

# Standards & Labeling Program Distribution Transformer





### Powers under EC Act



- <u>"Section 14 of EC Act</u>: The Central Government may, by notification, in consultation with the Bureau, -
  - <u>Clause (a):</u> specify the norms for processes and energy consumption standards for any equipment, appliances which consumes, generates, transmits or supplies energy;
  - <u>Clause (b):</u> specify equipment or appliance or class of equipments or appliances, as the case may be, for the purposes of this Act.
  - <u>Clause (d)</u>: direct display of such particulars on label on equipment or on appliance specified under clause (b) and in such manner as may be specified by regulations."





### BEE Labelling Program



- Mandatory labelling program for distribution transformer up to 200 kVA rating has been launched in 2009, vide the following notifications:
- Statutory order under section 14(b) of the EC Act, S.O. 184 (E) dated 12<sup>th</sup> January, 2009
- Statutory order under section 14(a) of the EC Act, S.O. 185 (E) dated 12<sup>th</sup> January, 2009
- Regulations under section 14(d) of the EC Act, Regulation No. 2/11(5)/03-BEE.3 dated 5<sup>th</sup> January, 2010





### **BEE Labelling Program**



- BEE accept test report from any NABL accredited test laboratory
- Each model need to be registered separately in BEE S&L program with separate test report
- Labelling Fee- Rs. 100
- Model registration Fee- Rs. 1000





### Label registration process



#### COMPANY **REGISTRATION**

Application Submission

1. Fill form 2. Submit Doc. Related to Company reg.

Submission

1.Agreement

2. Security Deposit

Hard Copy 3. Authorized Letter with online form

#### MODEL **REGISTRATION**



- Details of Model
- Test Reports

Hard copy

 Company Reg. Doc.& online form

• Sample Label

Application Fee

• Rs. 1000

Doc. **Verify-Approve Through** Label **IAME** 

 Verification in the Market

Verify

Check Test

 Check Test I Check Test II  Against the Permittee as per EC Act

Action





### Web Portal





#### About Standards & Labeling Program

The Objectives of Standards & Labeling Program is to provide the consumer an informed choice about theenergy saving, and thereby the cost saving potential of the marketed household and other equipment. This isexpected to impact the energy savings in the medium and long run while at the same time it will position domesticindustry to compete in such markets where norms for energy efficiency are mandatory.

The scheme was launched by the Hon'ble Minister of Power in May,2006 and is currently invoked forequipments/appliances (ROOM AIR CONDITIONER, CEILING FAN, COLOUR TELEVISION, COMPUTER, DIRECT COOL REFRIGERATOR, DISTRIBUTION TRANSFORMER, DOMESTIC GAS STOVE, FROST FREE REFRIGERATOR, GENERAL PURPOSE INDUSTRIAL MOTOR, MONOSET PUMP, OPENWELL SUBMERSIBLE PUMP SET, STATIONARY TYPE WATER HEATER, SUBMERSIBLE PUMP SET,



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### BEE amendment notification



- Energy performance standards for other appliances in the mandatory list has been revised regularly
- Recently in 2016, BEE have revised energy performance standards for Air conditioners and colour television
- BEE has revised performance norms for Direct cool refrigerators which is effective from 1st January, 2016
- Also upgraded the standards for water heater which is effective from 1<sup>st</sup> July, 2017





### BEE amendment notification



- BEE amended the existing notification for distribution transformer vide S.O 4062 (E) dated 16<sup>th</sup> Dec, 2016 and S.O. 513(E) dated 17<sup>th</sup> February, 2017
- Enforcement of revised standards from 1st July, 2017
- New Provisions:
- a. As per request from manufacturer and meeting with JS (Distribution) no. of test reduced from 12 tests to 5.
- b. Program expanded upto 2500 kVA, 11kV voltage class.





### Distribution Transformer program



• Revised star rating Plan valid from 1st July, 2017 (up to 200 KVA)

Stalladia E033C3 III Watts ap to II it Class	Standard	Losses in watts u	ip to 11 KV Class
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	Star 1		Star 2		Star 3		Star 4		Star 5	
Rating (kVA)	50 Per cent. Load	100 Per cent. Load	50 Per cent. Load	100 Per cent. Load	50 Per cent. Load	100 Per cent. Load	50 Per cent. Load	100 Per cent. Load	50 Per cent. Load	100 Per cent. Load
16	135	440	120	400	108	364	97	331	87	301
25	190	635	175	595	158	541	142	493	128	448
63	340	1140	300	1050	270	956	243	870	219	791
100	475	1650	435	1500	392	1365	352	1242	317	1130
160	670	1950	570	1700	513	1547	462	1408	416	1281
200	780	2300	670	2100	603	1911	543	1739	488	1582





### Distribution Transformer program



• Star rating Plan valid from 1st July, 2017 (above 200 kVA up to 2500 kVA)

Standard losses in watts up to 11 KV Class (For ratings above 200 kVA)											
Rating Cent. (kVA) Imped ance	Star 1		Star 2		Star 3		Star 4		Star 5		
	50 Per Cent. Load	100 Per Cent. Load	50 Per Cent. Load	100 Per Cent. Load	50 Per Cent. Load	100 Per Cent. Load	50 Per Cent. Load	100 Per Cent. Load	50 Per Cent. Load	100 Per Cent. Load	
250	4.5	980	2930	920	2700	864	2488	811	2293	761	2113
315	4.5	1025	3100	955	2750	890	2440	829	2164	772	1920
400	4.5	1225	3450	1150	3330	1080	3214	1013	3102	951	2994
500	4.5	1510	4300	1430	4100	1354	3909	1282	3727	1215	3554
630	4.5	1860	5300	1745	4850	1637	4438	1536	4061	1441	3717
1000	5	2790	7700	2620	7000	2460	6364	2310	5785	2170	5259
1250	5	3300	9200	3220	8400	3142	7670	3066	7003	2991	6394
1600	6.25	4200	11800	3970	11300	3753	10821	3547	10363	3353	9924
2000	6.25	5050	15000	4790	14100	4543	13254	4309	12459	4088	11711



6.25

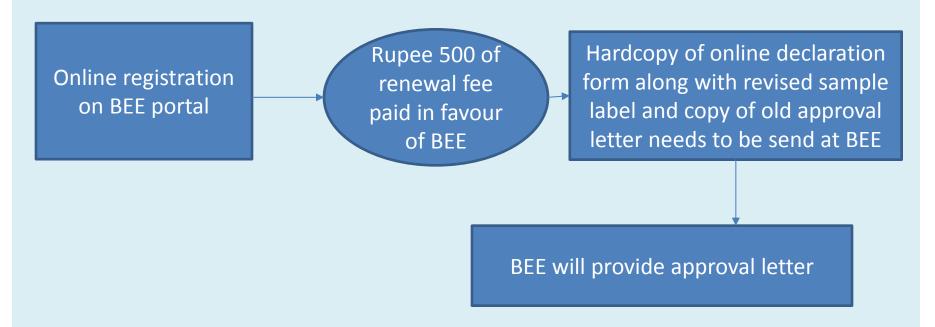


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### Models Renewal/Degradation Procedure



- All the old 4 star & 5 star registered models with BEE needs to be renewed for continuation of the star label
- Renewal process:









## Thank You



