

**JOINT ELECTRICITY REGULATORY COMMISSION
FOR THE STATE OF GOA AND UNION TERRITORIES
GURGAON**

Quorum
Shri S.K.Chaturvedi, Chairperson
Mrs. Neerja Mathur, Member
Petition No. 178/2015
Date of Order: 01.09.2015

In the matter of

Petition for approval of the Joint Electricity Regulatory Commission for the State of Goa and Union Territories for implementation of Domestic Efficient Lighting Programme (DELP) for LED Bulbs in the area of UT of Dadra & Nagar Haveli under Demand Side Management Programme.

And in the matter of

DNH Power Distribution Corporation Ltd.

.....Petitioner

Present

For Petitioner

Shri R.B. Choubal, Asstt. Engineer, DNH Power Distribution Corporation Ltd

ORDER

The Petitioner-DNH Power Distribution Corporation Ltd. has filed the present Petition for approval of the Joint Electricity Regulatory Commission for the State of Goa and Union Territories for implementation of Domestic Efficient Lighting Programme (DELP) for LED Bulbs in the area of UT of Dadra & Nagar Haveli under Demand Side Management Programme.

The Petition runs as under:-

Quote

- 1. The Petitioners humbly submits that under the Demand Side Management program obligation of the Distribution Licensee as required under the provisions in the JERC (DSM) Regulations, the Petitioners has proposed to implement the Domestic Efficient Lighting Program (DELP) for LED bulbs in the union territory of Dadra and Nagar Haveli through an Energy Service Company (ESCO), M/s Energy Efficiency Services Limited, New Delhi.*

2. The Petitioners submits that M/s Energy Efficiency Services Limited, New Delhi, have submitted a programme for implementation of DELP for LED bulbs in household sector in the UT of Dadra and Nagar Haveli. As per the proposal, the capital investment required for implementation of the program will be made by the ESCO i.e. M/s Energy Efficiency Services Limited, New Delhi and the Petitioners shall make payment to Energy Efficiency Services Limited by recovering the cost from consumers in 10 monthly installments.

3. DELP Programme Outline

Under the program, the Petitioners along with the technical and financial support of M/s Energy Efficiency Services Limited has envisaged to undertake the following tasks.

1. EESL will provide 2 LED bulbs each to all Petitioners' Domestic Consumers in the entire license area.
2. The LEDs will be given at an upfront cost of Rs 10 each. The balance cost towards actual price of the LED bulb as discovered through the competitive bidding and Other Costs such as Awareness Cost, Distribution Cost, Annual Maintenance Charges, Cost of Capital or any other cost related to implementation of this Scheme will be recovered from the consumers' electricity bill over a period of 10 months, subject to maximum of Rs 10 for each LED bulb every month. It is noteworthy to mention that the LED bulbs are sold at Rs 400-500 in the open market.

3. Energy Savings

The expected energy savings on account of offering 2 LEDs bulbs to all Petitioners' domestic consumers along with the assumptions submitted as below:

LED Bulbs:

S.NO.	Particulars	Unit	Value
1.	NUMBER OF ledS OFFERED UNDER THIS Scheme (2 assuming 51,580 Domestic Consumers)	Number (Lacs)	1.037
2.	Wattage of existing bulbs (2ICL of 60 W each)	Watt	60
3.	Wattage of LED	Watt	7
4.	Power saving	Watt	53
5.	Hours of Usage	Hrs/day	3.5
6.	Operating days per year	Days/year	300
7.	Energy saved per LED per day	KWh	0.1855
8.	Energy saved per LED per year	KWh	55.65
9.	Total Energy saved per year	Million KWh	5.77

The total annual saving of energy is around 5.77 Million KWh which, at the average power purchase cost of Rs 3.66 per KWh, will lead to annual cost savings of Rs 2.11 crores.

4. Cost Benefit Analysis

Petitioners' humbly submits that the implementation of DELP in its entire area of operation would result into energy savings of 5.77 million KWh per annum resulting into reduction in power procurement cost of Rs 6.34 crores over a period of three years. The summarized Cost Benefit Analysis of this Scheme is given below in the table:-

Sl. No.	Description	Amount (INR Crores)
1.	Total Payment to ESSEL as per Annexure - A	1.0385
2.	10 monthly installments of INR 10 (approx.) for each LED bulb every month recovered from Consumers	1.0385
3.	Net Payout from the ARR of the DISCOM	NIL
4.	Reduction in Power Procurement Cost over the period of three years	6.34
5.	Net Savings to DISCOM	6.34

5. Procurement of LED bulbs

EESL will follow an open competitive bidding process to procure the LED bulbs. The process will allow competition to ensure price discovery. The procurement will be done using the technical specifications finalized by EESL and will ensure that high quality lamps with 3 year technical warranty are procured at least cost EESL process has been very successful in the past and the prices of LED lamps have reduced by 50% in the last 6 months as a result thereof. Any benefit of cost reduction will be passed on to the Consumers / DISCOM.

6. Distribution of LED bulbs

The LED bulbs will be distributed from designated counters set up in various locations in the state. These locations will be mapped in consultation with the state agencies and could include billing centres of DISCOMS, SEWA Kendras, prominent locations like schools, etc. EESL will engage distribution agencies that will help set up the distribution counters and ensure smooth distribution of LEDs. The key elements of the distribution will be :

- i. Mapping and finalization of distribution counters for ensuring smooth distribution.
- ii. Arranging storage facilities for LED bulbs, including temporary storage at distribution centres.

- iii. *Finalization of distribution plan.*
- iv. *Compilation of distribution data and preparation of MIS reports of distribution.*

7. Awareness and Outreach

A statewide multimedia campaign will be designed and implemented to support the programme. The campaign will focus on:

- i. *Providing information about the DELP scheme*
- ii. *Dissemination of information about the comparative advantage of LED Lighting.*
- iii. *Providing information about the monetary benefit to the consumers in terms of reduction of their electricity bills.*
- iv. *Information regarding the place, date and time of distribution of LED bulbs.*
- v. *Any other information that is directly or indirectly related to the implementation of the scheme.*

8. Implementation Plans

8.1 EESL agrees for implementation of the programme as per the methodology agreed upon.

8.2 EESL agrees to extend guarantee for replacement of the faulty LED bulbs due to technical defects at free of cost for 3 years commencing after implementation of the project. Technical defects excludes physical damage, outdoor applications etc.

9. Payment to EESL

9.1 PETITIONERS shall make payment to Energy Efficiency Services Limited to recover the investment made as per the schedule in Annexure –A. The payment will be based on the actual numbers of LED bulbs provided by DISCOM based on the pre-registration process. Payment due to EESL by DISCOM shall not be linked with the recovery of project cost from Consumers.

10. Safety Aspects

10.1 M/s Efficiency Services Limited will ensure that the LED bulbs used under this project complies the technical specifications.

10.2 The sample testing procedure may also be carried out in any laboratory accredited by NABL jointly by M/s Efficiency Services Limited and PETITIONERS as part of this programme, in order to ensure safety compliance.

11. Other Benefits

The other accrued benefits upon implementation of this DELP Scheme are as given below.

11.1 House Hold Sector

- *Helps to reduce their energy consumption and its cost*

11.2 Distribution Utility

- *Aids the department in reducing the demand & supply gap.*
- *Minimize load shedding during peak hours.*
- *To meet demands of other cross subsidized consumers like commercial and industrial establishment.*
- *Generate additional revenue through sale of deemed energy saving to cross subsidized consumers and thereby helps to bridge the gap between the Average Cost of supply and the cross subsidised tariff rates.*

11.3 Society

- *Energy security*
- *Mitigation of climate changes and protection of environment.*

12 Project Financial at a Glance

The LEDs will be given at an upfront cost of Rs 10 each. The balance cost towards actual price of the LED bulb as discovered through the competitive bidding and other costs such as Awareness Cost, Distribution Cost, Annual Maintenance Charges, Cost of Capital or any other cost related to implementation of this Scheme will be recovered from the consumers' electricity bill over a period of 10 months, subject to maximum of Rs 10 for each LED bulb every month.

13.1 Tentative Project Cost

S.No.	Particulars	Unit	Value
1.	Cost of LED Bulb	INR	85.03
2.	Distribution, Transportation, Insurance, Storage & Awareness	INR	15.00
3.	Total cost per LED Bulb	INR	100.15
4.	Upfront Consumer contribution	INR	10
5.	Total number of LED Bulbs proposed for Distribution under scheme	Number (Lacs)	1.037
6.	Remaining recoverable cost of the Project assuming 51,850 consumers opt for scheme (excluding upfront cost)	INR (Lacs)	93.36

Recovery in 10 monthly installments

S. No.	Particulars	Unit	Value (Rs Cr)
1.	Remaining recoverable cost of the project (excluding upfront cost)	INR	.93
2.	Interest cost of capital of EESL	INR	.03
3.	AMC Cost	INR	.01
4.	Service Tax	INR	On Actuals
5.	Total programme cost	INR	.93
6.	10 monthly installments (Rs 10/ approx. for LED) recovered from consumers	INR	1.03
7.	Net payout from the ARR of the DISCOM	INR	NIL

4. PRAYER

Thus, the Petitioners' humbly prays before the commission to consider this petition and pass necessary orders to:

- Allow Petitioners' to implement the Domestic Efficient Lighting Program (DELP) as part of DSM measures with capital investment of Rs 93.36 lakhs, the entire license area of Petitioners'.
- Allow Petitioners' to recover the project cost of equipment in 10 monthly installments through their electricity bill.

- *In order to recover project cost as indicated in para 14 from consumers through their electricity bill, allow Petitioners' to make necessary modifications/additions in electricity bill of consumers by adding one line item.*
- *Authorize Petitioners' to treat default in payment of installments by consumers as "default of payment" under sec 56 of the Electricity Act, 2003 read with Uttarakhand Electricity Supply Code (i.e. disconnection of supply in default of payment) or as amended from time to time and recover such charges by suit, cut-off the supply of electricity.*

5. Allow Petitioners'

- *To make monthly payout to M/s Energy Efficiency Services Limited as per payment schedule stated in clause no. 11 of the petition.*
- *To provide bank guarantee/irrevocable and revolving Letter of Credit (LC) in favour EESL.*
- *Approve the Energy Service Agreement enclosed as per Annexure – B and*

6. Pass necessary orders as deem fit by the Hon'ble Commission."

Unquote

The Petition was received in the Commission on 14.07.2015 with Petition fee of Rs 10,000/- only. Whereas, according to Schedule of Fee attached to the JERC (Conduct of Business) Regulations, 2009 the Petitioner was required to pay Petition fee of Rs 20,000/-. Therefore, the Commission directed the Petitioner to pay the remaining fee of Rs 10,000/-. The Petitioner paid the remaining fee of Rs 10,000/- on 28.08.2015.

The Commission examined the Petition and found the same generally in line with the Electricity Act and JERC (Conduct of Business) Regulations, 2009. The Commission has admitted the Petition on 28.08.2015 and numbered it as Petition no. 178/2015.

The Commission scheduled hearing of the Petition on 01.09.2015 at Commission's HQ. The Commission sent hearing notice to the Petitioner for the date fixed. The Commission heard the representative for the Petitioner at length and has gone through the Petition with accompanying documents carefully and thoroughly.

The Commission observed that the programme is approved by the Government of UT of Dadra and Nagar Haveli. The Domestic Efficient Lighting Programme is in the interest of the Petitioner, general public of UT of Dadra and Nagar Haveli in general and consumers of DNH Distribution Corporation Limited in particular. The programme is energy saving also.

Therefore, the implementation of the Domestic Efficient Lighting Programme of the Petitioner is approved and the Petition is hereby allowed. However, the Petitioner is also advised to ensure that there shall not be adverse impact on the consumer / Petitioner, in case of actual number of LEDs installed / sold through this scheme are less than the numbers envisaged by the Petitioner / EESL.

Sd/-
(NEERJA MATHUR)
MEMBER

Sd/-
(S.K.CHATURVEDI)
CHAIRPERSON

Certified Copy


(D.R. PARMAR)
SECRETARY