



ORDER

ON

**REVIEW PETITION FILED BY MSPDCL ON AGGREGATE REVENUE
REQUIREMENT FOR FY 2017-18**

Review Petition No.1 of 2017

Dated 03.11.2017

**JOINT ELECTRICITY REGULATORY COMMISSION
FOR MANIPUR AND MIZORAM**

TBL BHAVAN, 2ND TO 5TH FLOOR,

PETER STREET, E-18, KHATLA, MIZORAM, 796001

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In the matter of

Review Petition on Tariff Order for FY 2017-18 of Manipur State Power Distribution Company Ltd

And

Manipur State Power Distribution Company Ltd (herein referred as MSPDCL -----
Petitioner

Present

Mr. Ngangom Sarat Singh

Chairperson

Order

(dated 03.11.2017)

1. The Petitioner Manipur State Power Distribution Company Ltd has filed Review Petition on Commission order passed on 28.02.2017 on Aggregate Revenue Requirement for FY 2017-18 under Clause 38 of the JERC for Manipur and Mizoram (conduct of Business) Regulations, 2010 and Section 94 and 181 of Electricity Act, 2003. The Petitioner has prayed to admit the Petition, examine the proposal submitted by the Petitioner for favourable dispensation and pass such other orders as are deemed fit and proper in the facts and circumstances of the case.
2. Submissions made by the Petitioner and Commission's Analysis are as under.

2.1 Distribution Loss

Petitioner's Submission

The Distribution Loss for FY 2017-18 was approved at 18.54%. The Hon'ble Commissions has computed 31.11% Distribution loss for FY 2015-16. With the same mechanism, the distribution loss works out to be 30.70% for FY 2016-17. Hence the Petitioner requested the Commission to consider 27.67% as distribution loss for FY

2017-18 due to increase in rural electrification work and expansion of LT network MSPDCL could not meet the Commission approved distribution loss.

However, MSPDCL has been proactively pursuing T&D loss reduction activities for holistic benefit of all stakeholders and consumers as well as to meet compliance target under UDAY scheme of Central Government. Hence MSPDCL proposes a gradual 3% T&D loss reduction in FY 2016-17 as well as FY 2017-18.

Therefore, MSPDCL humbly requests the Commission to consider 27.67% as the distribution loss and then work out the energy balance to determine energy requirement quantum for FY 2017-18.

Commission's Analysis

- The Commission in its Tariff Order dated 27.02.2015 had approved Distribution Loss of 18.4% while approving Distribution Loss of 2015-16 at 20.40%
- Again the Commission in its MYT Order dated 29.02.16 had approved Distribution Loss of 18.40% for FY 2017-18 while approving Distribution Loss at 19.40% for FY 2016-17
- Further, the Commission in its Tariff Order dated 27.02.2017 has approved distribution loss at 18.40% for the year 2017-18
- No objection was raised by the Petitioner on the Tariff Orders dated 27.02.2015 and 29.02.2016 fixing distribution loss target of 18.40% for the FY-2017-18
- The Distribution Loss of 31.11% is actually achieved by the Petitioner during FY 2015-16 as against 20.40% fixed by the Commission. And there is a shortfall/gap of 10.70% in fulfilling the approved target for the FY 2015-16.
- Now, MSPDCL is actively pursuing loss reduction activities and meet AT&C loss trajectory of UDAY scheme of Govt. Of India fixed at 18.7% and 15% respectively for the FY 2017-18 and FY 2018-19 respectively.

The MSPDCL has stated that due to increase in rural electrification work and expansion of LT network, MSPDCL could not meet the Commission approved distribution loss of 18.40%.

Further as verified from the actual energy sales during FY 2013-14 to FY 2015-16, considerable increase in sales in domestic category is observed as detailed in Table below:

Table 1: Year-wise growth in energy sales

Energy Sales	FY 13-14 Actuals	FY 14-15 Actuals	FY 2015-16 Actuals	FY 2016-17 Estimated	FY 2017-18 Projected by MSPDCL	FY 2017-18 Approved by the Commission
Kurti Jyoti	12.50	12.69	15.17	16.51	18.43	7.00
Domestic	202.03	243.95	283.28	303.16	342.87	372.00
Commercial	34.39	35.83	39.84	41.58	44.76	48.00
Public lighting	5.49	4.40	4.13	4.16	4.16	5.00
Public water works	28.25	16.99	16.69	17.44	17.44	19.00
Agriculture & Irrigation	3.12	2.41	1.78	1.05	1.09	2.00
Cottage & Small Industries	14.86	18.13	16.20	14.93	14.62	18.00
Bulk	97.61	96.86	89.75	91.46	94.86	95.00
Medium Industry	2.37	2.79	3.14	3.71	4.08	4.00
Large Industry	14.38	8.22	4.48	3.07	3.07	6.00
Total Energy Sales	415.09	442.30	474.86	497.07	545.37	576.00

- Further, MSPDCL is giving increased hours of supply of 24 hours supply in the State.
- The request of MSPDL to increase the distribution loss from 18.40% to 27.67% during FY 2017-18 is being considered not reasonable at this stage in view of the committed AT&C loss reduction target of UDAY Scheme of Govt.of India fixed at 18.70% and 15.00% for FY 2017-18and FY 2018-19 respectively.
- The Commission is also hopeful that with widespread intallation and activation of prepaid meters to its consummers MSPDCL can aecieve the distribution loss targets at a very short time.

Accordingly, the Commission considers not to revise the approved distribution loss target of 18.40% for the FY 2017-18.

2.2 Surplus energy for sale outside the State (UI Sales)

Petitioner's Submission

The Commission in its order dated 27.02.2017 has worked out surplus energy at 307.69 MU with the Distribution Loss of 18.40% during FY 2017-18. Now the Petitioner has requested to revise the surplus energy at 213.96 MU during FY 2017-18 considering distribution loss at 27.67% as detailed below:

Table 2: Energy balance approved by the Commission for FY 2017-18

Sl. No	Particulars	Unit	Approved by the commission
			FY 2017-18
A	Energy Requirement	MU	
1	Energy Sales	%	576
2	Distribution loss	MU	18.40%
3	Distribution loss	MU	129.88
4	Energy Requirement	MU	705.88
B	Energy Availability	MU	
5	Own Generation (Net)	MU	0.68
6	Power Purchase	MU	1067.95
7	Less: External Losses	%	2.65%
8	Less: External Losses	MU	28.30
9	Net energy available at state periphery(5+6-8)	MU	1040.33
10	Transmission Loss 3.6%	MU	37.45
11	Energy Available for Distribution	MU	1002.88
12	Surplus (11-4)		297
13	Surplus grossed up by 3.6% for sale outside the state		307.69

Based on revised sales and distribution loss as requested by MSPDCL in the earlier two sections, MSPDCL requests the Commission to approve the energy requirement at distribution periphery as below.

MSPDCL has adopted Commission's approach of determining the energy balance and requests the Commission to approve the following quantum as surplus for subsequent usage.

Table 3: Energy balance projected by MSPDCL in review petition for FY 2017-18

Sl. No	Particulars	Unit	Requested by MSPDCL in R.P
1	Energy Sales	%	576.00
2	Distribution loss	MU	27.67%
3	Distribution loss	MU	220.35
4	Energy Requirement	MU	796.35
B	Energy Availability	MU	
5	Own Generation (Net)	MU	0.68
6	Power Purchase	MU	1067.95
7	Less External Losses	%	2.65%
8	Less: External Losses	MU	28.30
9	Net energy available at state periphery(5+6-8)	MU	1040.33
10	Transmission Loss 3.6%	MU	37.45
11	Energy Available for Distribution	MU	1002.88
12	Surplus (11-4)		206.53
13	Surplus grossed up by 3.6% for sale outside the state		213.96

Commission's Analysis

As the Distribution loss is not revised, the energy balance approved by the commission remains the unchanged.

Thus the Commission approves energy availability at 1002.88MU with surplus of 307.69 MU for FY 2017-18.

2.3 Power Purchase Cost

2.3.1 Petitioner's Submission

Commission in its latest order dated 27.02.2017 had approved power purchase cost of Rs. 317.33 Cr as against Rs. 355.64 Cr claimed in the Petition, disallowing arrears amount of Rs. 31.00 Cr, UI purchase of Rs. 3.21 Cr. RE procurement is allowed at Rs. 12.08 Cr as against Rs. 17.00 Cr Claimed.

The MSPDCL has further submitted as follows:

On Supplementary bills

MSPDCL would like to submit that the cost incurred on account of arrears/

supplementary bills are not due to any penalty or delayed payment surcharge. This cost has arise from incremental power generation cost as approved by respective central or state electricity regulatory commission from time to time. In FY 2016-17, MSPDCL has already paid supplementary bills worth Rs 14 cr, with arrears & for NEEPCO still remaining. It is expected that the gross supplementary bill would be around Rs 20 crore for FY 2016-17. *Supplementary bills for FY 2016-17 have been attached for reference.*

For FY 2017-18 too, MSPDCL would have to spend to the tunes of Rs 20 crore as arrear bill.

Hence, it is humbly requested the Commission to approve this revised request of Rs 20 crore as supplementary bill for FY 2017-18.

2.3.2 Disallowance of UI purchase expense

MSPDCL accepts the Commission's judgement in this case.

2.3.3 Renewable Energy expense

The Commission has approved the RE cost as produced below. The Commission has applied RPO on energy required at distribution periphery which according to commission is 705.88 MUs.

Solar at 0.25%	1.76 MU X 5.8	Rs. 1.02 Cr
Non Solar at 4.75%	33.53 MU X 3.30	Rs. 11.06 Cr
Total		Rs. 12.08 Cr

MSPDCL's request

As in accordance with Commission principle, MSPDCL has also computed RE expense by working out quantum requirement for RPO compliance at distribution periphery.

As stated earlier, MSPDCL would require 754.18 MUs at distribution periphery. With these assumptions and per unit procurement cost being kept constant as approved by Commission, the following expenses for RE procurement is requested to be approved.

Solar at 0.25%	1.89 MU X 5.8	Rs. 1.15 Cr
Non Solar at 4.75%	35.82 MU X 3.30	Rs. 12.48 Cr
Total		Rs. 13.64 Cr

Therefore, MSPDCL requests the Commission to consider an additional amount of Rs 1.56 Crore on account of RE expense.

The total expense that is requested to be added is therefore Rs 20 Crore for arrear bills and Rs 1.56 Crore, i.e Rs 21.56 Crore.

Commission's Analysis

As verified from the copies of the following supplement bills now enclosed to the review petition, Rs. 32,45,819 were claimed excluding late payment charges of Rs. 13,56,98,791 due to NHPC, as detailed below:

1	NEEPC Ltd Invoice dated 31.03.2016	10,08,81,996
2	NHPC supply bill for FY 2016-17 dated 18.07.2016 excluding LPS amount of Rs. 13,56,98,791	19,01,60,230
3	PGCIL-PoC bill for 1/16 to 3/16 dated 22.06.2016	3,67,03,593
	Total	32,77,45,819

Against Rs. 32.77 Cr arrear bills excluding LPS amount of Rs. 13.57 Cr the MSPDCL stated that Rs. 14.00 Cr were paid during FY 2016-17. As such the balance outstanding amount is Rs. 18.77 Cr (32.77-14) is allowed during FY 2017-18 as against Rs. 20.00 Cr requested by the MSPDCL.

Considering the above amounts the power purchase cost for FY 2017-18 works out to Rs. 336.10 Cr as detailed in the Table below:

Table 4: Power Purchase cost for FY 2017-18 approved by the Commission

Source	Quantity of Power Purchased	Average Rate	Power Purchase Cost Approved by the Commission	Proposed in the Review Petition	Approved by the Commission
	(MU)	(Rs/kWh)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
NEEPCO(Hydro)					
Kopili I HEP	64.04	0.97	6.21	6.21	6.21
Kopili II HEP	6.77	1.84	1.25	1.25	1.25
Khandong HEP	10.75	2.64	2.83	2.83	2.83
Ranganadi HEP	106.45	2.96	31.51	31.51	31.51
Doyang HEP	18.12	4.33	7.85	7.85	7.85
Subtotal			49.65	49.65	49.65
New Projects					
Kameng HEP Stage I	18.4	2.55	4.69	4.69	4.69
Kameng HEP Stage II	-				
Pare HEP	-				
Tural HEP	-				
Sub Total	224.53		4.69	4.69	4.69
NEEPCO(Gas Based)					
Assam Gas based Power Project	132.99	3.96	52.66	52.66	52.66
Agartala Gas Turbine Power Project	73.75	4.36	32.16	32.16	32.16
Agartala Gas Turbine Power Project-EXT	-	-	-	-	-
Subtotal			84.82	84.82	84.82
New Projects					
Monarchak Gas Based Power Project	-	-	-	-	-
Sub Total	206.74		0.00	0.00	0.00
NHPC(Loktak HEP)					
Purchased (20.02 MW)	180.08	2.93	52.76	52.76	52.76
Free Power (12.60 MW)	70.83	0	-	-	-
Sub Total	250.91		52.76	52.76	52.76
TRIPURA					
Baramura(Gas Based)(Unit IV & Unit V)	81.84	3.1	25.37	25.37	25.37
New Projects					
OTPC- (Pallatana-Unit I)					
OTPC- (Pallatana-Unit II)	220.23	2.82	62.1	62.1	62.1
Sub Total	302.07		87.47	87.47	87.47
NTPC					
NTPC Bongaigaon Unit I	83.7	3.09	25.86	25.86	25.86
NTPC Bongaigaon Unit II	-				
NTPC Bongaigaon Unit II	-				

Source	Quantity of Power Purchased	Average Rate	Power Purchase Cost Approved by the Commission	Proposed in the Review Petition	Approved by the Commission
	(MU)	(Rs/kWh)	(Rs. Cr)	(Rs. Cr)	(Rs. Cr)
Sub Total	83.7		25.86	25.86	25.86
Renewable Energy					
Solar			1.02	1.15	1.02
Non Solar			11.06	12.48	11.06
Subtotal			12.08	13.63	13.63
Arrear Bills			-	20.00	12.08
Total Power	1067.95	2.97	317.33	338.88	336.10

The Commission approves power purchase cost of Rs. 336.10 Cr for FY 2017-18.

3. Aggregate Revenue Requirement

After taking into account the above changes the Net ARR works out to Rs. 559.55 Cr as detailed in the Table below:

Table 5: Aggregate Revenue Requirement for FY 2017-18 approved by the Commission

Sl. No	Particulars	Projected by MSPDCL	Approved by the Commission in order dated 27.02.2017	Proposed in the Review Petition	Now approved by the Commission
		FY 2017-18	FY 2017-18	FY 2017-18	FY 2017-18
1	Fuel Cost	358.74	1.19	1.19	1.19
2	Power Purchase Cost		317.33	338.88	336.10
3	Transmission Charges for inter state	57.45	57.45	57.45	57.45
4	Transmission Charges of MSPCL	68.58	68.15	68.15	68.15
5	SLDC charges		3.1	3.1	3.1
6	O&M Expenses	93.51	93.51	93.51	93.51
7	Depreciation	0.26	0.21	0.21	0.21
8	Interest and Financial Charges	0.28	0.19	0.19	0.19
9	Interest on Working Capital	8.82	5.22	5.22	5.22
10	Provision of bad debts	3.00	3.00	3.00	3.00

Sl. No	Particulars	Projected by MSPDCL	Approved by the Commission in order dated 27.02.2017	Proposed in the Review Petition	Now approved by the Commission
		FY 2017-18	FY 2017-18	FY 2017-18	FY 2017-18
11	Total Cost	590.63	549.35	570.90	568.17
12	Add: Return on Equity/RoE	1.56	1.56	1.56	1.56
13	Add: Income Tax	0.39	0.39	0.39	0.39
14	LESS: Non Tariff Income	0.37	0.37	0.37	0.37
15	Aggregate Revenue Requirement	592.21	550.93	572.48	570.44
16	Surplus on true up FY 2014-15		10.89	10.89	10.89
17	Net ARR		540.04	561.59	559.55

4. Revenue

With the distribution loss of 18.40% the surplus energy works out to 307.69 MU. As such the revenue from sale of energy works out to Rs. 325.28 Cr as detailed below:

Sl. No	Category	Energy Sales (MU)	Average Rate (Rs/kWh)	Revenue (Rs. Crore)
1	Revenue from sale of energy	576	4.64	267.44
2	UI Sales	307.69	1.88	57.84
3	Total Sales	883.69	3.48	325.28

The Commission approves the revenue from existing tariff at Rs. 325.28 Cr. for FY 2017-18 including UI sales at Rs. 57.84 Cr.

5. Revenue Gap

The MSPDCL in its Review Petition has requested to revise the revenue gap to Rs. 253.95 Cr as against Rs. 214.74 Cr approved in Commission's order dated 27.02.2017. After considering revised Revenue, the Revenue Gap works out to Rs. 234.27 Cr as detailed below:

Table 6: Revenue Gap for FY 2017-18 approved by the Commission

Particulars	Unit	Projected by MSPDCL	Approved by the Commission	MSPDCL in revised petition	Now approved by the Commission
Revenue requirement	Rs. Crore	585.08	540.04	561.60	559.55
Revenue from existing tariff	Rs. Crore	278.67	267.44	267.43	267.43
Outside state sales	Rs. Crore	13.2	57.86	40.22	57.84
Total revenue from sale of energy	Rs. Crore	291.86	325.30	307.65	325.28
Revenue gap	Rs. Crore	293.21	214.74	253.95	234.27

6. Subsidy and Tariff Hike

Petitioners' Submission

The MSPDCL has requested to revise the Tariffs with an average hike of 11.60% as against 5.60% approved by the Commission and also increase of government subsidy to Rs. 222.92 Cr as against Rs. 199.91 Cr approved by the Commission as detailed below:

Table 7: Government Subsidy for FY 2017-18 approved by the Commission

Particulars	MSPDCL's Projections for FY 2017-18 in Petition No.2 of FY 2016	Approved by the Hon'ble Commission in T.O. dated 28.02.2017	Requested in Review Petition
Net ARR	591.92	540.04	561.60
Covered by			
Revenue at Existing Tariff	240.57	267.44	267.43
UI /Trading Receivable	49.06	57.86	40.22
Total Revenue from Sale of Energy	289.63	325.3	307.65
Revenue Gap/Surplus	302.29	214.74	253.95
Covered by			
Budgetary Support from Government	271.26	199.91	222.92
Additional Revenue at Revised Tariff	31.03 (at 12.9 % proposed tariff hike)	14.83 (at 5.6% approved tariff hike)	31.03 (11.60% hike)
Total	302.29	214.74	253.95

Commission's Analysis

As per Section 62(4) of the Electricity Act, 2003 " No Tariff or part of any tariff may ordinarily be amended, more frequently than once in any financial year except in respect of any changes expressly permitted under the terms of any fuel charge formula as may be specified".

As the Tariffs were already revised for FY 2017-18, it is not permissible to revise again.

Thus the revised revenue gap of Rs. 234.27 Cr now arrived vide Table 6 has to be met from the additional revenue from tariff of FY 2017-18 and Government subsidy.

The additional revenue at the revised tariff of FY 2017-18 is arrived at Rs. 14.83 Cr. The balance revenue gap of Rs. 219.44 Cr. (Rs. 234.27 – Rs. 14.83 Cr.) has to be met from Govt. subsidy against Rs. 199.91 Cr. agreed to earlier.

Thus the Petition is disposed of.



Station: Aizawl

(NGANGOM SARAT SINGH)

Date: 03.11.2017

Chairperson