



Perform Achieve & Trade

Amendments in PAT Rules Cycle II – The Next Step Forward

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Energy Conservation Rules 2012 (PAT Rules)

Energy Conservation Rules, 2012

In exercise of powers conferred under the Energy Conservation Act, 2001 (52 of 2001), the Central Government has made the following rules, namely :-

“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, 2012”

Energy Conservation Rules, 2012

These Rules define

- The procedure for establishment of energy consumption norms and standards and specify such norms and standards for Designated Consumers (Rule 3 & 4)
- Scheme for preparation and implementation of efficient use of energy and its conservation. (Rule 5)
- Assessment of Performance by the Designated Consumers with reference to the energy Consumption Norms and Standards specified for them (Rule 6)
- Procedure for Assessment of performance through Monitoring & Verification (M&V) and Check verification by Empaneled Accredited Energy Auditor (Rule 7 & 8)
- The Procedure regarding compliance with energy consumption Norms and Standards and for issue of ESCerts . (Rule 9 , 11,12 &13)

Energy Conservation Rules, 2012

These Rules define

- Roles and responsibilities of various stake holders (Rule 10 & 15)
- Establishment of new Baseline for the next PAT Cycle (Rule 14).
- The procedure for notifying the price of one tonne of oil equivalent (toe) for purposes of penalty (Rule 16).
- The reporting and verification format for compliance with Energy Consumption Norms and Standards (Form A, Form B, Form C and Form D).
- The procedure and formulae for Normalization (Schedule I & II)
- The timelines for various activities under Perform, Achieve and Trade






Reasons for Proposed amendments in Energy Conservation Rules, 2012

- Based on implementation experience during PAT Cycle I, and on inputs from sector technical committees and through wide consultation with DCs and concerned stakeholders, the need was felt to amend certain provisions of the aforesaid rules with an **objective** to:
 - ✓ Provide clarity and better understanding
 - ✓ Remove the ambiguity
 - ✓ Maintain consistency

- Amendments have been proposed for-
 - ✓ Insertion of new provisions
 - ✓ Omission of existing provisions
 - ✓ Modification in provisions of aforesaid rules






Summary of Proposed amendment in Energy Conservation Rules, 2012

Insertion of New Provisions

Sr No	Rules	Sub Rule/ Clause	Addition	Remarks
#1	Rule 2	after clause (a),	Definition of Accredited Energy Auditor	AEA carries out verification. Definition needed 
#2	Rule 2	after clause (a),	Definition of compliance period	To define the Validity of ESCerts. Definition needed 
#3	Rule 2	after clause (a),	Definition of Normalisation	The insertion of this definition was suggested by Ministry of Law while vetting the EC Rules, 2007 on the ground that the term “normalisation” appears repeatedly in EC Rules, 2012 
#4	Rule 2	after clause (d),	Definition of CERC is listed	CERC regulates Exchanges for ESCerts trading. Definition needed 
#5	Rule 4	clause (b(iii)) of Sub Rule (1)	Clarification on “Grid Connection”	Necessary to differentiate between Grid Connection and Grid Synchronisation 





Summary of Proposed amendment in Energy Conservation Rules, 2012

Insertion of New Provisions

Sr No	Rules	Sub Clause	Rule/ Addition	Remarks
#6	Rule 8	Sub-rule (2)	Inspection of Check Verification – Supervision	Under Act, and as provided for, in Inspection Rules SDAs are the inspecting agencies. This has been explicitly provided here for consistency and clarity 
#7	Rule 12	Sub-rule (7),	Function of CERC as market regulator for ESCerts trading	Role of CERC as Regulator of Exchange for ESCerts is explicitly provided for. 
#8	Rule 16	Sub-rule (3)	The value of per metric ton of oil equivalent of energy for the year 2014-15	The value of per metric ton of oil equivalent of energy consumed has been calculated for the FY 2014-15 
#9	Form B & Form C		Name of the Empanelled Accredited Energy Auditor Firm	To provide clarity 
#10	Schedule	After Schedule I	Insertion of Schedule II for incorporation of Normalisation Factors	Implementation during PAT Cycle I showed that conditions during baseline and target years may be very different due to which SEC are not directly comparable. The schedule provides formulae for Normalisation 







Summary of Proposed amendment in Energy Conservation Rules, 2012

Omission of Some existing Provisions

Sr No	Rules	Sub Rule/ Clause	Deletion	Remarks
#1	Rule 4,	Clause (b(v)) of Sub Rule (1)	Provision to report disaggregated figures	Had been earlier included as a precautionary measure to substantiate SEC at aggregated level. However, implementation has shown that disaggregated data is not required as these data are not verified 
#2	Rule 4,	After Clause (d), clause (e)	Has same provision as given in clause (c) of sub-rule 1	The normalisation of factors beyond the control of DCs has already covered in clause (c) of sub-rule 1 
#3	Rule 6	sub-rule (2)	Earlier issuance of Escerts (First and Second year of PAT Cycle)	This provided for "Provisional" issuance of ESCerts in the first and second years of PAT cycle to enable market liquidity. However, there are no buyers before the 3 rd year. As we move towards Rolling cycle (i.e., New plants are added each year with a three year target), this is no longer needed 
#4	Rule 11	sub-rule (3)	Deletion of Formulae for carrying out the earlier issuance of ESCerts	Since the provision for early issuance has been deleted, hence there is no relevance for retaining the formulae to workout the entitlement of ESCerts. (This is a consequential to the deletion of early issuance of ESCerts.) 

Summary of Proposed amendment in Energy Conservation Rules 2012

Modification in some Provisions

Sr No	Rules	Sub Rule/ Clause	Original Provision	Modification	Remarks
#1	Rule 2	Sub-rule 1, clause (d)	“check-verification” The energy consumption norms and standards achieved in any year of the three year cycle	“check-verification” The energy consumption norms and standards achieved in the target year	This provided for “Provisional” issuance of ESCerts in the first and second years of PAT cycle to enable market liquidity 
#2	Rule 3	clause (a) of sub-rule (2)	Determination of Energy consumption Norms and standards through Energy Audit	1. Av rate of reduction in SEC across Sectors through Energy Audit 2. Through policy objectives	To provide comprehensive scope in the setting of Specific Energy Consumption target, and to be able integrate policy objective in target setting 
#3	Rule 4	Clause (c) of sub-rule (1)	Schedule	“Schedule I and Schedule II”	Insertion of new schedule II 
#4	Rule 4	Sub-rule (4)	Schedule	“Schedule I and Schedule II”	Insertion of new schedule II 
#5	Rule 6	Sub-rule (1), clause (c) & (d)	“Form II” and “Form III”	“Form 2” and “Form 3” respectively.	To provide clarity and consistency 
#6	Rule 6	Sub-rule (7)	SDA to comment with in Fifteen days or fifteen working days	Twenty Days	To remove ambiguity due to working days 






Summary of Proposed amendment in Energy Conservation Rules 2012

Modification in some Provisions

Sr No	Rules	Sub Rule/ Clause	Original Provision	Modification	Remarks
#7	Rule 8	sub-rule (2)	The Bureau's action in accordance with the "Check Verification"	where the Bureau decides to undertake check-verification on its own, it shall appoint an accredited energy auditor, who has not performed the verification functions w.r.t. concerned DC	To enhance the scope of check-verification of DCs
#8	Rule 8	sub-rule (3), clause (b)	Rule 6	Rule 7	To correct the reference to rule
#9	Rule 8	Sub-rule (3), clause (c)	Permissible Error, omission or misrepresentations or aggregation of data	Permissible errors, omissions or misrepresentations or aggregation by way of errors, and sums thereof shall not exceed $\pm 0.5\%$	To provide consistency for errors in check-verification and reasonable value of tolerance
#10	Rule 8	Sub-rule 15	Sub-rule 9	Sub-rule 14	To correct the reference to rule
#11	Rule 11	Sub-rule (1)	BEE recommendation by ten working days	Fifteen Days	To remove ambiguity due to working days
#12	Rule 11	sub -rule (2)	Earlier issuance of ESCerts (First and Second year of PAT Cycle)	Issuance of Certificate only after the end of target year	As discussed earlier in relation to omission of Rule 6 (2)
#13	Rule 12	sub-rule (1)	i. Under Rule 10 ii. Issue of ESCerts by Central Government by 15 working days	i. Under Rule 11 ii. Twenty Days	i. Typographical Error ii. To remove ambiguity due to working days







Summary of Proposed amendment in Energy Conservation Rules 2012

Modification in some Provisions

Sr No	Rules	Sub Rule/ Clause	Original Provision	Modification	Remarks
#14	Rule 12	sub-rule (3)	The value of one energy savings certificates	The value of one energy savings certificates shall be rounded off to nearest whole number as per IS 2: 1960."	To provide consistency 
#15	Rule 12	sub-rule (4)	DC to sell ESCerts through Power Exchange	DC to sell ESCerts through Power Exchange regulated by CERC	To provide clarity on position of power exchanges under the CERC 
#16	Rule 12	sub -rule (5) sub-rule (6)	DC who has been issued ESCerts may use them for the purpose of Banking ESCerts issued shall remain valid till the completion of the compliance period of next cycle	DC who has been issued ESCerts may use them for the purpose of Banking and the ESCerts issued shall remain valid till the completion of the compliance period of their next cycle	As per direction in meeting with JS(EC), both sub-rules of rule 12 has been merged 
#17	Rule 13	Sub-rule (1)	The compliance with the energy consumption norms and standards during the target year in Form 'D' by the end of five months from the last date of submission of Form 'A' -	The compliance with the energy consumption norms and standards during the target year, in Form 'D' by the 30th November of the year following the respective target year."	To provide clarity on the submission of "compliance of energy consumption norms and standard document- Form D" 
#18	Rule 13	sub-rule (1), existing clause (b)	the designated consumer shall purchase the energy savings certificates equivalent in full satisfaction of the shortfall in the energy consumption norms and standards worked out in terms of metric ton of oil equivalent.	the designated consumer shall purchase the energy savings certificates equivalent in full satisfaction of the shortfall in the energy consumption norms and standards worked out in terms of metric tonne of oil equivalent and after achieving compliance , the balance energy savings certificates if any, may be used for the purpose of banking and may sell through the power exchange."	

Summary of Proposed amendment in Energy Conservation Rules 2012

Modification in some Provisions

Sr No	Rules	Sub Rule/ Clause	Original Provision	Modification	Remarks
#19	Rule 16	sub-rule (1)	Average of delivered fuel	Average price of delivered fuel	For clarification 
#20	Form A		Form A modification	Form A modification to capture normalised SEC	For clarification 
	FORM B		See rule 5 I/We Form II, Form III	see rule 6(1) I/We Shall be FORM 2 and FORM 3	Rule reference For consistency 
	FORM C		See rule 7 I/We Form II, Form III	[see rule 8(9) and 10(14)] M/s Shall be FORM 2 and FORM 3	Rule reference 
#21	FROM D		Heading: 3. Sector Heading: 4. Sub-Sector	Heading: 3. Sector "As specified in FORM A" Heading: 4. Sub-Sector "As specified in FORM A"	For clarification 
#22	Schedule		Schedule	Schedule has been substituted by Schedule -I	For consistency 

Baseline Fixation and Target Setting Methodology

Baseline Fixation-Existing DCs

Existing DCs

- ▶ As per Rule 14 of Energy Conservation Rules, 2012
- ▶ SEC achieved -Un-normalised in the target year 2014-15
- ▶ The existing Product-mix normalisation to be made for the year 2014-15 (The energy factor/Ratio/Clinker factor for target to changed as per target year factor)
- ▶ Intermediary product effect is same as per Pro-forma
- ▶ Power Export as per Weighted Heat Rate to be made as per year 2014-15
- ▶ As Fired GCV will be used for determining the thermal energy consumption for SEC calculation
- ▶ Other normalisation effect to be reviewed for impact in the SEC in the target year

Existing DCs

Rule 14: The energy consumption norms and standards achieved by the designated consumer on the completion of the target year, as mentioned in the compliance report in Form-'D' shall be the baseline for establishment of new plant specific energy consumption norms and standards for designated consumers for the next cycle.

PAT Cycle I Un-normalised SEC of Assessment year will be considered as Baseline year SEC for the existing DCs in PAT Cycle II

Baseline Fixation-New DCs in existing sector

Consideration of year's data

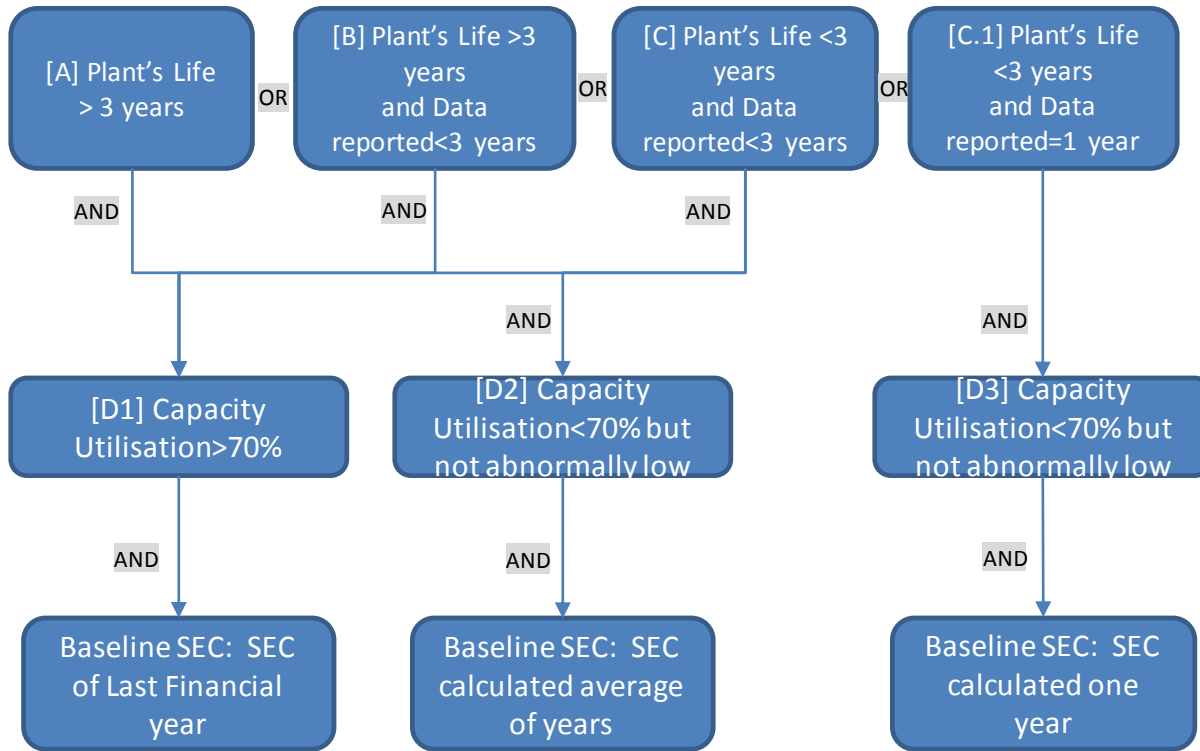
- ▶ (A) During the first cycle of designated consumer having **more than three years life**,
 - data for the previous three years, shall be considered.
- ▶ (B) During the first cycle of designated consumer having **more than three years life and less than three years data has been reported**,
 - the same shall be considered
- ▶ (C) During the first cycle of designated consumer having **less than three years life and less than three years data been reported**,
 - the available year's data shall be considered.

(D) Applications on New DCs

- (D1) During the first cycle of designated consumer, the data shall be considered for those years where the capacity utilisation is greater than seventy percent (70%)
- (D2) and if only one year data is reported, the same shall be considered irrespective of the capacity utilization
- (D3) and if capacity utilization is less than 70% but not abnormally low for all reported years, average of all these years shall be considered.

Baseline Fixation-New DCs in existing and new sector

Baseline SEC Calculation- Based on Last financial year data



[E] Baseline SEC Fixation Condition

- Baseline Specific Energy Consumption will be calculated based on the last financial year data, if any conditions mentioned in (A) or (B) or (C) and condition mentioned in (D) are satisfied for the last financial year.
- In case, conditions are not satisfied for the last financial year, average of all those year where above mentioned conditions are satisfied shall be considered for calculating baseline specific energy consumption

Last financial year of three year reported data will be considered as the Baseline year for the new DCs in PAT Cycle II (Majority of the DCs)

Thank You