

DELHI ELECTRICITY REGULATORY COMMISSION

(Sector 7, Pushp Vihar, New Delhi –110 017)

Petition No. 1/2001

In the Matter of : Annual Revenue Requirement for the Financial Year 2001-02

and

Tariff Determination Principles for the years 2002-03 till 2005-06

AND

In the Matter of : Delhi Vidyut Board

Before

Delhi Electricity Regulatory Commission

Present:

Sh. V.K. Sood

Chairman

Delhi Vidyut Board

Petitioner

Date of Order: 23rd May 2001

Table of Contents

1.1	Constitution of the Delhi Electricity Regulatory Commission	1
1.1.1	Powers and functions of the Commission	1
1.2	Guiding principles for exercise of powers under the ERC Act, 1998	1
1.2.1	Departure from the principles set forth in ERC Act	1
1.3	Enactment of Delhi Electricity Reform Act, 2000	2
1.3.1	Responsibilities assigned to DERC	2
1.3.2	Legislative approval	2
1.3.3	Broad Principles for tariff fixation	2
1.4	Orders and Papers issued by the Commission	3
1.4.1	Proposal for rationalisation of tariff	3
1.4.2	Concept Paper on Tariff	3
1.4.3	Public hearings on rationalisation proposal	3
1.4.4	Order on rationalisation of tariff	3
1.5	Procedural history of tariff filing for the year 2001-02	3
1.5.1	Guidelines for revenue and tariff filing	3
1.5.2	Filing of Petition	3
1.5.3	Preliminary deficiencies in the filing	3
1.5.4	Publicity to the tariff proposal	3
1.6	Description of the ARR Filing	4
1.6.1	Proposed means of meeting ARR	4
1.6.2	Basis of proposed increase in tariff	4
1.6.3	Proposed increase in tariff	4
1.6.4	Some other requests in the proposal	4
1.6.5	Separate information on transmission and distribution	4
1.6.6	Tariff setting principles	4
1.6.7	Deficiencies in the filing	4
1.6.8	Unaudited accounts	4
1.6.9	Information on assets, forecast figures and subsidy	5
1.6.10	Embedded and marginal cost study	5
1.6.11	Effect of legislative changes on the proceedings	5
1.7	Public notice and process of public hearing	5
1.7.1	Publicity to tariff proposal	5
1.7.2	Categorisation of responses	5
1.7.3	Shortlisting of respondents for hearing	5
1.7.4	Criteria for selection	6
1.7.5	Schedule for public hearing	6
1.7.6	Reply sought from the Petitioner	6
2.1	Stakeholders' response to tariff proposal	7
2.2	Public hearings	7
2.3	Objections and suggestions made by the stakeholders	7
2.3.1	Procedural Objections	7

Table of Contents

2.3.2	Quality of filing	8
2.3.3	The legal status of DVB and competence for filing the petition.....	9
2.3.4	DVB's role in effecting privatisation and five year tariff determination principles.....	9
2.3.5	Other General Objections.....	10
2.3.6	T & D losses	10
2.3.7	Tariff Structure	13
2.3.8	Domestic Consumers	14
2.3.9	Industrial Consumers	16
2.3.10	Agricultural and Commercial	18
2.3.11	Administrative Expenses of DVB.....	22
2.3.12	General Performance of DVB.....	23
2.3.13	Commission observations on quality of service	24
2.3.14	Representations from utilities in power sector.....	24
2.3.15	Representation from Northern Railways	25
2.3.16	Delhi Metro Rail Corporation (DMRC) Limited	26
2.3.17	New Delhi Municipal Council (NDMC)	26
2.3.18	Municipal Corporation of Delhi (MCD)	26
2.3.19	Other miscellaneous suggestions	27
2.4	Conclusion:	27
3.1	Cost of power generation and purchase	28
3.1.1	DVB's position.....	28
3.1.2	Commission's approach.....	28
3.1.3	Cost of Own Generation	29
3.1.3.1	Analysis of generation parameters	29
3.1.4	Cost of power purchase.....	29
3.1.4.1	DVB's submission.....	29
3.1.4.2	Commission's view	29
3.2	Employee costs.....	30
3.2.1	Components considered in A&G expenses by DVB	30
3.3	Administrative & General expenses.....	31
3.3.1	DVB's submission	31
3.3.2	Commission's analysis	31
3.4	Repairs and Maintenance (R&M) Expenses	31
3.4.1	DVB's submission	31
3.4.2	Commission's analysis	31
3.5	Interest on loan	31
3.5.1	DVB's submission	31
3.5.2	Commission's analysis	32
3.5.2.1	Interest on working capital.....	32
3.6	Bad debt and shortfall in collection efficiency	32
3.6.1	DVB's submission	32
3.6.2	Commission's analysis	32
3.6.2.1	Provisioning for bad debts.....	33
3.6.2.2	Shortfall in collection efficiency.....	33

3.7 Depreciation	33
3.7.1 Original cost of fixed assets	33
3.7.1.1 DVB's submission.....	33
3.7.1.2 Commission's analysis	33
3.7.1.3 Directive	34
3.7.2 Depreciation rate	34
3.7.2.1 DVB's submission.....	34
3.7.2.2 Commission's analysis	34
3.8 Surplus.....	34
3.8.1 Original cost of fixed assets:	34
3.8.2 Consumer contribution:	34
3.8.3 Accumulated depreciation	35
3.9 Total annual revenue requirement for DVB	35
3.10 Non-tariff income.....	35
3.11 Aggregate revenue requirement for year 2001-02	36
4.1 Salient features of tariff filing	37
4.2 Consumer mix.....	37
4.3 Information inadequacy.....	37
4.4 Commission's Analysis of the Tariff Filing	37
4.5 Basic Areas of Tariff Design.....	38
4.5.1 Cost of Service	38
4.5.2 Commission's Observations on T&D losses.....	38
4.5.3 Consumption Estimates.....	38
4.5.4 Modified Fuel and Power Purchase Adjustment Charge (FAC)	40
4.6 Tariff	40
4.6.1 Revision of Tariff in previous years	40
4.6.2 Domestic Tariff.....	40
4.6.3 Non-Domestic Low Tension (NDLT)	43
4.6.4 Mixed Load High Tension (MLHT).....	44
4.6.5 Small Industrial Power (SIP).....	44
4.6.6 Large Industrial Power (LIP).....	45
4.6.7 Agricultural Tariff	45
4.6.8 Mushroom cultivation.....	45
4.6.9 Public Lighting	46
4.6.10 Railway Traction.....	46
4.6.11 Delhi Metro Rail Corporation Ltd.	47
4.6.12 Supply to NDMC and MES	48
4.7 Total Revenue from Approved Tariffs	48
4.8 Revision to the Tariff Schedule: Salient Features	49
4.8.1 Changes/modifications made.....	49
4.8.2 Certain changes proposed by DVB and accepted by the Commission	50
4.9 Treatment of the Revenue Gap.....	51
5.1 Five-year Tariff Setting Principles	53
5.2 Tariff Setting Formula	53

Table of Contents

5.3	Proposed Mechanism	53
5.3.1	Changes in Power Purchase Cost	53
5.3.2	T&D losses.....	53
5.3.3	Employee costs	53
5.3.4	O&M Expenses and A&G Expenses.....	53
5.3.5	Interest on Debt and Return on Equity	53
5.3.6	Depreciation	53
5.3.7	Bad debt and collection efficiency shortfall.....	54
5.5	Public Response.....	54
5.6	Response from the Petitioner.....	54
5.6.1	Reforms Process not to be deferred.....	54
5.6.2	Relationship between Tariff Setting and Privatisation.....	54
5.6.3	Necessity for positive Steps.....	55
5.6.4	Statistical Input on T&D losses.....	55
5.6.6	Necessity for norms based Approach.....	55
5.6.7	DVB clarifies its role in Privatisation.....	55
5.7	Commission's analysis	56
5.7.1	Issues for Commission's consideration.....	56
5.7.2	Different Methodologies for Tariff Setting.....	56
5.7.3	Performance Based Regulations (PBR)	56
5.7.4	Commission's observations on limits for T&D losses.....	56
5.7.7	Different Targets for new entities.....	57
5.7.8	Relevance of average Tariff.....	57
5.7.9	Difficulties regarding Annual Capital Expenditure.....	57
5.7.10	Efficiency Improvement Plan	57
5.7.13	Commission's Role.....	58
6.	Directives	59
1.	Management Information System.....	59
2.	T&D Losses	59
3.	Base Paper on System based on Meter Rating	59
4.	Data about Power purchase and Generation.....	60
5.	Review of R&M Works.....	60
6.	Analysis of Working Capital Management.....	60
7.	Collection Efficiency Shortfall.....	60
8.	Audited Accounts and details of Assets and Investment Plans.....	60
	Annexure 'A': List of Respondents	72
	Annexure 'B' : List of Participants in Public Hearing	85
	Annexure 'C': Date-sheet for Critical Activities.....	90
	Annexure 'D' : Tariff in Neighbouring States.....	92