



# Workshop for PAT Cycle I Designated Consumers on Familiarization of ESCerts Trading Process

22-23 May 2017 India Habitat Centre, New Delhi





#### Background of PAT cycle I

- Under National Mission for Enhanced Energy Efficiency (NMEEE), the scheme of Perform Achieve and Trade (PAT) to reduce specific energy consumption in energy intensive industries, with an associated market based mechanism to enhance the cost effectiveness through certification of excess energy saving which can be traded.
- Perform Achieve and Trade in its first cycle was designed to reduce the specific energy consumption (SEC) in energy intensive sectors under which 478 DCs from 8 sectors viz. Aluminum, Cement, Chlor- Alkali, Fertilizer, Iron & Steel, Paper & Pulp, Thermal Power Plant and Textile.
- PAT cycle I has achieved an energy saving of 8.67 mtoe against the targeted energy saving of 6.68 mtoe which is about 30% over achievement. Ministry of Power has issued approximately 38.25 lakh ESCerts to 306 Designated consumers while 110 Designated Consumers have to purchase ESCerts for their compliance.
- PAT Cycle –II (2016-17 to 2018-19) commenced from 1<sup>st</sup> April, 2016 under which 621 industrial units from 11 sectors (8 existing sectors and 3 new notified sectors viz. Railways, Refineries and electricity distribution companies (DISCOMs) have been notified
- PAT cycle III (2017-18 to 2019-20) has commenced from 1<sup>st</sup> April 2017 under which targets for 116 DCs in 6 sectors have been notified.





#### **Realized Impacts – PAT 1 (2012-2015)**



## **Energy Saving**

8.68 mtoe 5635 MW

1.25% of India's total primary energy supply



## **Emission** Reduction

31 million tonnes of CO2

1.93% of India's emissions



## Skill Development

Capacity building: 5000+ Engineers and operators

13718 Energy Auditors & Managers

219 Accreditation



#### **Savings**

Rs 37,685 Crores

from saved
energy
consumption
and avoided
generation



#### Investment

Encouraged investments for energy efficient technologies for domestic manufacturing

Rs 24,517 Crore invested





#### **Trading of ESCerts - Background**

- Section 14A (1) of Energy Conservation Act 2001 gives power to Central Government to issue energy savings certificate to the designated consumer whose energy consumption is less than the prescribed norms and standards.
- ➤ Energy Conservation Rules, 2012 (PAT Rules 2012) notified on 30th March 2012 by Ministry of Power, has specified that the ESCerts to be issued/entitled to purchase will be in electronic form and tradable on Power Exchange. BEE developed PATNet portal for all the DCs through which they upload their forms and ESCerts can be electronically issued/entitled to purchase to them.
- The Power Exchanges are regulated by CERC and with respect to the powers conferred to CERC under section 66 and sub-section (1) as well as clause (y) of sub-section (2) of section 178 of the Electricity Act, 2003, the Central Commission can make the regulations for the development of market (including trading) in power sector.





#### Trading of ESCerts – Background......contd.

- ➤ Value of one ESCert is equal to one metric ton of oil equivalent of energy consumed. The value of per metric ton of oil equivalent of energy consumed shall be prescribed by Central Government , in consultation with BEE, under Section 14 B of the Energy Conservation Act 2001.
- As per PAT Rules amendment dated 31, March 2016, the value of per metric ton of oil equivalent for 2014-15 is Rs. 10968.
- For trading of ESCerts, no floor price or forbearance price has been defined as the price of ESCerts shall be discovered at the power exchanges
- A buyer DC can buy the ESCerts upto or more than their compliance whereas a seller DC can not buy the ESCerts. DCs to whom the ESCerts shall be issued can sell them at Power exchanges and balanced ESCerts can be utilized for compliance of their next consecutive PAT cycle.
- The ESCerts submitted to BEE for meeting the compliance, will stand expired. After purchasing ESCerts DCs cannot re-sell them and could use those ESCerts for compliance of current or for compliance of their next consecutive PAT cycle.





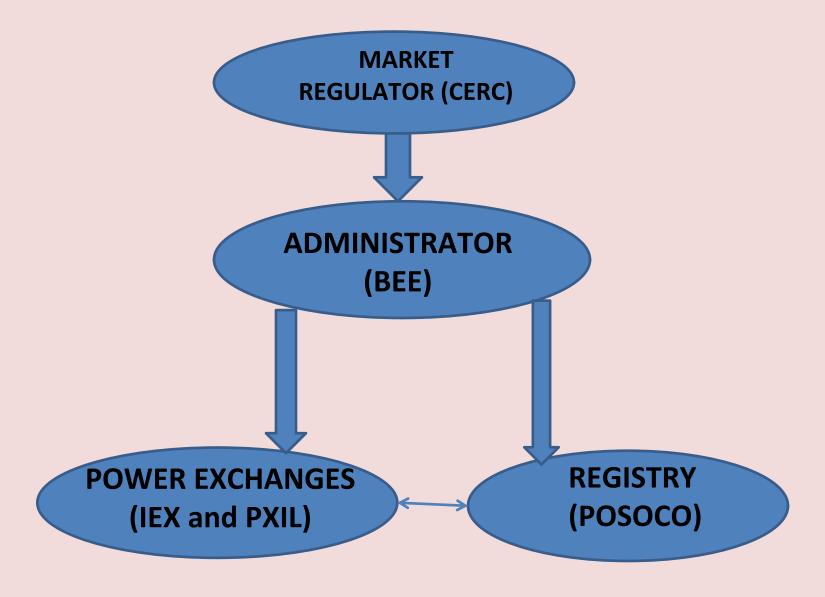
#### **Trading Regulations for ESCerts**

- ➤ Central Electricity Regulatory Commission (Terms and Conditions for Dealing in Energy Savings Certificates) Regulations, 2016 was issued by CERC on 27<sup>th</sup> May, 2016 and notified on 30<sup>th</sup> May, 2016. Important features of this Regulation are as follows:
  - Roles & responsibilities of Administrator, Registry, CERC and Power exchanges were defined.
  - b. Market price of ESCerts shall be discovered through bidding at power exchanges i.e. through closed double-sided uniform price auction.
  - c. Interested DCs to whom ESCerts have been either issued or are entitled to purchase by MoP have to register themselves with 'Registry' i.e. POSOCO to become eligible entity
  - d. For trading in Power exchanges too the DCs have to get themselves registered with any of the exchange.



### **Regulatory structure for Trading of ESCerts**

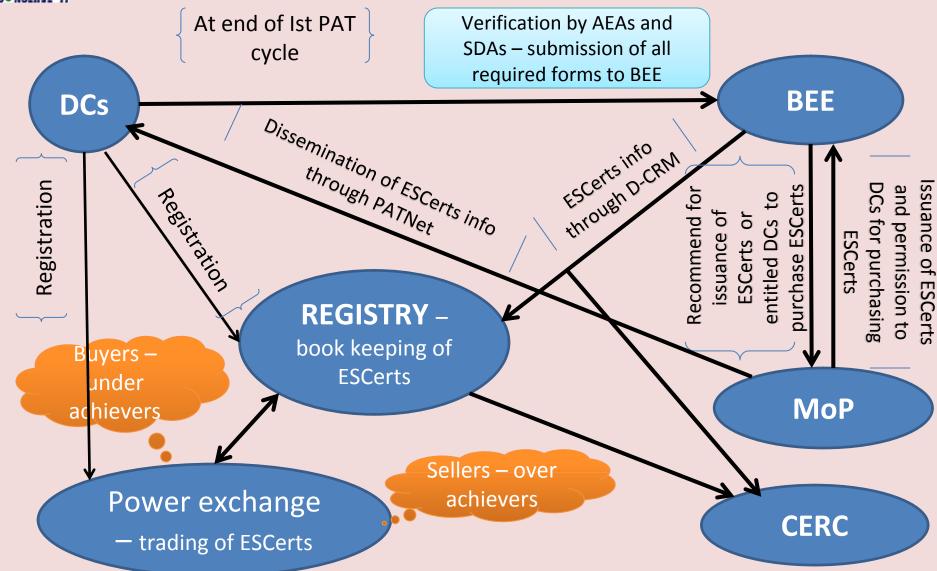






#### **Process Flow of ESCerts in PAT**









#### **Procedure for Transaction of ESCerts**

- ➤ BEE (Administrator) had developed the detailed procedure for transaction of ESCerts in consultation with POSOCO (Registry) and on 14<sup>th</sup> February 2017, the Procedures was approved by the Commission. Following are important features of Procedure:
  - a. Template of application form to become eligible entity for trading of ESCerts has been defined. Documents like PAN, TAN, CIN, etc shall be required. DCs shall fill up application form through PATNet (where already DCs of PAT cycle I are registered)
  - b. Process of application scrutiny by Registry has been detailed
  - c. Registry shall grant certificate of Registration to eligible entities
  - d. Event of default will happen when a DC who is a seller will place bid more than the ESCerts issued to it. Upto three times, it will be simply debarred for one month and more than three times he continues, then the Dc will be debarred for six months from the trading.
  - e. Interface activities between Power exchanges and Registry, Administrator and Registry, and Registry and Designated consumers have been defined in detail.





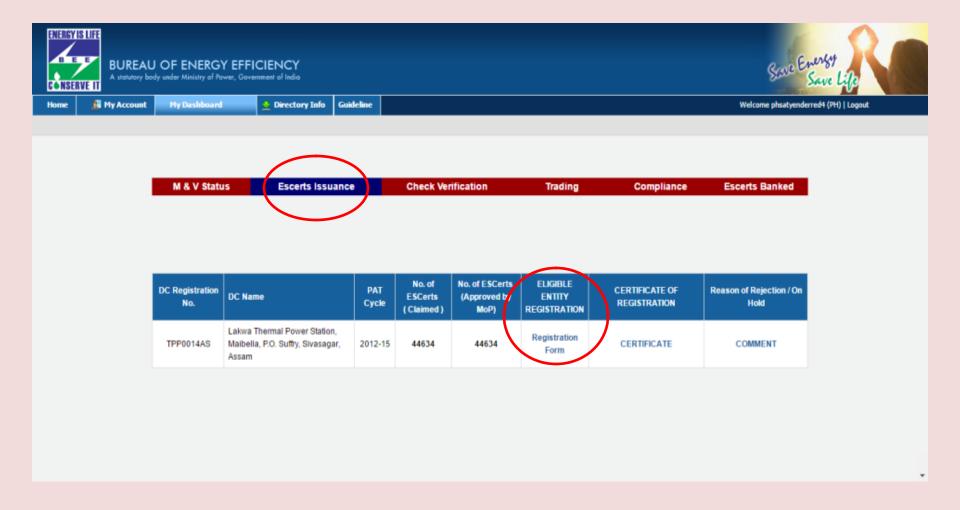
#### Fee order for Transaction of ESCerts

- ➤ On 24th March 2017, CERC has approved the Fee order for transaction of ESCerts, with following details:
- i. One time Registration Fee of Rs. 15000/- per eligible entity. However, CERC has exempted the DCs to pay registration fee till 31st December 2017.
  - ii. The Eligible Entities who have been issued ESCerts, shall pay an ESCerts Fee at the rate of Rs. 5/- per ESCert.
  - iii. The taxes and duties on fees & charges shall be applicable as per the prevailing norms.
- ➤ All payment to Registry shall be done only through ECS and no draft / cheque will be accepted. Transaction id of RTGS / NEFT has to be provided in the application form to become eligible entity. Bank account details shall be provided to the DCs separately.



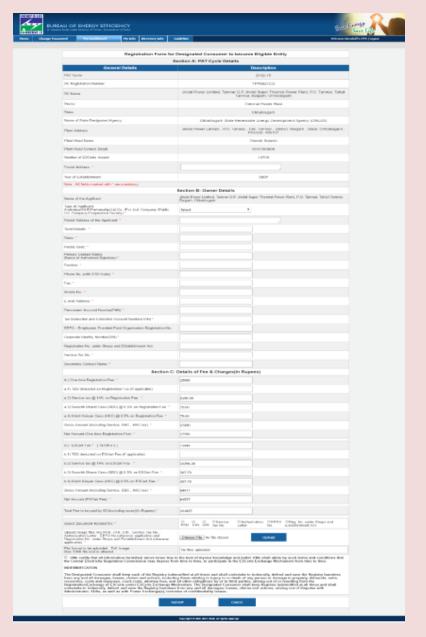
#### DC - Dashboard PATNet Portal







#### DC - Registration Form on PATNet Porta



This registration form is to be filled by designated consumer on PATNet portal to become eligible entity. Subsequently the data will be submitted to Registry.





# Timportant features of ESCerts (Energy Conservation Rules 2012)

- > The energy savings certificates (ESCerts) shall be issued in electronic form.
- The value of one energy savings certificate shall be equal to one metric ton of oil equivalent of energy consumed.
- The DC who has been issued ESCerts during the current cycle may sell them through Power Exchange, or may use them for the purpose of banking until their next consecutive compliance cycle. The ESCerts issued in a cycle period shall remain valid till the completion of compliance period of their next consecutive cycle.
- The ESCerts purchased by a DC for the purpose of compliance with the energy consumption norms and standards shall after their submission to BEE stand expired.





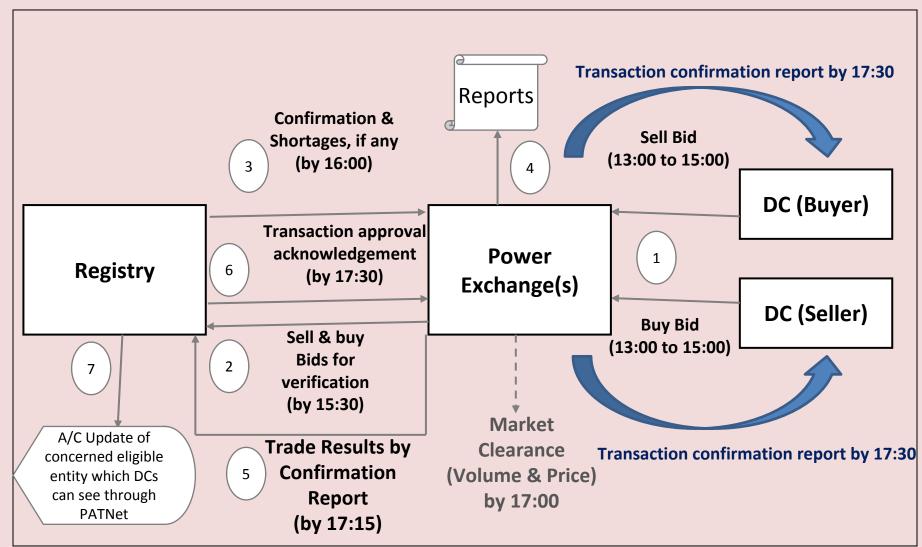
#### **ESCerts Number format**

CYCLE	ESCerts Serial Number	DC Registration Number	DATE (Issued) [DDMMYY]
01	0000001	DC Registration Number	DDMMYY





#### **Process flow for ESCerts trading**







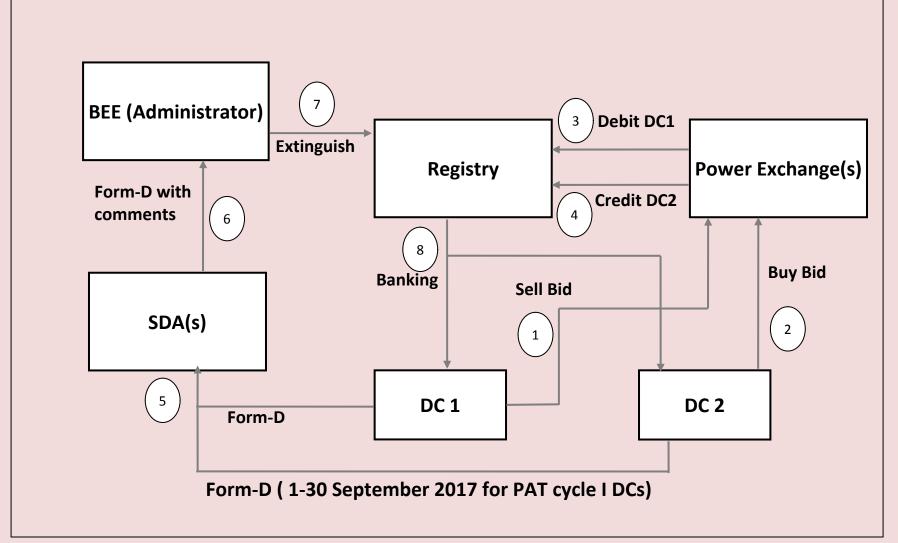
#### **Trading period**

- DCs shall submit the application for registration to Registry to become Eligible Entity within 15 days as per the date intimated by the Administrator.
- After receipt of application for registration, the Registry shall undertake scrutiny and inform the applicant (by email) within 7 working days.
- The applicant shall furnish the details as requested by the Registry within 7 working days so as to unable the Registry to undertake the registration of the applicant.
- The process of registration of the DC shall be completed within 15 working days from the date of complete information by the Registry.
- After registration, the Eligible Entities shall be allowed to undertake trading of ESCerts as per the procedure and bye laws of the power exchanges approved by the Commission.
- As per clause 8.6 of the Procedure, the period for submission of form D is from 1<sup>st</sup> to 30<sup>th</sup> June of the year. This period has now been revised to 1<sup>st</sup> to 30<sup>th</sup> September for the year 2017, in which the DCs of PAT cycle I may submit Form D to BEE for compliance.





### Flow of Extinguishing process for ESCerts









For further information, please contact:

#### Vineeta Kanwal

Assistant Energy Economist
Bureau of Energy Efficiency
Ministry of Power,
4th Floor, Sewa Bhawan, Sector 1
R. K. Puram, New Delhi -110066
Ph: +91 11 26179699

Fax: +91 11 26178352

Email: vkanwal@beenet.in, igupta@beenet.in, vmehta@beenet.in

WEB: https://www.beeindia.gov.in