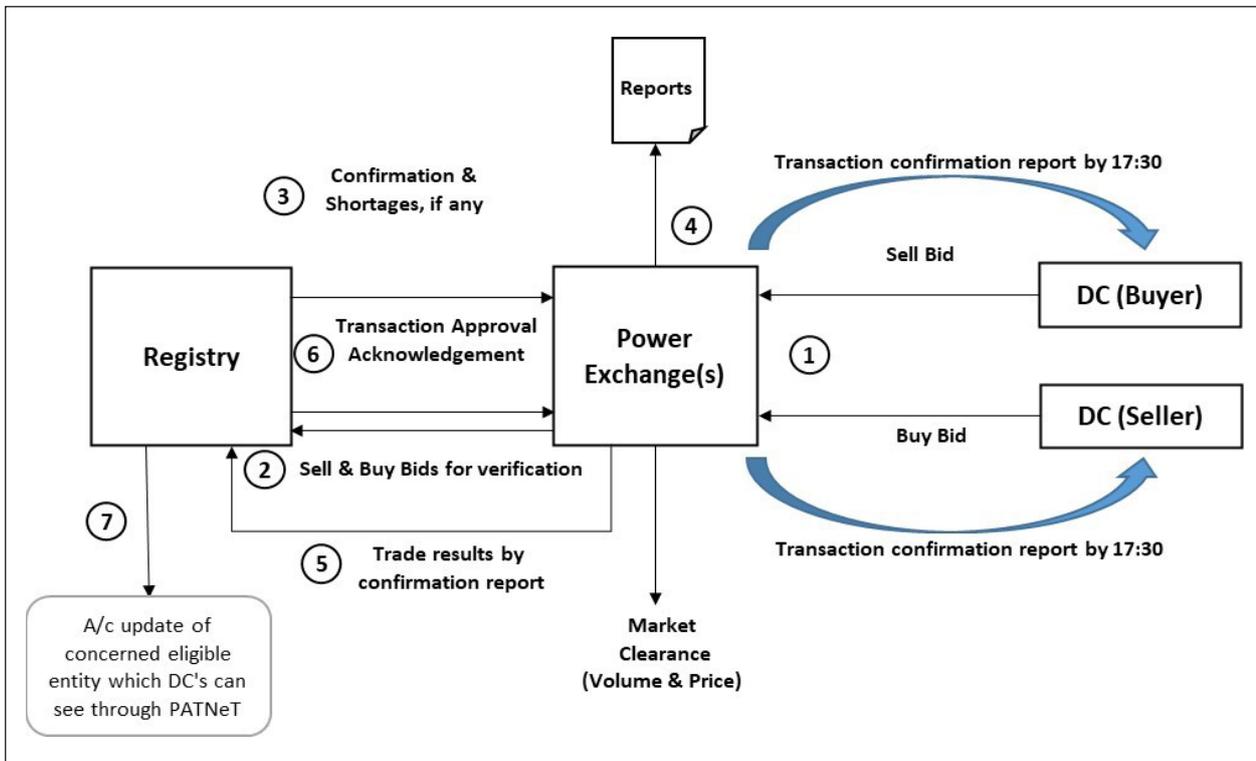
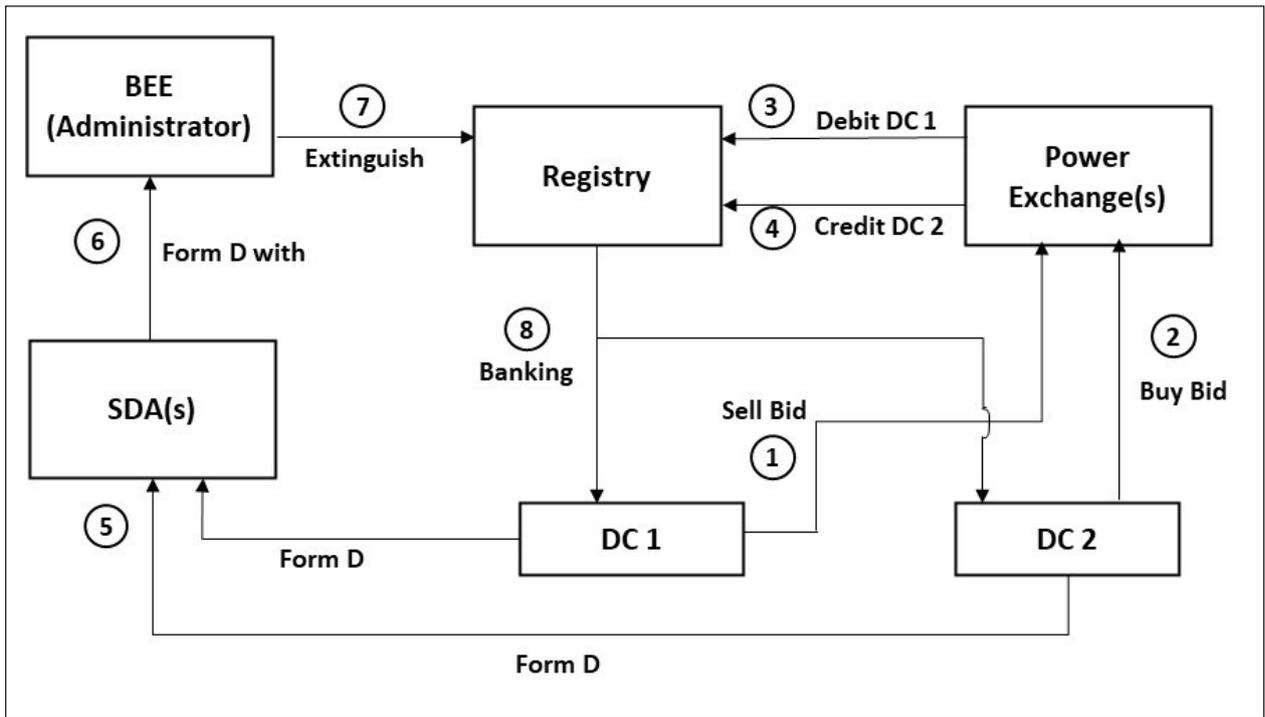


Figure 2: Process of Transaction (Sell & Purchase) of ESCerts



Note: The time shown above is tentative time

Figure 3: Process of Extinguishment of ESCerts by Registry



REFERENCES

List of Reference Documents

- Energy Conservation Act, 2001 and amendment in 2010

- BEE (Minimum Qualification for Energy Manager) Rules, 2006
- BEE (Certification Procedures for Energy Managers) Regulations, 2010
- BEE (Manner and Intervals of Time for Conduct of Energy Audit) Regulations, 2010 and as amended from time to time
- BEE (Qualifications for Accredited Energy Auditors and Maintenance of their List) Regulations, 2010, notification no. 02/11(7)/09-BEE dated 31st March, 2010
- Energy Conservation (The Form and Manner for Submission of Report on the Status of Energy Consumption by the Designated Consumers) Rules, 2007 notified vide, GSR 174(E) dated 2nd March 2007 and as amended from time to time
- Energy Conservation (Form and Manner and Time for Furnishing Information with regard to Energy Consumed and Action Taken on Recommendation of Accredited Energy Auditor) Rules, 2008 notified vide GSR 486 (E) dated 26th June 2008

Ministry of Power PAT Rules and Notifications as and when notified:

- PAT Rules- 30th March 2012
- PAT Rules, Amendment- 31st March 2016
- PAT Rules, Amendment -2018, 26th April, 2018

[The PAT rules are called as "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 Savings Certificate and Value of Per Metric Tonne of Oil Equivalent of Energy Consumed) Rules']

- S.O. 687 dated 30. Mar 2012- Targets under PAT - I
- S. O. 1264(E), 31st March, 2016, Notification for PAT Cycle II
- S.O. 2022 (E), dated 8th June, 2016, Corrigendum for Railway Sec. under PAT II
- S.O. 998(E), 30th March, 2017, Notification for PAT Cycle III
- S.O. 1348(E), 28th April, 2017 , Corrigendum of Targets under PAT III
- S.O. 1409(E), 28th March, 2018, Notification for PAT Cycle IV
- S.O. 1473(E), 29th March, 2019, Notification for PAT Cycle V
- S.O. 2673. dated 30th Sep, 2015, Exemption of NLC-1 from PAT I
- S.O.1378(E) dated 27th May 2014
- S.O. 394 (E) dated 12th March 2007
- S.O. 3542 (E) dated 29th December 2015 (Annexure 4B)
- S.O. 2022(E) dated 8th June, 2016
- S.O. 3600 (E) dated 15th November 2017 (Annexure 4D)
- S.O.968(E) dated 22nd February 2019
- S.O. 2147(E) dated 17th June 2020
- Handbook for Implementation of Provisions of The Energy Conservation Act, 2001-Version 1, BEE - 2019
- CERC approved Procedure for Transaction of ESCerts on 14th Feb 2017'

BEE Website: <https://beeindia.gov.in/>

ANNEXURE I:**Form – A**
[(See rule 6 (1))]**PERFORMANCE ASSESSMENT DOCUMENT**
(To be filled by designated consumer)

1.	Name of designated consumer		
2.	Registration number		
3.	Sector		
4.	Sub-sector		
5.	Accredited Energy Auditor		
a.	Name of the Empanelled Accredited Energy Auditor Firm		
b.	Registration number of Firm		
6.	List of documents submitted (Attach a copy self-attested by Energy Manager and counter signed by Accredited Energy Auditor)		
a.	Baseline data	Submitted/Not submitted	Date of submission
b.	Form 1 of Rules, 2007 or Rules, 2008 () Specify the year in the bracket	Submitted/Not submitted	Date of submission
c.	Form 1 of Rules, 2007 or Rules, 2008 () Specify the year in the bracket	Submitted/Not submitted	Date of submission
d.	Form 1 of Rules, 2007 or Rules, 2008 () Specify the year in the bracket	Submitted/Not submitted	Date of submission
e.	Form 2 of Rules, 2008	Submitted/Not submitted	Date of submission
f.	Form 3 of Rules, 2008	Submitted/Not submitted	Date of submission
7.	Specific energy consumption		
a.	Specific energy consumption (baseline) as notified		toe/tonne or Net Heat Rate, kcal/kWh or Energy Performance Index, as specified for a particular sector

b.	Production (baseline) as notified		Tonne or Million kWh
c.	Target specific energy consumption (SEC) as Notified		toe/tonne or Net Heat Rate, kcal/kWh or Energy Performance Index, as specified for a particular sector
d.	Difference of Baseline specific energy consumption (SEC) and Target specific energy consumption (SEC) as notified		toe/tonne or Net Heat Rate, kcal/kWh or Energy Performance Index, as specified for a particular sector (a-c)
e.	Normalised specific energy consumption (Achieved in the target year)		toe/tonne or Net Heat Rate, kcal/kWh or Energy Performance Index, as specified for a particular sector
f.	Energy savings certificates to be issued or deficit		Nos [(c-e)xb] or [(c-e)xb]/10

8. Energy Efficiency Project implemented during current cycle (Mention cycle period:)								
S. No	Project	Year of Implementation	Annual Energy Savings in Lakh kWh	Annual Energy Saving in toe*	Annual Energy consumption (before) in toe	Annual Energy consumption (after) in toe	Energy cost (Rs per kWh or toe)	Investment (Rs crores)
a.								
b.								
c.								
d.								
e.								

*Please indicate the weighted average Gross Calorific Value (GCV) of coal considered for calculation of toe: kcal/kg.

Note 1: Form A may be filled in accordance with the following guidelines, namely: -

GUIDELINES

1. Name of designated consumer: As per notification under clause (g) of section 14.
2. Registration No: As provided by Bureau of Energy Efficiency
3. Sector: As specified in Form 1 of Rules, 2007 or Rules, 2008.
4. Sub-sector: As specified in Form 1 of Rules, 2007 or Rules, 2008.
5. Name of accredited energy auditor: As selected by designated consumer from list of accredited energy auditor empaneled by Bureau of Energy Efficiency.

6. List of documents submitted:

- (a) Baseline data: Submitted to Bureau of Energy Efficiency for Target Calculations
- (b) Form 1 of Rules, 2007 or Rules, 2008 mention the year (): As per filing, attach acknowledgement of submission i.e. after completion of 1st year after notification
- (c) Form 1 of Rules, 2007 or Rules, 2008. mention the year (): As per filing, attach acknowledgement of submission i.e. after completion of 2nd year after notification
- (d) Form 1 of Rules, 2007 or Rules, 2008. mention the year (): As per filing, attach acknowledgement of submission i.e. after completion of target year
- (e) Form 2 of Rules 2008: As per filing, attach acknowledgement of submission
- (f) Form 3 of Rules 2008: As per filing, attach acknowledgement of submission

- 8. Project implemented during current cycle: Energy efficiency projects implemented by designated consumers during last three years. Attach photograph of energy savings projects implemented.

Undertaking

I/We undertake that the information supplied in this Performance Assessment Document is accurate to the best of my knowledge and if any of the information supplied is found to be incorrect and such information result into loss to the Central Government or State Government or any of the authority under them or any other person affected, I/we undertake to indemnify such loss.

I /We agree to extend necessary assistance in case of any enquiry to be made in the matter.

7. Specific energy consumption (SEC)

- (a) Specific energy consumption (Baseline): As notified by Government of India as aforesaid.
- (b) Production (Baseline): As notified by Government of India as aforesaid.
- (c) Target specific energy consumption as notified: notified by Government of India
- (d) Normalised specific energy consumption (Achieved): Normalised specific energy consumption (Achieved) in the target year from Form 1 of Rules, 2007 and Rules, 2008.
- (e) Energy savings certificates: Calculate as per formula provided in the rule 11. Enter +ve value if energy savings certificates to be issued to designated consumer or enter -ve value in case recommended for purchase of energy savings certificates

Signature

Name

Designation

For and behalf of

Name of the Firm/Company/ Organisation

SEAL of the Firm /Company/ Organisation

ANNEXURE II: Form B - EmAEA Certificate of Verification of achievements of energy conservation norms and standards by DC

Form B
(See rule 6(1))

CERTIFICATE OF VERIFICATION

M/s. the accredited energy auditor "(Name of Empanelled Accredited energy Auditor Firm)", have undertaken a thorough independent evaluation of the activities undertaken by Ms. a designated consumer for compliance with the energy consumption norms and standards specified under the Government of India Ministry of Power notification number....., dated the..... during the target year compared to the baseline year and consequent entitlement or requirement of energy savings certificates and certify that-

- (a) the verification of the data collection in relation to energy consumed and specific energy consumption per unit of production in the baseline year and in the target year in Form 1 under Rules 2007 or Rules 2008, has been carried out diligently and truthfully;
- (b) the verification of the identified energy efficiency measures, and the progress of their implementation given in Form II and Form li I under Rules 2008 has been carried out diligently and truthfully;
- (c) the verification of the compliance with energy consumption norms and standards during the target year has been carried out diligently and truthfully;
- (d) the verification of the total amount of energy saved, year-wise, after the baseline year and until target year or otherwise and request made by the designated consumer, the entitlement of (Nos) energy savings certificate (s) required to be issued or purchased by him have been carried out diligently and truthfully;
- (e) (e) all reasonable professional skill ,care, and diligence have been taken in verifying the various verification activities, findings and conclusions, documents, reports, preparing the documents including the performance assessment document in Form 'A' and verification report and the contents thereof are a true representation of the facts.



Signature:

Name of accredited energy auditor for verification
Name of Empanelled Accredited energy Auditor Firm:

ANNEXURE III:

ESCerts Calculation Method

(i) For Thermal Power Plant Sector:

No. of energy savings certificates= (heat rate notified for target year – heat rate as achieved in target year) x Production in baseline year in million kwh/10

(ia) For petroleum refinery sector:

No. of energy savings certificates= (MBN notified for the target year– MBN as achieved in the target year) x Crude processed in the baseline year in thousand barrels x NRGF x 2.52 x 10⁻²;

(ib) For Railway Sector:

(A) Zonal Railways (Traction)

a= (specific energy consumption (Diesel traction– passenger) notified for target year – specific energy consumption (Diesel traction–passenger) as achieved in target year) x 1000 GTkm (Diesel traction–passenger) of baseline year.

b= (specific energy consumption (Diesel traction– goods) notified for target year – specific energy consumption (Diesel traction– goods) as achieved in target year) x 1000 GTkm (Diesel traction– goods) of baseline year.

a= (specific energy consumption (Electrical traction– passenger) notified for target year – specific energy consumption (Electrical traction– passenger) as achieved in target year) x 1000 GTkm (Electrical traction– passenger) of baseline year.

b= (specific energy consumption (Electrical traction– goods) notified for target year – specific energy consumption (Electrical traction–goods) as achieved in target year) x 1000 GTkm (Electrical traction– goods) of baseline year.

Then Energy Saving Certificates (ESCerts)= ((a+b)/1022) + ((c+d)/11630)

(B) For Production factories:

Energy Saving Certificates= (Specific Energy Consumption notified for target year – specific energy consumption achieved in target year) x No. of units in baseline year/1000 ;

(ic) For Electricity Distribution Company Sector:

No. of energy savings certificates= Percent Transmission & Distribution Loss notified for target year – Percent Transmission & Distribution Loss achieved in target year

(*Oil Equivalent Conversion Factor (OEC))EC x 80/100

(id) For Commercial Buildings or establishments:

No. of energy saving certificates= (Specific energy consumption notified for the target year – Specific Energy Consumption achieved in the target year) x total built up area excluding parking and storage (thousand meter square) in the baseline year.

(ie) For Petrochemical Sector:

No. of energy savings certificates= (Specific energy consumption notified for the target year – Specific energy consumption achieved in the target year) x total equivalent production of olefin products in the baseline year

(ii) for other sectors:

NNo. of energy savings certificates= (Specific Energy consumption notified for the target year – specific energy consumption as achieved in the target year) x production in baseline year

ANNEXURE IV:

Format 1.2

ESCerts Number Format

Cycle	ESCerts serial Number	DC Registration number	Date (issued) [DDMMYY]
01	00000001	DC Registration number	DDMMYY

ANNEXURE V:

Application Form for Registration of Designated Consumer(DC) to become Eligible Entity (EE) FORMAT

Section A: PAT Cycle Details

PAT Cycle (duration):

DC Registration Number:

DC Name:

Sector: State:

Name of State Designated Agency:

Plant Address:

Plant Head Name:

Plant Head Contact Details:

Number of ESCerts Issued/ to be purchased:

Postal Address:

Year of Establishment:

* The above details are as per Registration details submitted by Designated Consumer during Registration with BEE

Authorized Signatory of the Application (submit authorization Letter by CEO/CMD/MD/Director/Partners/Board Resolution):

Section B: Owner Details

Name of the Applicant

Type of Applicant:

(Individual/HUF/Partnership/Ltd Co./Pvt. Ltd. Co./Public Ltd. Co/Cooperative Society)

Postal Address of the Applicant:

Town/Suburb:

State: Postal Code:

Primary Contact Name: (Name of Authorised Signatory)

Position: Phone:

Fax: Mobile:

E-mail Address:

Permanent Account Number (PAN):

Tax Deduction and Collection Account Number (TAN):

EPFO - Employees Provided Fund Organisation Registration No.:

Corporate Identity Number (CIN):

Registration No. under Shops and Establishment Act:

Service Tax Number:

Secondary Contact Name:

Section C: Details of Fee and Charges

A. Name of the Bank:

B. Details of Fee Paid (Fees along with tax details):

i. One time Registration Fee -Rs.

ii. ESCert Fee (if applicable)-Rs.

iii. Service tax (as applicable on above i-ii) - Rs.

iv. TDS details, if applicable- Rs.

C. ECS reference number/Transaction reference number:

Section D: Declaration

Declaration to be signed by the M.D./CEO/Authorised Signatory of the Applicant

I/We certify that all information furnished above is true to the best of my/our knowledge and belief. I/ We shall abide by such terms and conditions that the Central Electricity Regulatory Commission may impose from time to time, to participate in the ESCerts transaction Mechanism from time to time.

INDEMNIFICATION

The Designated Consumer shall keep the Registry indemnified at all times and shall undertake to indemnify, defend and save the Registry harmless from any and all damages, losses, claims and actions, including demands, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the Registration/transaction of ESCerts under ESCerts transaction Mechanism. The Designated Consumer shall also keep Registry indemnified at all times and shall undertake to indemnify, defend and save the Registry harmless from any and all damages, losses, claims and actions, arising out of disputes with Administrator, State Designated Agencies (SDAs), as well as with Power Exchange(s), inclusive of confidentiality issues.

Signature of the applicant

(Seal of the Company)

Date:

Place:

ANNEXURE VI:

CHECK LIST FOR REGISTRATION APPLICATION

1. Hard Copy of Application signed and stamped on each page.
2. Declaration of Applicable Clauses given in online application on letter head of the concerned Designated Consumer.
3. Details of payment of registration fees/charges
4. Letter for authorised signatory if application is not signed by MD/CEO.

Type of Organization	Authority or his/her authorized representative
Public Ltd.	Board Resolution / MD / CEO
Pvt Ltd.	Director / MD
Partnership	Partner / Director / MD
Individual / Proprietorship	Owner
Cooperative / Govt. Department	Head of the Organization / Authorized representative

5. Permanent Account Number (PAN)
6. Tax Deduction and Collection Account Number (TAN)
7. Corporate Identity Number (CIN)
8. Service tax number
9. Employees Provident Fund Organisation Registration No. (wherever applicable)
10. Registration No. under Shops and Establishment Act (wherever applicable)

ANNEXURE VII:

Procedure for submission of the documents to the Registry

All communication regarding dealing in ESCerts to be addressed as follows:

The Nodal Officer,
ESCerts Registry,
1st Floor NLDC office
B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016.

All documents regarding ESCerts shall be accepted by the Courier/by hand or through services of Indian Post. However, the delivery of documents through courier/ by hand will be accepted on all working days during 10 AM to 12 noon and 3 PM to 5 PM and the same will be acknowledged through POSOCO date stamp and acknowledgement number.

The Application(s) for Registration of Designated Consumers to become eligible entities and the name of the Designated Consumer has to be clearly stated on the envelope.

Further, the requisite documents to be submitted by BEE, the Power Exchange(s) may be accepted by the POSOCO through their respective authorized e-mail.

ANNEXURE VIII:

FORMAT 1.3: CERTIFICATE OF REGISTRATION

This is to certify that (Name of the Designated Consumer)

..... [Designated Consumer

Registration Number having Address] has been registered with Registry as 'Eligible Entity' for the

PAT Cycle

This registration is granted subject to fulfilling the Rules, Regulations and Procedures specified by the CERC/Administrator/Registry from time to time.

The expiry of this certificate is due on the compliance of next PAT Cycle.

Authorized Signatory of the Registry

National Load Despatch Centre,

B-9, Qutab Institutional Area, Katwaria Sarai,

New Delhi- 110 016

Date of Issue:

This is a computer-generated Certificate and needs no signature.

ANNEXURE IX: Form D (Contains details of status of compliance of DC with the energy conservation norms and standards)

FORM-D

(See rule 13 and 14)

COMPLIANCE OF ENERGY CONSUMPTION NORMS AND STANDARD DOCUMENT
(To be filled in by designated consumer)

1.	Name of designated consumer		
2.	Registration number		
3.	Sector		
4.	Sub-sector		
5.	List of documents submitted		
a.	Performance Assessment Document (Form 'A')	Submitted/Not Submitted	Date of Submission
6.	Compliance		
a.	Energy Savings Certificates		Issued/Recommended for purchase
b.	Energy Savings Certificates submitted for compliance		If recommended for purchase
c.	Balance Energy Savings Certificates		Nos

Note 1: Form D may be filled in accordance with the following guidelines: -

GUIDELINES

1. Name of designated consumer: As per notification from Government of India (GoI) under clause (g) of section 14
2. Registration number: As per E-filing
3. Sector: "As specified in Form A"
4. Sub Sector: "As specified in Form A"
5. List of Documents submitted:
 - (a) Performance assessment document: Submitted to Bureau of Energy Efficiency for issue of energy savings certificates.
6. Compliance
 - (a) Energy savings certificates: Enter +ve value if energy savings certificates issued to designated consumer or enter -ve value in case recommended for purchase of energy savings certificates
 - (b) Energy savings certificates submitted for compliance: If designated consumer is recommended for purchase of energy savings certificates, then enter value of energy savings certificates submitted by designated consumer for compliance of energy consumption norms and standards- saving target of designated consumer.
 - (c) Balance energy savings certificates: - Numbers of energy savings certificates balance. If balance is ZERO than DC is in accordance for compliance of energy saving target and if balance is -ve than DC will be recommended for penalty.

Undertaking

I/We undertake that the information supplied in compliance with energy consumption and standard documents in this Form 'D' is accurate to the best of my/our knowledge and if any of the information supplied is found to be incorrect and such information result into loss to the Central Government or State Government or any of the authority under them or any other person affected, I/we undertake to indemnify such loss.

I/we agree to extend necessary assistance in case of any enquiry is made in the matter.

Signature

Name

Designation

For and behalf of

Name of the Firm/Company/Organisation

SEAL of the Firm/Company/Organisation

ANNEXURE III:

Suggested format of M&V Report

The M&V report to be submitted to BEE shall include, but not limited to, the following details,

- 1) Details about the DC which includes name of the plant, registration number, details about energy manager/auditor
- 2) Period over which the verification was done
- 3) Block diagram/ single line diagram showing entire process (all units) of the plant with clear boundary conditions, fuel sampling points (if applicable), and intermediate import/ export channels for fuel, raw materials, and products. If any condition has been changed in the assessment year, the same needs to be clearly highlighted (with dotted line, other colour, etc)
- 4) Block diagram/ single line diagram showing entire electrical system in the present boundary condition, with import/ export, as and where applicable.
- 5) Details about the scenario of the baseline & verification year – Production, energy consumption pattern, sources of energy etc.
- 6) Energy conservation measures implemented, with, quantified savings, investment made, etc.
- 7) Quantified break-up of the savings accrued w.r.t. the measures taken, year wise.
- 8) Agency's view and findings on the savings measures vs actual savings incurred.
- 9) Quarterly, Yearly and End of Cycle (EoC) Data Reports by DCs (2015–2018)
- 10) Measuring Equipment and Instrument Calibration
- 11) Energy scenario in the assessment year – Main plant, CPP, HRSG, GTG etc.
- 12) Addition or deletion of Equipment as compared to baseline scenario
- 13) Changes in Process Flow, Plant & Machinery, Technology, Product Mix, addition, deletion of products etc. in current year as compared to baseline
- 14) Details of raw materials prepared used in the year with quality parameters
- 15) Fuel related information including usage, fuel analysis (solid, liquid & gaseous), procedure carried out for fuel analysis in lab
- 16) Fuel Analysis report (Internal and External) with frequency of fuel testing
- 17) Energy and mass balance of the entire process.
- 18) Suggestions/comments on the proforma by Accredited energy auditor
- 19) List of documents verified with each parameter (both baseline & assessment year)
- 20) Details about normalization factors identified
- 21) Gate-to-gate diagrams (Baseline & Assessment year)
- 22) Annexures required
 - i. Proforma
 - ii. Production reports
 - iii. Annual power cost reports
 - iv. CPP/HRSG/WHR monthly reports
 - v. Signed copy of Form A & B
 - vi. Calculation of normalization factors – with supporting documents
 - vii. Details about Energy Manager, PCB Consent, calibration certificates, Fuel receipt details etc.
 - viii. Supporting document for all the parameters in the proforma.
 - ix. Reconciliation document, as applicable



Bureau of Energy Efficiency

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