

DELHI ELECTRICITY REGULATORY COMMISSION
Viniyamak Bhavan, C-Block, Shivalik, Malviya Nagar, New Delhi-110017

Explanatory Note on Delhi Electricity Regulatory Commission (Terms and Conditions
for Determination of Tariff) Regulations 2007

The Commission, in the exercise of its powers under sub-clauses (zd), (ze) and (zf) of sub-section (2) of section 181 read with sections 61 and 62 of Electricity Act, 2003, has framed Delhi Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2007. The object of these Regulations is to provide for a Multi Year Tariff frame work which would provide regulatory certainty to investors, induce tariff stability to consumers and licensees, provide incentives for efficiency in performance, provide for risk sharing mechanism, promote open access and competition within the National Capital Territory of Delhi and for the matters which are incidental and auxiliary thereto.

Background

- 1.1 In exercise of the powers conferred by Section 12 and other applicable provisions of the Delhi Electricity Reform Act, 2000, and after considering the views expressed by the Delhi Electricity Regulatory Commission, hereinafter referred to as “the Commission”, the Government of National Capital Territory of Delhi (GoNCTD) notified the policy directions enabling restructuring of the Delhi Vidyut Board and privatisation of the distribution business.
- 1.2 The power sector in Delhi was privatized with effect from 1st July 2002 and the electricity tariffs in Delhi were governed by the Policy Directions issued by GoNCTD vide its notification of 22nd November 2001 and as amended on 31st May 2002. In the context of these Regulations, the period from July 2002 to March 2007 is being termed as the “Policy Direction Period”.
- 1.3 The important parameters involved in determination of tariffs during the Policy Direction Period included the following:
 - (a) Reduction of Aggregate Technical and Commercial (AT&C) Losses by at least 17 percent during the period 2002 to 2007;
 - (b) The distribution licensee shall earn at least a return of 16 percent on the issued and paid up capital and free reserves invested into fixed or any other assets in the distribution business;
 - (c) Electricity tariffs of the three distribution licensees shall be identical till the end of 2006-07;

- (d) There shall be a method for computation and treatment of over-achievement and under achievement made by the distribution licensee vis-à-vis the targets of AT&C loss level; and
 - (e) The Government shall give a transitional loan support of Rs 3450 Cr to the Delhi Transco Limited (DTL) to bridge the gap between its revenue requirement and bulk supply tariff.
- 1.4 During the course of the policy direction period of 2002-2007, significant changes have taken place in the policy and regulatory environment with the enactment of Electricity Act, 2003. This period also saw the advent of the National Electricity Policy and National Tariff Policy.
- 1.5 The Electricity Act 2003, requires the Appropriate Commission to specify the Terms and Conditions for the determination of tariff. Under Section 61 of the Act, the Commission shall consider the following factors, while determining the tariff:
 - (a) the principles and methodologies specified by the Central Commission for determination of the tariff applicable to generating companies and transmission licensees;
 - (b) the generation, transmission, distribution and supply of electricity are conducted on commercial principles;
 - (c) the factors which would encourage competition, efficiency, economical use of the resources, good performance and optimum investments;
 - (d) safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner;
 - (e) the principles rewarding efficiency in performance;
 - (f) multi year tariff principles;
 - (g) that the tariff progressively reflects the cost of supply of electricity and progressively reduce the cross-subsidies within the period to be specified by the Appropriate Commission;
 - (h) the National Electricity Policy and Tariff Policy.
- 1.6 While Section 185 of the Act ensured that provisions of the enactments specified in the Schedule, which are not inconsistent with the provisions of the Act, shall remain applicable to the relevant States, Delhi Electricity Reform Act 2000 (Delhi Act No. 2 of 2001) is part of the Schedule referred to in Section 185 of the Act.

- 1.7 Post policy direction period, the Commission has decided to adopt a comprehensive Multi Year Tariff (MYT) regime covering principles on addressing issues of i) determination of AT&C losses, ii) power purchase and consumer sales variations, iii) approval of operating and capital cost and iv) ensuring quality of supply to consumers.
- 1.8 In this context, the Commission has framed Regulations specifying the Terms and Conditions for Determination of Tariff for Generation, Transmission and Distribution of electricity under the Multi Year Tariff (MYT) framework for the period FY 2007-08 to FY 2010-11. The Commission shall be guided by the principles and methodologies specified in Section 61 of the Act, and by regulations issued by CERC for generation and transmission tariff, and the decisions taken in Forum Of Regulators (FOR) in accordance with National Tariff Policy.

Consultation Process

- 1.9 The Commission prepared draft Regulations based upon the Multi Year Tariff principles for Generation, Transmission and Distribution of electricity, along with a MYT Consultative Paper which highlighted the various issues which were to be debated before the finalization of the said Regulations.
- 1.10 These draft Regulations and MYT Consultative Paper were posted on the Commission's website and a notice to this effect was published in the leading newspapers seeking comments from public and stakeholders. The said public notice was published in the leading newspapers viz. Times of India (English), Pioneer (English), Hindustan Times (English), Hindustan (Hindi), Hamara Maqsad (Urdu) and Educator (Punjabi) on 11.10.2006.
- 1.11 The Commission, vide its letter dated 12.10.2006, supplied a copy of the draft Regulations to various stakeholders namely, the Delhi Transco Limited (DTL), North Delhi Power Ltd.(NDPL), the BSES Rajdhani Power Limited (BRPL), the BSES Yamuna Power Limited (BYPL), the New Delhi Municipal Council (NDMC), the Indraprastha Power Generation Company, the Pragati Power Generation Company Ltd., the Military Engineering Services (MES), the Ministry of Power (Govt. of India), Municipal Corporation of Delhi, Delhi Development Authority and other State Electricity Regulatory Commissions. A copy of the draft Regulations was also forwarded to the Principal Secretary (Power), GoNCTD.
- 1.12 In response to the said public notice, the Commission received submissions from various stakeholders. These responses and suggestions have been considered by the Commission while finalising these Regulations. A public hearing was held in this regard on 27.11.2006 in the Commission. The list of stakeholders who gave their written submissions and response during public hearing are given in Appendix 1.

General Principles

1.13 The Commission through these Tariff Regulations aims to meet the following objectives:

- (a) Continue and improve upon the existing incentivisation framework to reward performance and promote efficiency;
- (b) Provide regulatory certainty to the investors and consumers by promoting transparency, consistency and predictability of regulatory approaches;
- (c) Ensure financial viability of the sector to attract investments and safeguard consumers' interest; and
- (d) Develop equitable risk sharing mechanism between utility and consumers.

Control Period

1.14 The Control Period in these Regulations refers to the period from the date of issue of these Regulations till 31 March 2011. The control period shall provide flexibility to the utilities in planning their investments, costs and performance improvement.

Controllable and Uncontrollable parameters

1.15 The Commission has segregated the costs and performance elements into controllable and uncontrollable based on the ability of the licensee to manage each of them.

Filings of Business Plan and ARR Petition

1.16 The generating companies, transmission and distribution licensees (utilities) shall submit their Business Plans and Aggregate Revenue Requirement (ARR) petitions for the Control Period to the Commission, for determination of tariffs during the Control Period.

Capital Investments

1.17 The Commission plans to undertake comprehensive review of the capital investment plans which shall be filed along with Business Plan of the licensee and generating companies and approve the amount of capital investment to be undertaken during the Control Period.

1.18 The actual capital expenditure incurred annually shall be monitored but no adjustments would be made for observed differences on an annual basis. Adjustment for the actual capital investment vis-à-vis approved capital investment shall be done at the end of Control Period.

Operation & Maintenance Expenses

- 1.19 The Operation and Maintenance (O&M) expenses comprise of costs incurred on a day-to-day basis in order to run the business efficiently. These costs include:
- (a) Employee Expenses, which include “wages and salaries” and “contribution to employee funds”;
 - (b) Repair and Maintenance Expenses; and
 - (c) Administrative and General Expenses, including expenses on rents, rates and taxes, legal charges, and audit and other charges
- 1.20 The Commission has proposed to conduct a detailed analysis of each element of O&M costs and approve a consolidated value for O&M expenses for the first year of the Control Period to be increased in subsequent years of the Control Period on a pre determined principle as specified in the regulations.
- 1.21 The O&M expenses have been treated as controllable parameter and any loss or gain on account of the same will not be adjusted in the ARR of the licensee.

Return

- 1.22 The principle for providing return to the transmission and distribution licensee has been based on the principle of Return on Capital Employed (RoCE) on a regulated rate base, with the weighted average cost of capital to be determined independently for each year of the Control Period. In case of generating companies, the principle for providing return has been based on the Return on Equity.

Depreciation

- 1.23 The Commission has decided to align the rates of depreciation with those stipulated by the CERC, and has also provided for Advance Against Depreciation (AAD) should the need arise.

In addition to above, the tariff for generation, transmission and distribution will have features outlined below:

Generation Tariff

Norms of Operation

- 1.24 The Commission has specified norms of operation for the generating stations for determination of tariffs for each year of the Control Period. The norms of operation for existing generating stations may be changed considering the expected efficiency improvements based on the Business Plan of the generating companies

- 1.25 Norms of operation for new generating stations have been taken as specified in the tariff regulations issued by CERC.
- 1.26 The Commission has also specified the formula for fuel price adjustment to be used for calculation of any variation in the fuel price from the values approved by the Commission in its MYT Order. The variation in fuel prices shall be adjusted on a monthly basis. The generating companies shall separately indicate rate of energy charges at base price of primary and secondary fuel and the fuel price adjustment.

Transmission Tariff

- 1.27 The Commission has provided an incentive to the Transmission Licensee for achieving a higher level of annual transmission system availability vis-à-vis the target level specified by the Commission. This is in line with the practice followed by CERC for determination of transmission tariff.

Distribution Tariff

Segregation of Wheeling and Retail Supply Business

- 1.28 The Commission has approved a framework recognising the necessity to consider the “retail supply business” and the “network business” of the distribution licensees separately. The Commission shall determine separate components of the distribution tariff as:
- (a) Wheeling Tariff, to recover the cost of “network business” - will reflect Capital Servicing Costs (depreciation, interest on loans, interest on working capital and return on equity), O&M costs (employee costs, R&M costs, A&G costs), and related network business costs (true-ups, incentives, penalties).
 - (b) Retail Supply Tariff, to recover the power purchase costs, transmission costs, any other costs clearly attributable to the supply business, distribution losses, and cross subsidies.
- 1.29 This segregation shall be useful to determine non-discriminatory tariff for consumers permitted open access under Section 42 of the Act.

Sales Projections

- 1.30 The Commission for the current control period envisages that the sales quantum and consumer mix are dependent to a large extent on factors beyond the control of the licensee while acknowledging that the licensee should develop robust forecasting methods.

- 1.31 In view of the explanation provided by the licensees and recognising the need for providing universal service obligations, energy sales have been considered as uncontrollable for the first Control Period.

AT&C Loss reduction during Policy Direction Period

- 1.32 During the Policy Direction Period, Delhi adopted AT&C loss (Aggregate Technical and Commercial Loss) as a measure of efficiency which measured the difference between units input into the distribution system and the units for which payment is collected or realised. The opening level of losses was determined by the Commission in its Order on “Bulk Supply Tariff and Opening Level of AT&C Losses” for the three Distribution Licensees on 22nd February 2002.
- 1.33 AT&C loss reduction target for the Policy Direction Period from FY 2002-03 till FY 2006-07 was used as a bidding parameter for privatising the distribution system. GoNCTD had stipulated minimum loss reduction target of 20 percent from the baseline loss levels, which was later agreed at 17 percent over a period of 5 years for each of the three licensees.
- 1.34 The incentivisation framework specified that any benefit of loss reduction beyond the target level but below the Government stipulated minimum level was passed onto consumer entirely, while the achievement above the Government stipulated minimum level was shared equally between consumer and licensee. Any revenue loss due to underachievement in target loss reduction was borne by the licensee.
- 1.35 Substantial capital investments were made by the distribution licensees for improving the distribution network and reducing technical and commercial losses. Government support in the form of special courts for power theft related cases, police support during theft control drives, deployment of CISF, etc are also being provided to the licensees.

AT&C Loss reduction targets for the Control Period

- 1.36 The AT&C loss targets have been fixed based on the past achievements on loss reduction, capital expenditure programs, review of the consumer mix of Delhi, metering status, etc.
- (a) The Abraham Committee report for release of APDRP funds has provided insights into existing levels of losses across several urban centres of India. It mentions that “AT&C Losses have been brought below 20 percent in 212 towns in the country of which 169 towns have brought AT&C losses below 15 percent”;
- (b) Loss levels in similar private urban distribution licensees, such as Ahmedabad Electricity Company, BEST and BSES, Mumbai were in the range of 10 percent - 14 percent in FY 2004-05;

- (c) During 2002-06, NDPL has been able to reduce AT&C losses by 21.6 percent (from 48.1 percent to 26.52 percent); and
 - (d) Delhi is an urban area with very small number of agricultural consumers and almost 100 percent retail consumer metering.
- 1.37 Based on the existing efficiency and incentivisation framework, the Commission has finalised the AT&C loss targets and incentivisation framework for the Control Period
- (a) AT&C loss levels have been specified at 17 percent for NDPL and BRPL, 22 percent for BYPL and 10 percent for NDMC at the end of the Control Period;
 - (b) Equal sharing of benefits between the licensee and the contingency reserve (which is used for consumers benefit), on account of gains arising out of better performance vis-à-vis the approved AT&C loss target; and
 - (c) Licensees to retain all gains accruing out of achieving loss levels below 15 percent for NDPL and BRPL, 20 percent for BYPL and 9 percent for NDMC.

Contingency Reserve

- 1.38 The Commission has also created a Contingency Reserve (CR) for each licensee at the start of the Control Period for minimising the impact of uncontrollable factors on retail tariffs and ensure tariff stability across the Control Period.

Annual Truing-up mechanism

- 1.39 The Commission shall review variations in approved values of uncontrollable parameters through an annual truing up mechanism while there shall be no adjustment for variations in controllable items. Annual truing-up shall be carried out for variations due to sales and power purchase costs.

Profit Sharing

- 1.40 The Regulations also contain a profit sharing mechanism to provide benefits of better performance of the licensee to the consumers (via contingency reserve) and to provide incentives to licensee for achieving better efficiency than the targets set by the Commission.

Appendix 1: List of Stakeholders

S.No	Name (S/Shri)	Address
1.	Ajit Singh Chauhan General Secretary	Delhi Vidyut Board Pensioners Association, 264, Gali Gunna Misser, Delhi Gate, New Delhi-110002.
2.	Arun Kumar Datta	222 Pocket E, Mayur Vihar Phase-II, Delhi-110091.
3.	B.N. Ahuja	D-195, Lajpat Nagar-I, New Delhi-110024.
4.	Dr. T.R. Grover Convenor	Delhi Power Consumers' Guild S-371, Greater Kailash, Part-II, New Delhi-110048.
5.	Executive Members	Engineers Assn. Okhla (Regd.), Y-35, Okhla Indl. Area, Ph-II, New Delhi – 110020.
6.	G.D. Gupta General Secretary	Delhi State Villages Development & Welfare Sangh, B-8/4, Phase-I, Badli Industrial Area, Bawana Road, Delhi-42.
7.	H.D. Joshi	All India Federation of Plastic Industries, Suite No. 17, (1 st Floor), 40, D.L.F. Industrial Area, Kirti Nagar, New Delhi- 110015.
8.	Ish Mehra Hony. Secretary	DSIDC Nangloi & Udyog Nagar CEPT Society, Behind DTC Nangloi Depot, Rohtak Road, Delhi-110041.
9.	Jaidyal Singh Yadav	Ekta Goela Dairy Welfare Association (Regd.) E-Block, Plot No. 1736, Goela Dairy, New Delhi-110071.
10.	K.L. Katyal General Secretary	Rattan Park Sudhar Sabha G-3, Rattan Park, Street No. 1, New Delhi-110015.
11.	K.V. Panicker	Flat No. 449, Pocket- Q, Dilshad Garden, Delhi-96.
12.	M. L. Jain	Gen. Secretary, Sr. Citizen Residents Welfare Association, Dilshad Garden, Delhi -110095
13.	M.P. Aggarwal G.M.(Comml.) & Prem Prakash, G.M.	Delhi Transco Ltd. 33 KV Grid Sub-Station, Building I.P. Estate, New Delhi-110002.
14.	Mallika Singh Sr. Assistant Secretary	PHD Chamber of Commerce and Industry PHD House, 4/2, Siri Institutional Area, August Kranti Marg, New Delhi-110016.
15.	Nand Kishore Garg Chairman	Maharaja Agrasen Institute of Technology, PSP Area, Plot No. 1, Sector-22, Rohini, Delhi-110085.
16.	O.P. Kapoor President	Mayapuri Industrial Welfare Association (Regd.) MIWA Bhawan, Central Park Block "B", Mayapuri Phase-I, New Delhi-110064.
17.	Prem Chandra Gupta Gen. Secretary	Vivek Vihar Nagrik Suvidha Samiti, C-126, Vivek Vihar, Delhi-110095.

S.No	Name (S/Shri)	Address
18.	R.N. Gujral Hon. Gen. Secretary	Federation of Rohini Co-Operative Group Housing Societies, Ahinsa Vihar, Plot No. 27/1, Sector –9, Rohini, Delhi-110085.
19.	Raghuvansh Arora Secretary General	Delhi Chamber of Commerce & Industry, A-8, Naraina Industrial Area, Phase-II, New Delhi-110028.
20.	Raghuvansh Arora Secretary General	Wazirpur Entrepreneur Welfare Association 55, DSIDC Wazirpur Industrial Complex, Delhi-110052.
21.	Rajan Gupta	Bharatiya Mazdoor Sangh, 5239 Ajmeri Gate, Delhi.
22.	Rajinder Singh	S-171/132, Rangpuri Pahari, New Delhi-110037.
23.	Ram Bhaj General Secretary	Raja Garden Residents Welfare Association (Regd.) 129, Raja Garden, New Delhi-110015.
24.	S. Gyanchandani	148, Civil Supplies CGHS, Plot No. 6, Sector –4, Dwarka, New Delhi-110075.
25.	S.P. Vaish	B-1, Gujranwala Apartments, ‘J’-Block, Vikas Puri, New Delhi-110018.
26.	S.R. Abrol	L-II-91B, DDA, LIG, Kalkaji, New Delhi-110019.
27.	S.S. Malhotra General Secretary	Jan Kalyan Samiti (Regd.) C-4/80, Yamuna Vihar, Delhi-110053.
28.	Sandeep Kapoor Gen. Secretary	Narela Relocation Industrial Welfare Association (Regd.) B-2595, DSIDC Complex, Narela, Delhi-110040.
29.	Ved Kumar President	Senior Citizens’ Welfare Association, H/14-B, Saket, New Delhi-110017.
30.	Ved Prakash Gupta	4/10, Jai Dev Park, New Delhi - 26
31.	S. C. Agarwal	F-4, Green Park extension, New Delhi – 110016
32.	S. K. Sharma	Delhi Chamber of Commerce & Industry, A-8, Naraina Industrial Area, Phase-II, New Delhi – 110017
33.	H. R. Kocha	Hony. Secretary, Okhla Factory Owners Association (regd.), C-80, Okhla Industrial Area, Phase – I, New Delhi – 110020
34.	R.K. Jain, Company Secretary & Viney Kumar, Director	Indraprastha Power Generation Company LTD, & Pragati Power Corporation LTD; Himadri , Rajghat Power House Complex, New Delhi-110002
35.	Harish K. Ahuja, Dy Secretary (Power) & Dr. Narender Nath, Chairman	Govt of National Capital Territory of Delhi, Department of Power, Delhi Secretariat, 8 th Level , B-Wing, New Delhi- 110002
36.	S.K.Thapar (Retd. Director(T), IPGCL, PPCL	33 B/4,Shamnath Marg, New Delhi-110054
37.	Utpal Bhattacharyya, Committee Member	Federation of Electricity Utilities Camp Office- CESC, LD. , CESC House, Chowringhee Square, Kolkota 700001

S.No	Name (S/Shri)	Address
38.	Ms. Namrata Mukherjee	TERI, The Energy and Resource Institute, Darbari Seth Block, IHC Complex, Lodhi Road, New Delhi-110003
39.	D. K. Tyagi, SE Commander	Headquarters Commander Works Engineers (AF) Military Engineer Services, Tughlakabad, New Delhi-110062
40.	Promod Chawla	NNFI, National Network For India, 131-132, Som Dutt Chambers 1, 5 Bhikaji Cama Place New Delhi 11006
41.	Chandar Pal (G.P.A for POLE-STAR)	Pole Star SCIENTIFIC /TECHNICAL CONSULTANCY SERVICES, A-101, Sharma Market, Pul Pehlad, M.G. Road New Delhi -110044
42.	Arup Ghosh, Chief Operating Officer & Puneet Munjal, AGM – Finance	NDPL, Sub Station Building, Hudson Line, Kingsway Camp, Delhi 110009
43.	Yash Mehra, Chief Operating Officer	BSES Yamuna, Shakti Kiran Building, Karkardooma, Delhi 110092
44.	Pankaj Kumar, Vice President	BSES Rajdhani, BSES Bhawan, Nehru Place, New Delhi 110019
45.	B.L. Kantroo, President/Chairman	Association of National Brotherhood for Social welfare 21.22, New Rohtak Road, Karol Bagh, New Delhi - 110005