



Delhi Electricity Regulatory Commission
Viniyamak Bhawan, 'C' Block, Shivalik, Malviya Nagar, New Delhi – 17

No. F. 11(1397)/DERC/2016-17/

Petition No. 32/2016

In the matter of: **Petition seeking approval for implementation of DSM based Energy Efficient Air-Conditioner program in UT of Delhi under Demand Side Management Programme with an object to lower the overall cost of electricity to the consumer by economical and efficient use of resources.**

BSES Rajdhani Power Limited
Through its: **CEO**
BSES Bhawan, Nehru Place,
New Delhi-110019.

...**Petitioner**

Coram: Sh. B.P. Singh, Member

ORDER

(Date of Order: 20.09.2017)

1. M/s BSES Rajdhani Power Limited (BRPL) has submitted the present petition for implementation of Demand Side Management (DSM) based Energy Efficient Air-Conditioner program in Delhi for its consumers in its area of supply to accelerate adoption of BEE 5 Star Rated Air Conditioner (AC) through consumer rebate scheme, which in turn would significantly reduce overall cost of electricity to the consumers of the Petitioner as well as Petitioner itself by economical and efficient use of resources.

2. **Petitioner's Submission:**

The Petitioner through the Petition and subsequent communications has submitted the following:

a. The proposed scheme is to promote Demand Side Management (DSM) measures wherein it intends to launch an "Energy efficient Air Conditioner Program" for the licensee's domestic consumers in the entire area of operation in Delhi for replacement of the existing non-star rated Air Conditioner in working condition with BEE 5 Star rated Energy Efficient Air Conditioner.

b. The programme outline is that the project offers 10000 BEE 5 Star rated Energy Efficient Air Conditioner under which 50% of the ACs are offered under

buy back and 50% are without buy back to the consumers of the Petitioner whose monthly billing unit is up to 1200 units. Only one Ac will be offered to one each domestic consumer. Under this scheme, a domestic consumer can buy BEE 5 star rated Energy Efficient Air Conditioner by paying entire amount upfront. A consumer shall have the option for getting maximum quantity i.e. 1 Air Conditioner. The actual price will be discovered through open competitive bidding. Any benefits realized during price discovery shall be passed on to consumers.

- c. Savings due to AC exchange scheme is 809 units per consumer per year, as a result of which the Petitioner can save 9.12 MU per year (including saving in Transmission and distribution losses). Further, the initial investment through DSM fund required by the Petitioner is Rs. 4.90 crore approx. Which will be recovered with a payback period of 5.1 year (approx.) and after that an annual saving of Rs. 1.23 crore is estimated to the Petitioner.
- d. The Air Conditioner will be distributed by Vendor's/manufacturer's channel. The vendor shall supply and install the Air Conditioner at consumer's premises. The vendor shall also arrange to collect old AC (on as is where is basis) from the consumers and replace it with BEE 5 Star Energy Efficient Air Conditioner if purchased under replacement scheme by the consumers.
- e. The cost benefit analysis of different types and models of Acs are as follows:
 - i. The rebate offered under buy back is minimum of Rs. 6400/- or 20% of the offered price per AC and without buyback scheme it is minimum of Rs. 3200/- or 10% of the offered price per AC ;
 - ii. Additional 2% administration cost;
 - iii. The scheme is proposed for Window, Split and Inverter type with 5 Star rated 1.5 tonnage only;
 - iv. Energy saved is computed with respect to consumption of 3 Star rated 1.5 tonnage only;
 - v. Energy saved is computed with respect to consumption of 3 Star AC that is 2364 W with hours of usage as 6 hours in days and 150 days in a year;
 - vi. The net savings ha been computed as the difference of saving:
 - i. Saving in Power Purchase Cost;
 - ii. Saving in infrastructure of Development Cost;
 - iii. Saving in Distribution network and revenue loss due to DSM and ABR.
 - vii. Therefore, the net savings have been arrived at with discounting factor of 14%.

3. **Commissions Decision:**

Considering the calculation of cost benefit analysis for AC replacement scheme based on all the aforesaid assumptions and the cost saving as prorated to the ratio of energy saved for specified AC, the Commission approves this scheme for 10,000 BEE 5 Star rated Energy Efficient Air Conditioner as under:

i. **Buy back arrangement :**

The scheme shall be operated under 100% buy back arrangement so that the inefficient Acs must be taken out of the grid and disposed off in an environmental friendly manner.

ii. **Rebate/Discount rate:**

The rebate to be allowed to consumers for different class of Acs after rounding off is as follows:

Sl. No.	Type	Name of Manufacturer	Compr. Warrantee in years	Model Name	Rebate based on Energy Saving
1	1.5 ton 5 star window AC	Voltas	5	185DY	6340
2		Hitachi	5	RAW518KUDZ1	3477
3		LG	4	LWA5CP5A	3886
4		Whirlpool	4	WAC 1.5 T MAGICOOL COPR 5S	3583
5	1.5 ton 5 star Split AC	Voltas	5	185JY	4608
6		Hitachi	5	RAU518KWD(S)	3987
7		LG	4	LSA5NP5F	3569
8		Whirlpool	5	3DCOOL HD 5S,	4242
9		Sansui	5	SSD55WS1_MDA/ QDL	4721
10		Carrier	4	Ester+ 18k 5 Star	4158
11		Blue Star	4	5HW18ZCWX	3353
12		Hair	4	HSU-19TFW5P	3881
13		Godrej	4	GSC 18 UPX 5 WQR	4158
14		Micromax	5	ACS18ED5AS02W HI	4940
15		Samsung	5	AR18MC5ULGM	4096
16	1.5 ton 5 star Inverter AC	Voltas	5	18V dy	3221
17		LG	4	BSA18IBE	3600
18		Godrej	10	GSC 18 GIG 5 DGOG (NXW)	5045

iii. Expenses in ARR:

The expenses on account of floating tender, hiring of implementation agency, administrative costs and the rebate cost along with interest thereon are allowed additionally in the Annual Revenue Requirement (ARR) of the petitioner to be recovered under the head of Demand Side Management (DSM) budget or any other head.

iv. Eligibility of Consumers:

- a. The consumer should have a valid consumer connection number/CA number.
- b. There shall be no outstanding dues as on date of application.
- c. A maximum number of 3 Acs shall be offered to a consumer.
- d. The scheme shall be applicable on first come first serve basis for the eligible consumers.

v. Implementing Agency:

BRPL shall engage at least two implementing agencies discovered through competitive bidding process. The price to be quoted by the implementing agency in the bid process shall be net of the quoted price of new AC minus the salvage value of the old AC, which shall be indicated separately as part of the bid. The implementing agency shall be responsible for the safe disposal of old Ac's.

vi. Maintenance of Records:

BRPL shall keep all the records related to this scheme separately. BRPL will submit following details related to the implementation of the scheme :

- a. Final price discovered through competitive bidding for the specified Acs;
- b. Actual saving of energy due to implementation of this scheme;
- c. Administrative cost incurred under this scheme; and
- d. Any other record relevant to the scheme.

vii. Proper and Safe Disposal of Old replaced Ac's:

BRPL shall ensure proper and environment friendly disposal of old replaced air-conditioners by the implementation agency to avoid misuse as well as safety hazards. For this purpose, the compressor of the old replaced AC shall be destroyed by cutting it vertically into two pieces in the presence of the consumer.

viii. Validilty of the Scheme:

The scheme shall be valid for 12 months from the date of issue.

4. In view of the above, the case is disposed of accordingly.

**Sd/-
(B.P. Singh)
Member**