

**BEFORE THE KARNATAKA ELECTRICITY REGULATORY COMMISSION, BENGALURU****Dated 11<sup>th</sup> April, 2017****Present:**

- |                                       |                 |
|---------------------------------------|-----------------|
| <b>1. Sri M.K.Shankaralinge Gowda</b> | <b>Chairman</b> |
| <b>2. Sri H.D.Arun Kumar</b>          | <b>Member</b>   |
| <b>3. Sri D.B.Manival Raju</b>        | <b>Member</b>   |

**ORDER****In the matter of determination of revised ARR  
and  
Retail Supply Tariff for FY18 in respect of Mangalore SEZ Limited****1. Background:**

As per the Extraordinary Gazette Notification dated 3.3.2010, issued by the Ministry of Commerce, Government of India, all the Special Economic Zones notified under sub-Section (1) of Section 4 of SEZ Act, 2005, shall be deemed to be a Licensee as per Section 14 of the Electricity Act, 2003. The Mangalore Special Economic Zone Ltd, by virtue of the aforesaid notification issued by Government of India, became a deemed Distribution Licensee, w.e.f 03.03.2010.

The Mangalore Special Economic Zone Ltd., (herein after referred to as MSEZL) has filed the application dated 30<sup>th</sup> November, 2016, for the approval of APR for FY16, revised ARR and retail supply tariff for FY18 in terms of the KERC Tariff Regulations and the MYT Regulations.

In exercise of the powers conferred under Sections 62, 64, and 86 of The Electricity Act, 2003, read with the KERC (Terms and Conditions for determination of Tariff for Distribution and Retail Sale of Electricity) Regulations, 2006, as amended from time to time and other enabling Regulations, the Commission has considered the applications of MSEZL and

after considering the views and objections of the consumers and other stakeholders, the Commission has passed this Order.

The details of the licensee's proposals, Commission's analysis and the decision thereon, are discussed in subsequent paragraphs of this Order.

## 2. Licensee's Profile:

The MSEZL was incorporated in February, 2006 under the Companies Act, 1956, having its registered office at Infantry Road, Bengaluru and its site office located at Ashok Nagar, Mangalore, Dakshina Kannada District. The MSEZL is promoted by the Oil and Natural Gas Corporation Ltd (ONGC), the Infrastructure Leasing & Financial Services Ltd, (IL&FS), the Karnataka Industrial Areas Development Board (KIADB) and the Kanara Chamber of Commerce and Industries (KCCI). The Company is implementing a sector specific Special Economic Zone in its Phase-I for Petroleum and Petrochemical Sector. It has recently been approved as "Multi-Product" Special Economic Zone.

### MSEZL's Network:

Power for Supply to the entire Dakshina Kannada (DK) District is procured by the Mangalore Electricity Company Limited (MESCOM) at IF points of the Karnataka Power Transmission Corporation Limited (KPTCL) substations. The 220KV double circuit line from Kemar to Kavour is passing through the MSEZL area and a 220/110KV substation is constructed by the KPTCL, from which the power supply is being made available to the MSEZL at IF point.

### Consumer Profile:

The consumer profile of MSEZL as at the end of 31<sup>st</sup> March 2016 is shown hereunder:

**TABLE – 1**

Sl. No	Category of Consumer	Voltage class	Sanctioned load in MVA
1	HT Industrial	33/11KV	15.70
2	HT -Construction	11KV	3.90
	<b>Total</b>		<b>19.69</b>

## 3. Background for filing the Tariff application:

The Commission, in its Order dated 3<sup>rd</sup> March, 2015 had determined the ARR and the retail supply tariff for FY16. Further, in its Tariff Order dated 30<sup>th</sup> March, 2016, the Commission has approved the APR of FY15 and has determined the ARR for the control period FY17-19 besides revising the retail supply tariff for FY17.

Now, the MSEZL has filed an application on 30<sup>th</sup> November, 2016 and has requested the Commission to:

1. Pass appropriate Orders on APR for FY16.
2. Approve the revised ARR for FY18.
3. Consider the tariff structure / proposal detailed in the application and approve tariff proposed in the tariff application, duly considering the submission made by the MSEZL for FY18.
4. Condone any error, omissions and deletions in the petition and give a chance to provide any other necessary information as deemed fit by the Commission.
5. Pass appropriate orders on the application made by the MSEZL.

#### **4. Acceptance of Applications and Consultation Process:**

The Commission, vide its letter dated 27<sup>th</sup> December, 2016 communicated its preliminary observations and the MSEZL in its letter dated 3<sup>rd</sup> January, 2017 has furnished its replies.

The Commission, vide its letter dated 5<sup>th</sup> January, 2017, informed the MSEZL that, its application filed on 30<sup>th</sup> November, 2016, for approval of APR for FY16 and revised ARR and revision of retail supply tariff in the Mangalore SEZ area, has been treated as a petition in terms of Tariff Regulations, subject to further verification and validation and informed it to publish a summary of the application in the leading newspapers in the distribution area of the MSEZL inviting objections/comments/suggestions from the consumers and other stakeholders.

Accordingly, the MSEZL has published the summary of its application on 11<sup>th</sup> and 12<sup>th</sup> January, 2017, in Deccan Herald, The New Indian Express, Vijaya Karnataka, Kannada Prabha and Udayavani. The Commission has published a Notice of Public hearing on 10<sup>th</sup> February, 2017 in Deccan Herald, Times of India, The Hindu and The New Indian Express, Vijay Karnataka, Udayavani, Projavani, Kannada Prabha and Vijayavanika. In response, the Commission has received two objections.

#### 5. The Gist of the objections by the Stakeholders and Replies of MSEZL:

The Commission has held a Public Hearing on 27<sup>th</sup> February, 2017, at Mangalore to elicit the views of the general public/ stakeholders. The details of the written and oral objections, the response of the MSEZL and the Commission's views thereon are as under:

In the written submissions as well as oral submission made during the Public Hearing some of the stakeholders and consumers have raised objections on the Tariff Application filed by the MSEZL and their names are given below:

#### List of persons who filed written objections: -

<u>Sl. No</u>	<u>Application No.</u>	<u>Name &amp; Address of Objectors</u>
1	MS-01	Sri. Sushil K Shenoy, Chief Executive Officer, ONGC Mangalore Petrochemicals Limited.
2	MS-02	Sri. Divakar Kadri, General Manager, Cardolite Specialty Chemicals India LLP.

The Gist of the objections, Replies by the Licensee and the views of the Commission are shown below:

<u>Sl No.</u>	<u>Objections</u>	<u>Replies by Licensee</u>
1	The MSEZL has stated that, it has created the infrastructure capacity of 80MVA keeping in view of the future development	The infrastructure project is taken up considering the long term assessment of energy requirements of the

	of industries in its area. The present load is 18MVA only. Hence, interest and depreciation should be restricted to the capacity catering to the present demand.	consumers and back-up options of load management to provide uninterrupted supply.
	<b>Commission's Views:</b> The interest and depreciation is being allowed as per the norms stipulated in the MYT Regulations with reference to cost of the assets created.	
2	Since the consumption of the existing units is less than the anticipated power requirement, the demand charges may be increased from Rs.140/kVA per month to Rs.200 and the corresponding consumption charges may be reduced.	In two part tariff, the demand charges and energy charges have to be increased based on the stack up of the fixed and variable cost. However, the Commission may take a view.
	<b>Commission's Views:</b> This issue has been suitably dealt with in the relevant Chapter of this Tariff Order.	
3	The Technical loss of 1.16% should not be considered as distribution loss while fixing tariff as the MSEZL has a distribution gain of 0.55 % till September, 2015.	The MSEZL has set a target of technical loss of 1.76% as mentioned in Page 65. The exact loss can be known in true-up exercise.
	<b>Commission's Views:</b> The reply furnished by the MSEZL is noted.	
4	The MSEZL is collecting bill amount within 18 <sup>th</sup> of every month and is paying the power purchase charges to MESCOM by 18 <sup>th</sup> of every month. Hence, the interest on working capital should not be allowed.	The interest on working capital is allowed for ARR to meet the business working capital requirement. The interest on consumer bill is levied only in case of belated payments.
	<b>Commission's Views:</b> The expenses are being allowed in the ARR in terms of the norms as per MYT Regulations.	
5	The MSEZL should give rebate to the units getting power supply at 33kV as the distribution loss will be less in 33kV as compared to 11kV and LT lines.	It is not financially viable to give a rebate for consumption at 33 kV as 11 kV consumers will have to be charged at very high rates.
	<b>Commission's Views:</b> The voltage-wise cost of service regime is yet to be implemented and hence the losses have to be borne on an average basis, as is being borne by all the other HT consumers in the ESCOMs.	

6	The self-consumption by the MSEZL, the capex on its re-habilitated colony including power infrastructure and water pumping should not be considered in the tariff revision.	The capital expenditure of other MSEZL utilities are not included in the licensed activity assets.
	<b>Commission's Views:</b> The expenses chargeable to the distribution licensee's business only will be included in the ARR.	
7	The energy supplied by the MESCOM should be based on the pooled power purchase cost instead of incremental cost.	The issue is being discussed with the MESCOM. The consumers of the MSEZL are paying Rs.0.38/unit lesser than similar consumers of other ESCOMs due to exemption from Electricity tax.
	<b>Commission's Views:</b> This is suitably dealt with in the relevant Chapter of this Tariff Order.	

## CHAPTER – 1

### ANNUAL PERFORMANCE REVIEW FOR FY16

#### 1. MSEZL's Application for APR for FY16:

MSEZL has filed its application for Annual Performance Review (APR) for FY16 and Revision of ARR and retail supply tariff for FY18 on 30<sup>th</sup> November, 2016. MSEZL has sought the approval for its revised ARR as per the Annual Performance Review (APR) for FY16 based on the Audited Accounts.

The Commission in its letter dated 27<sup>th</sup> December, 2016 had communicated its preliminary observations to the application. MSEZL, in its letter dated 3<sup>rd</sup> January, 2017 has furnished its replies to the preliminary observations of the Commission.

The Commission in its Tariff Order dated 3<sup>rd</sup> March, 2015, had approved the ARR along with Retail Supply Tariff for FY16. The Annual Performance Review of MSEZL for FY16 based on its audited accounts is discussed in this Chapter.

#### **MSEZL's Submission:**

MSEZL has submitted its proposals for revision of ARR for FY16 based on the Audited Accounts as follows:

**TABLE – 1**  
**APR for FY16 – MSEZL's Submission**

Amount in Rs. Crores		
Sl. No	Particulars	As Filed
2	Energy at Interface in MU	13.88
3	Distribution Losses in %	-1.74%
4	Sales in MU	14.12
5	Revenue from sale of power	11.88
	<b>Expenditure</b>	
6	Power Purchase Cost	7.36
7	Employee Cost	0.40

8	Repairs & Maintenance	0.34
9	Admin. & General Expenses	0.39
10	Total O&M Expenses	1.13
11	Depreciation	2.19
12	Interest on Loans	3.91
13	Interest on Working capital	0.00
14	Interest on consumer deposits	0.38
15	Less: Expenses capitalised	(0.55)
16	Return on Equity	2.77
17	Other Income	0.47
	<b>Net ARR</b>	<b>16.72</b>

Considering the revenue of Rs.11.88 Crores against a net ARR of Rs.16.72 Crores, MSEZL has reported a gap in revenue of Rs.4.84 Crores for FY16.

**2. The item wise review of expenditure and the decisions of the Commission thereon are as discussed in the following paragraphs:**

**i. Sales for FY16:**

The Commission in its order dated 3rd March, 2015 had approved sales of 78.49 MU. MSEZL in its, present application has reported sales of 14.12 MU for FY16. MSEZL has stated that, the envisaged sales could not be achieved due to demand side constraints of the consumers in MSEZL. **The Commission recognizes the actual sales of 14.12 MU for the purposes of APR for FY16.**

**ii. Distribution Losses for FY16:**

MSEZL, in its application has reported that, there are actual negative distribution losses of 1.74% as against the distribution losses of 2.90% approved by the Commission for FY16.

MSEZL has stated that, the negative losses are due to meter calibration issues.

The Commission in its, preliminary observations had informed MSEZL that, it cannot accept negative loss figures. The distribution system should invariably include technical losses and any negative losses are only due measurement issues. MSEZL in its replies has stated that, the losses are based on the



measurements and the meters at IF points and consumers' locations have been calibrated.

The Commission, notes that MSEZL has sold energy higher than the energy received from MESCOM at IF points for FY16. MSEZL is required to reconcile the energy data along with MESCOM. Thus, for the present, the Commission is unable to recognise the negative distribution losses reported for FY 16.

### iii. Power Purchase for FY16:

MSEZL, in its application has reported that it has purchased 13.88 MU at a cost of Rs.7.36 Crores as against approved power purchase of 80.84 MU at a cost of Rs.42.44 Crores for FY16. As per the actual source-wise power purchase reported by MESCOM under format D-1 and audited accounts, the revised power purchase cost for MSEZL is as detailed below:

**TABLE – 2**  
**Revised Power Purchase Cost-FY16**

Particulars	Energy in MU	Total Cost Rs.Crs	Cost Per Unit Rs/Unit
5% of MESCOM	251.39		
Sourced from BTPS Unit 1	218.59	107.25	4.91
Sourced from BTPS Unit 2	20.23	9.58	4.74
5% Sourced from Short term	12.57	6.40	5.09
Total Power purchase cost at 5%		123.23	4.90
Transmission Charges		14.63	0.58
Total Cost		137.86	5.48
Power Purchase Cost with 5 paise trading margin		1.26	5.53
<b>Power Purchase at IF Points (Transmission Loss at 3.535%)</b>	<b>242.50</b>	<b>139.11</b>	<b>5.7366</b>

Based on the above computations, the power purchase cost for purchase of 13.88 MU by MSEZL from MESCOM for FY16 works out to Rs.7.96 Crores. Therefore, MSEZL is required to pay the difference in the cost of power purchase to MESCOM.

Further, the Commission notes that the power purchase quantum reported by MSEZL is lesser than the energy sold to the consumers of MSEZL. MSEZL is directed to reconcile the energy purchase quantum with MESCOM, based on calibration of meters as reported in its application. However, for the present, **the Commission decides to consider the actual power purchase of 13.88 MU at a cost of Rs.7.96 Crores for the purposes of APR of FY16.** Any revision in the quantum and cost of power purchase for FY16 noticed subsequently shall be factored, in the ensuing year and reported to the Commission.

#### iv. Operation and Maintenance Expenses:

MSEZL in its application has sought the approval for O&M expenditure of Rs.1.13 Crores for FY16 as detailed below:

**TABLE-3**  
**O&M Expenses for FY16 – MSEZL submission**

Amount In Rs. Crores

Repairs & Maintenance	0.34
Employee Expenses	0.40
A&G expenses	0.39
<b>O&amp;M expenses</b>	<b>1.13</b>

The Commission in its Tariff Order dated 3<sup>rd</sup> March, 2015 had approved O&M expenses of Rs.0.84 Crores for FY16. The Commission notes that, the O&M expenses consist of R&M expenses, Employee cost and A&G expenses. FY16 being the first year of operation of MSEZL, there is no base year data for computing normative O&M expenses.

**Hence, the Commission decides to allow actual O&M expenses of Rs.1.13 Crores for FY16.**

**v. Depreciation:**

MSEZL in its application has claimed an amount of Rs.2.19 Crores as depreciation for FY16.

In accordance with the provisions of the KERC (Terms and Conditions for Determination of Tariff) Regulations, 2006 and amendments there to the allowable depreciation for FY16 has been determined by the Commission duly considering the data of assets as per MSEZL's statement as follows:

**TABLE – 4**  
**Allowable Depreciation for FY16**

Amount in Rs. Crores

Particulars	Opening Balance of Asset as on 01.04.2015	Closing Balance of Asset as on 31.03.2016	Depreciation for FY16
Lease hold assets	2.30	6.17	-
Buildings	-	2.84	0.09
Civil	-	0.87	0.03
Plant & M/c	-	21.07	1.00
Line, Cable Network	-	33.87	1.07
Furniture	0.02	0.02	0.00
Office Equipments	0.05	0.05	0.00
<b>Total</b>	<b>2.37</b>	<b>58.72</b>	<b>2.19</b>
<b>Allowable depreciation</b>			<b>2.19</b>

Considering the opening and closing balance of gross blocks of fixed assets for FY16 and the allowable depreciation based on the rates of depreciation as per the prevailing Regulations works out to Rs.2.19 Crores.

**Thus, the Commission decides to allow depreciation of Rs.2.19 Crores for FY16.**

**vi. Interest on Capital loan:**

MSEZL in its application has claimed an amount of Rs.3.91 Crores towards interest on capital loans. The Commission in its, Tariff Order dated 3<sup>rd</sup> March, 2015 had approved interest on capital loans at Rs.4.15 Crores for FY16.

As per the audited bifurcated balance sheet of the licensed activity of MSEZL, the opening balance of loans is Rs.24.53 Crores and the closing balance is Rs.22.72 Crores for FY16. As per the D9 (format) MSEZL has not availed any fresh capital loan during FY16. However, the repayment of capital loan is indicated as Rs.1.81 Crores in FY16. Considering the payment of interest on capital loan balance as per the consolidated audited accounts of MSEZL for FY16, the weighted average rate of interest on capital loan works out to 8.0469% only which is within the normative rate. The Commission recognises the same rate of interest for computation of interest on the average capital loan amount for FY16 as detailed below:

**TABLE –5**

**Allowable Interest on Capital Loans for FY16**

Amount in Rs. Crores

Particulars	FY16
Opening balance of Capital Loans	24.53
New Loans	0.00
Less Repayments	1.81
Total loan at the end of the year	22.72
Average Capital Loan	23.63
Interest Rate in %	8.05%
<b>Interest on Capital Loans</b>	<b>1.90</b>

**Thus, the Commission decides to allow an amount of Rs.1.90 Crores towards interest on capital loan for FY16.**

**vii. Interest on Working Capital:**

MSEZL has stated that, it has not incurred any interest on working capital and has not claimed in the APR for FY16.

The Commission in its Tariff Order dated 3<sup>rd</sup> March, 2015 has allowed Rs.1.08 Crores as interest on working capital for FY16. As per the KERC (Terms and Conditions for Determination of Tariff) Regulations, 2006 and amendments there to, the Commission has computed the normative allowable interest on working capital for FY16 as follows:

**TABLE – 6****Allowable Interest on Working Capital for FY16**

Amount in Rs. Crores

Particulars	FY16
One-twelfth of the amount of O&M Expenses	0.19
Opening GFA	2.37
Stores, materials and supplies 1% of Opening balance of GFA	0.02
One-sixth of the Revenue	1.98
Total Working Capital	2.19
Rate of Interest (% p.a.)	11.00%
Normative Interest on Working Capital	0.24
Actual interest on WC as per audited accounts for FY16	0.00
<b>Allowable Interest on Working Capital</b>	<b>0.12</b>

**Thus, the Commission decides to allow an amount of Rs.0.12 Crores towards interest on working capital for FY16.**

**viii. Interest on Consumers' Security Deposits:**

MSEZL in its application has claimed an amount of Rs.0.38 Crores towards payment of interest on consumers' security deposits for FY16.

The Commission notes that, the opening balance of consumers' security deposits as per the audited consolidated balance sheet of MSEZL is Rs.1.89 Crores for FY16. As per the KERC (Interest on Consumers' Security Deposit) Regulations, 2005 the interest on consumer deposits is to be allowed as per the bank rate prevailing as on the 1<sup>st</sup> of April of the relevant year. Considering, the bank rate 8.50% as on 1<sup>st</sup> April, 2015, the allowable interest on consumers' security deposits for FY16 is Rs.0.16 Crores only. The Commission notes that, there is no justification in claiming interest on consumers' security deposits by considering the opening balance as per the audited accounts of MSEZL.

**Thus, the Commission decides to allow an amount of Rs.0.16 Crores towards interest on consumers' security deposits for FY16.**

**ix. Capitalization of expenses:**

MSEZL in its application has claimed an amount of Rs.0.55 Crores towards capitalization of expenses for FY16. The same has been considered for computation of APR for FY16.

Thus the allowable interest and finance charges for FY16 are as follows:

**TABLE – 7  
Allowable Interest and Finance Charges**

Sl. No.	Particulars	Amount in Rs.Crores
		FY16
1.	Interest on Loan capital	1.90
2.	Interest on working capital	0.12
3.	Interest on consumers; security deposits	0.16

4.	Less Interest and other expenses capitalized	0.55
	<b>Total interest and finance charges</b>	<b>1.63</b>

#### x. Return on Equity:

MSEZL in its application has claimed Return on Equity of Rs.2.77 Crores for FY16 as detailed below:

**TABLE – 8**

**Return on Equity – MSEZL’s Submission**

Amount in Rs. Crores

Particulars	FY16
Opening Equity	19.76
Less: cash resources to fund equity commitments	(1.90)
Equity for FY16	17.86
Return on equity at 15.50%	2.77

The Commission while approving the first ARR for FY16 has computed the return on equity at 15.50% by considering the equity at 30% of the GFA and has allowed RoE of Rs.2.59 Crores. As per the audited balance sheet of MSEZL for FY16 submitted now the opening share capital for the entire Company is Rs. 50 Crores and the accumulated surplus is Rs.27.86 Crores. The Commission having recognized the equity of the licensed activity in proportion to the opening GFA of the licensee as provided by the MSEZL in its application, the share capital for the licensed activity on the total equity works out to 6.5329%. Accordingly, the equity for licensed activity is reckoned as Rs.5.0955 Crores for FY16.

However, as the normative allowable equity based on the gross fixed assets is less than the actual equity indicated by MSEZL in its audited accounts for FY16, the Commission decides to consider the normative equity of Rs.0.711 Crores for computation of return on equity.

As per the KERC (Terms and Conditions for Determination of Tariff) Regulations, 2006 and amendments there to, the Commission has computed the allowable Return on Equity at 15.5% on equity plus accumulated balance of surplus/deficit as at the beginning of the year. Considering the status of equity as per the audited accounts for FY16 and as discussed in the above paras, the allowable RoE is determined as follows:

**TABLE – 9**  
**Allowable Return on Equity**

Amount in Rs. Crores

Particulars	FY16
Opening balance of Share Capital	3.270
Opening balance of Reserves and Surplus	1.825
Opening balance of Total Equity	5.095
Normative Equity at 30% of the GFA	0.711
<b>Return on equity at 15.50% on 30% of GFA</b>	<b>0.11</b>

Thus, the Commission decides to allow Return on Equity of Rs.0.11 Crores for FY16.

**xi. Other Income:**

MSEZL in its application has claimed an amount of Rs.0.47 Crores as other income for FY16. MSEZL has stated that, it has received Rs.0.44 Crores as credit towards interest from Banks and interest on security deposits given by MESCOM.

**The Commission decides to allow an amount of Rs.0.47 Crores as other income for FY16.**

**3. Abstract of Approved ARR for FY16:**

As per the above item-wise decisions of the Commission, the consolidated statement of ARR for FY16 is as follows:

**TABLE – 10**  
**Approved ARR for FY16 as per APR**

Particulars	Amount in Rs. Crores.		
	As approved	As filed	As per APR



	03.03.2015		
<b>Revenue</b>			
Revenue From Sale of Power	52.21	11.88	11.88
Subsidy from Government		0.00	0.00
<b>Total Revenue</b>		<b>11.88</b>	<b>11.88</b>
<b>Expenditure</b>			
Power Purchase Cost	42.44	7.36	7.96
Employee Expenses		0.40	
R&M Expenses		0.34	
A&G Expenses		0.39	
<b>O&amp;M Expenses</b>	<b>0.84</b>	<b>1.13</b>	<b>1.13</b>
Depreciation	1.96	2.19	2.19
Interest on Loan Capital	4.15	3.91	1.90
Interest on Working Capital	1.08	0.00	0.12
Interest on Consumers' security Deposit	0.00	0.38	0.16
(Less) Expenses Capitalised	0.84	0.55	0.55
Return on equity	2.59	2.77	0.11
Other Income		0.47	0.47
<b>Net ARR</b>	<b>52.21</b>	<b>16.72</b>	<b>12.55</b>

#### 4. Gap in Revenue for FY16:

As against an approved ARR of Rs.52.21 Crores, the Commission after the Annual Performance Review of MSEZL for FY16 decides to allow an ARR of Rs.12.55 Crores for FY16. Considering the revenue of Rs.11.88 Crores, a revenue deficit of Rs.0.67 Crores is determined for the year FY16.

MSEZL in its application has stated that, the Management has decided to absorb 50% of the gap in revenue, in its books and do not propose to pass on the same to the consumers. Further, MSEZL has requested the Commission to factor the remaining 50% of revenue gap to be equally spread over the next five years as regulatory asset.

The Commission takes note of the decision of the Management of MSEZL on treatment of the deficit in revenue for FY16. Accordingly, the Commission decides to carry forward Rs.0.34 Crores being the 50% of the revenue deficit of FY16 to the proposed ARR for FY18 as discussed in the subsequent Chapter of this Order.

## CHAPTER – 2

### REVISED ANNUAL REVENUE REQUIREMENT FOR FY18

#### 1. Revised Annual Revenue Requirement (ARR) for FY18

##### MSEZL's Application:

MSEZL in its application dated 30<sup>th</sup> November, 2016, has sought approval of the Commission for the revised ARR for FY18. The summary of the proposed revised ARR for FY18 is as follows:

**TABLE – 1**  
**Revised ARR for FY18 – MSEZL Proposal**

Amount in Rs.Crores

Particulars	FY18
Energy at IF Point (MU)	85.33
Sales (MU)	84.60
Distribution Loss (MU)	0.73
Distribution Loss in %	0.86%
<b>Revenue</b>	
Revenue From Sale of Power	58.34
<b>Expenditure</b>	
Power Purchase Cost	47.87
Employee Expenses	0.40
R&M Expenses	0.71
A&G Expenses	0.32
<b>Total O&amp;M Expenses</b>	<b>1.43</b>
Depreciation	2.73
Interest & Financing Charges(net)	
Interest on Capital Loan	3.53
Interest on Working Capital	1.29
Interest on Consumers' Security Deposit	0.25
Return on Equity	2.92
Other Income	0.26
Less: 50% gap in Revenue of FY16	(2.42)
<b>Total Expenses</b>	<b>62.18</b>

The MSEZL has requested the Commission to approve the revised Annual Revenue Requirement of Rs.62.18 Crores for FY18. Considering the estimated revenue of Rs. 58.34 Crores based on the existing retail supply tariff, MSEZL has projected revenue gap of Rs.1.42 Crores for FY18. However, as discussed in the previous Chapter of this Order, MSEZL has proposed carry forward gap of

revenue of Rs.2.42 Crores of FY16. Thus, the total gap in revenue for FY18 is Rs.3.84 Crores. In order to bridge this gap in revenue, MSEZL, in its application has requested the Commission to revise the retail supply tariff for FY18.

### **Annual Performance Review for FY16:**

As discussed in the preceding chapter of this Order, the Commission has carried out the Annual Performance Review for FY16 based on the audited accounts furnished by MSEZ. Accordingly, a deficit of Rs.0.34 Crores of FY16 is required to be carried forward in to the ARR of FY18.

## **6. Determination of revised ARR for FY18:**

The analysis of the expenditure and revenue proposed by the MSEZL and decisions of the Commission on each item of the expenditure are discussed below:

### **i. Sales:**

The MSEZL in its application has estimated the sales of 84.60 MU for FY18. Since the MSEZL has projected the sales duly considering its present status and progress of facilities available within its premises, the Commission has considered the sales projections made by the MSEZL for FY18.

### **ii. Distribution Losses:**

MSEZL in its application has projected the distribution losses of 0.86% for FY18. The MSEZL has reported a negative loss in FY16, which has not been accepted by the Commission. The Commission, in its MYT Order dated 30<sup>th</sup> March, 2016 had fixed the distribution loss of 1.47% for FY18. Hence, for the present, the Commission decides to consider and refix the distribution losses at 0.86% as proposed by the MSEZL for FY18.

### **iii. Power Purchase cost:**

The MSEZL in its application has proposed the energy requirement of 85.33 MU for FY18 and the same is proposed to be procured from the MESCOM. The power purchase cost of Rs. 47.87 Crores has been computed by assuming a rate of Rs.5.61 per unit as approved by the Commission in its Order dated 30<sup>th</sup> March,2016.

The Commission in its Order dated 30<sup>th</sup> March, 2016 had approved power purchase cost at the rate of Rs.5.61 per unit. For computing the power purchase cost, the marginal cost of power purchase from long-term sources (excluding RE) and 5% from short term /medium term by MESCOM were considered. The Commission has adopted the same approach for projecting the power purchase cost for FY18. However, as short-term power purchase in FY18 is not envisaged, 5% is factored from Solar power and the remaining requirement is sourced on the basis of merit order for determining the power purchase cost as shown in the following table:

**TABLE - 2**  
**Cost of Power purchase for FY18**

Amount in Rs. Crores

Particulars	Energy in MU	Fixed cost	Variable cost	Total cost	Per unit Cost
5% Requirement of MESCOM	279.19				
BTPS-3	211.17	39.49	64.62	104.11	4.93
UPCL	54.76	9.19	17.30	26.49	4.90
Solar Power	13.96			9.26	6.63
Total PP cost				139.86	5.01
Transmission & SLDC Charges				15.20	0.54
Total PP & Transmission cost				155.06	5.55
Trading margin at 5 paise per unit				1.40	0.05
Total cost				156.46	5.60
<b>Energy at Interface point (Transmission loss at 3.37%)</b>					<b>5.80</b>

The above per unit rate of power purchase payable to the MESCOM includes a margin of 5 paise per unit besides charges payable to the KPTCL, PGCIL, SLDC and POSOCO. Hence, the Commission hereby approves the power purchase rate of Rs. 5.80 per unit of energy delivered to MSEZL by MESCOM at the IF point, for FY18.

As per the quantum of sales and the distribution losses indicated by the MSEZL, and the power purchase rates computed above, the purchase cost for FY18 is as under:

**TABLE – 3**  
**Approved Sales and Power Purchase cost for FY18**

Year	Sales in MU	Distribution Losses in %	Energy at IF point in MU	PP rate at IF point Rs. per unit	Total Power Purchase cost in Rs. Crs
FY18	84.60	0.86%	85.33	5.80	49.49

Thus, the Commission approves power purchase cost of Rs.49.49 Crores which is payable to MESCOM for FY18.

**iv. Other items of Expenditure:**

In addition to the power purchase cost, the following are the other items of expenditure to be factored in the ARR for FY18:

**a) O & M Expenses:**

The MSEZL in its application has claimed O & M expenses of Rs.1.43 Crores by considering the weighted inflation index of 9% on the base year O&M expenses of FY17 and the efficiency factor of 0.5%. MSEZL has claimed this amount with breakup of employee cost, R&M expenses and A&G expenses as detailed below:

**TABLE – 4**  
**O & M Expenses – MSEZL Proposal**

Amount in Rs.Crores

Particulars	FY18
Employee Expenses	0.40
Repairs & Maintenances Expenses	0.71
General Administration Expenses	0.32
<b>Total</b>	<b>1.43</b>

The Commission in its Tariff Order dated 30<sup>th</sup> March, 2016 had approved O&M expenses of Rs.1.62 Crores for FY18. The Commission, as per the audited accounts of MSEZL has considered the actual O&M expenses of Rs.1.13 Crores for FY16 as the base year O&M expenses. This base year cost is escalated by weighted inflation index of 7.71% and efficiency factor of 0.50% to arrive at the allowable O & M expenses for the control period FY18.

As there is increase in the number of installations upto FY17 and projections made indicate 100% increase in FY18, the Commission is of the view that such an increase cannot be considered upfront for computation of consumer

growth. However, the Commission would consider the actual number of installations while truing up the expenses for FY18.

Based on this approach, the approved O&M expenses for FY18 is as follows:

**TABLE - 5**  
**Approved O & M Expenses-FY18**

Particulars	Amount in Rs.Crores		
	FY16	FY17	FY18
No. of Installations	9	9	18
Consumer Growth rate-CAGR			25.99%
Weighted Inflation Index		7.71%	7.71%
Base Year O&M Cost	1.13		
<b>Approved O&amp;M expenses</b>		<b>1.21</b>	<b>1.30</b>

**Thus, the Commission decides to approve O & M expenses of Rs.1.30 Crores for FY18.**

**b) Depreciation:**

The MSEZL in its application has claimed depreciation of Rs.2.73 Crores based on the average projected gross fixed assets for FY18.

**Commission's analysis and decision:**

For the purpose of allowing the depreciation, the average of opening and closing balances of gross fixed assets has been considered and the allowable depreciation, at the rate as per the MYT Regulations, is worked out as follows:

**TABLE -6**  
**Approved Depreciation for FY18**

Amount in Rs. Crores

Particulars	FY18	
	Closing Balance of Asset as on 31.03.2017	Depreciation
Buildings	2.84	0.09
Civil	0.87	0.03
Plant & M/c	21.18	1.00
Line, Cable Network incl plant/Machinery	33.89	1.61
Furniture	0.02	0.00
Office Equipments	0.05	0.00
<b>Depreciation</b>	<b>58.85</b>	<b>2.73</b>

Thus, the Commission decides to approve depreciation of Rs.2.73 Crores for FY18.

**Interest on Capital loans:**

The MSEZL has considered the opening balance of capital loan of Rs.38.27 Crores and repayment of Rs. 0.43 Crores and has claimed interest on Capital loans of Rs.3.54 Crores at interest rate of 9.30% for FY18.

**Commission's analysis and decision:**

The Commission has considered the amount of loans, repayments and new loan, as furnished by the MSEZL in Format D-9 of its application. The Commission notes that the actual weighted average rate of interest during FY16 is 8.05%. The Commission has worked out the allowable interest on the average loans for FY18, duly considering the balance of capital loans, as per the audited accounts for FY16 and the repayments proposed by MSEZL, as shown in the following Table:

**TABLE - 7**  
**Approved Interest on Loan for FY18**

Amount in Rs. Crores	
Particulars	FY18
Opening Balance of Capital Loan	20.00
Add new Loans	0
Less Repayments	2.72
Total loan at the end of the year	17.28
Average Loan	18.64
Interest Rate allowed in %	8.05%
<b>Interest on Capital Loans</b>	<b>1.50</b>

**Thus, the Commission decides to approve interest on capital loans of Rs.1.50 Crores for FY18.**

**c) Interest on Working Capital Loan:**

The MSEZL has claimed interest on Working Capital Loan at Rs.1.29 Crores for FY18. MSEZL has made this claim based on the working capital equivalent to sum of one month's O & M expenses, 1% of opening GFA and two month's revenue with an interest rate of 12%. The rate of interest is based on the bank rate declared by RBI at 9.3% / 9.65% plus 250 basis points.

**Commission's analysis and decisions:**

As per the norms specified under the MYT Regulations, the Commission has computed the interest on working capital, which consists of one month's O & M expenses, 1% of opening GFA and two month's revenue.

The present interest rates by commercial banks and financial institutions are charged mainly based on Marginal Cost of fund based Lending Rates (MCLR). These rates are comparatively lower than the base rates considered earlier. Further, in view of the changing economic situation, it is observed that there is a considerable reduction in the MCLR and also downward trend is evident in the interest rates. Hence, in such a situation, the Commission is of the view that, the MSEZL can avail Capital loans at competitive interest rates which would be less than the proposed rates of 12%. The Commission notes that, the present SBI MCLR rate for capital loans with tenure of 3 years is 8.15%. Considering the present MCLR, the Commission decides to allow an interest rate of 11.00% for FY18 for Working Capital loans.



Accordingly, the approved interest on working capital loans is as follows:

**TABLE - 8**

**Approved Interest on Working Capital - FY18**

Amount in Rs. Crores	
Particulars	FY 18
One-twelfth of the amount of O&M Exp.	0.11
Opening GFA as per Audited Accounts	65.02
Stores, materials and supplies 1% of Opening balance of GFA	0.65
One-sixth of the Revenue	9.74
<b>Total Working Capital</b>	<b>10.50</b>
Rate of Interest (% p.a.)	11.00%
<b>Interest on Working Capital</b>	<b>1.15</b>

**Thus, the Commission decides to approve interest on Working Capital loans of Rs.1.15 Crores for FY18.**

**d) Interest on Consumers Security Deposits:**

The MSEZL has claimed the interest on consumers' security deposit of Rs. 0.25 Crores for FY18.

**Commission's analysis and decisions:**

In accordance with the KERC (Interest on Security Deposit) Regulations 2005, the interest rate on consumers' security deposit to be allowed is the bank rate prevailing on the 1<sup>st</sup> of April of the financial year for which interest is due. As per the Reserve Bank of India Notification dated 4<sup>th</sup> October, 2016, the applicable bank rate is 6.75%. The Commission has considered the same, for computation of interest on consumers' security deposits for FY18.

The Commission has considered the consumers' security deposits of Rs.0.56 Crores as per the audited accounts of FY16 for onward projection for FY18. As there is no change in consumers, the Commission has considered the same amount of consumers' security deposits for FY18 also and the interest on consumer's security deposits is worked out as follows:

**TABLE - 9**

**Approved Interest on Consumers' Security Deposits for FY18**

Amount in Rs. Crores	
Particulars	FY18

Opening Balance of Consumers' Security Deposits	0.56
Addition of deposits	0.00
Closing Balance of Consumers' Security Deposits	0.56
Average Balance of Consumers' Security Deposits	0.56
Rate of Interest	6.75%
<b>Approved Interest on Consumers' Security Deposits</b>	<b>0.04</b>

**Thus, the Commission decides to approve interest on consumers' security deposits of Rs.0.04 Crores for FY18.**

The abstract of approved interest and finance charges for FY18 are as follows:

**TABLE – 10**  
**Approved Interest and finance charges for FY18**

Amount in Rs. Crores	
Particulars	FY18
Interest on Loan Capital	1.50
Interest on Working Capital	1.15
Interest on Consumers' Security Deposit	0.04
<b>Total Interest &amp; Finance Charges</b>	<b>2.69</b>

**e) Return on Equity (RoE):**

The MSEZL in its application has claimed Return on Equity of Rs. 2.92 Crores for FY18 based on normative equity of Rs.18.81 Crores by considering 30% of the GFA of Rs.65.83 Crores and the negative balance cash resource available from share premium account of Rs.0.94 Crores.

**Commission's analysis and decision:**

The Commission notes that, as per the consolidated audited accounts of MSEZL for FY16, the closing balance share capital for the entire Company is Rs. 50 Crores and the accumulated surplus is Rs.23.95 Crores. The Commission having recognized the equity of the licensed activity in proportion to the opening GFA of the licensee as provided by the MSEZL in its application, the share capital for the licensed activity on the total equity is 6.5329%. Accordingly, in the same proportion, the equity for licensed activity is reckoned as Rs.5.10 Crores for FY16. Considering the accumulated reserves and surplus earned during FY17, allowable equity for FY18 is Rs.5.583 Crores.

The Commission, in accordance with the provisions of the MYT Regulations, has considered 15.5% of Return on Equity duly grossed up with the applicable Minimum Alternate Tax (MAT) of 21.342%. This works out to 19.706% per annum. The approved Return on Equity for FY18 is as follows:

**TABLE - 11****Approved Return on Equity for FY18**

Amount in Rs. Crores	
Particulars	FY18
Equity	3.270
Reserves and Surplus	2.313
Total equity	5.583
<b>Approved RoE with MAT</b>	<b>1.10</b>

**Thus, the Commission decides to approve RoE of Rs.1.10 Crores for FY18.**

**f) Other Income:**

MSEZL has estimated the other income of Rs. 0.26 Crores for FY18. The Commission notes that, MSEZL has reported other income of Rs. 0.47 Crores for FY16 which is mainly on account of credit of interest received from MESCOM to an extent of Rs.0.44 Crores. Hence, the Commission decides to consider the Other Income of Rs.0.26 Crores as proposed by MSEZL for FY18.

**7. Abstract of Revised Approved ARR for FY18:**

Based on the above analysis and decisions of the Commission, the approved revised ARR for FY18 is as follows:

**TABLE - 12**  
**Revised Approved ARR for FY18**

Amount in Rs.Crores

Particulars	FY18
Power Purchase Cost	49.49
O&M Expenses	1.30
Depreciation	2.73
Interest on Capital Loan	1.50
Interest on Working Capital	1.15
Interest on Consumers' Security Deposit	0.04
RoE	1.10
Less Other Income	0.26
Add 50% gap in revenue of FY16	0.34
<b>Net ARR</b>	<b>57.39</b>

**8. Average Cost of Supply:**

**TABLE - 13**  
**Average Cost of Supply**

Particulars	FY18
Approved ARR in Rs. Crores	57.39
Sales in MU	84.60
<b>Average cost of supply in Rs. per Unit</b>	<b>6.78</b>

**5. Gap in Revenue for FY18:**

As discussed above, the Commission decides to approve the revised Annual Revenue Requirement (ARR) of MSEZL for its operations in FY18 at Rs.57.39

Crores as against MSEZL's application proposing the revised ARR of Rs.61.99 Crores, which included a the revenue deficit of Rs.2.23 Crores for FY16. This approved revised ARR includes an amount of Rs.0.34 Crores, which is determined as the deficit in FY16 as discussed in Chapter-4. Based on the existing retail supply tariff, the total realization of revenue will be Rs. 58.42 Crores, which is Rs.1.03 Crores more than the projected revenue requirement for FY18.

The net ARR and the gap in revenue for FY18 are shown in the following table:

**TABLE – 14**  
**Revenue gap for FY18**

Particulars	FY18
Net ARR including carry forward gap of FY16 (in Rs. Crores)	57.39
Approved sales (in MU)	84.60
Average cost of supply (in Rs./unit)	6.78
Revenue at existing tariff (in Rs. Crores)	58.42
<b>Surplus revenue (in Rs. Crores)</b>	<b>1.03</b>

Based on the above approved ARR, the determination of revised retail supply tariff is detailed in the following paragraphs.

#### 6. Retail Supply Tariff of MSEZL for FY18:

The MSEZL in its application has proposed an additional category of consumers of LT Industries and has proposed for approval of retail supply tariff as follows:

**TABLE – 15**

Category	Particulars	Rate
HT Industrial	Fixed Charges/KVA/month	180
	Energy Charges Rs/kWh	6.65
HT Construction	Fixed Charges/KVA	200
	Energy Charges Rs/kWh	9.15
LT Industrial	Fixed Charges/KVA/month	180
	Energy Charges Rs/kWh	6.65

#### **Commission's analysis and decision:**

The Commission, in order to ensure full recovery of the ARR, has approved the following retail supply tariff:

**Table-16**

**Approved Retail Supply tariff for FY18:**

Category	Particulars	Rate (Rs.)
HT Industrial		
	Fixed Charges/KVA/month	200
	Energy Charges/kWh	6.34
HT Construction		
	Fixed Charges/KVA/month	230
	Energy Charges/kWh	9.00
LT Industrial- New Category		
	Fixed Charges/KVA/month	190
	Energy Charges/kWh	6.00

**Time of Day (TOD) Tariff :**

The following is the approved TOD tariff applicable to HT consumers :

Time of Day	Increase (+) / reduction (-) in energy charges over the normal tariff applicable
06.00 Hrs to 10.00 Hrs	(+) 100 paise per unit
10.00 Hrs to 18.00 Hrs	0
18.00 Hrs to 22.00 Hrs	(+) 100 paise per unit
22.00 Hrs to 06.00 Hrs next day	(-) 100 paise per unit

**General Terms and Conditions of Tariff:**

The relevant general terms and conditions of tariff for HT and LT consumers as approved in the Tariff Orders of ESCOMs issued from time to time is also applicable to consumers of MSEZL.

**7. Commission's Order**

- 1. In exercise of the powers conferred on the Commission under Sections 62, 64 and other provisions of the Electricity Act, 2003, the Commission hereby determines and notifies the retail supply tariff of MSEZL for FY18 as stated above.**
- 2. The above retail supply tariff shall come into effect for the electricity consumed from the first meter reading date falling on or after 1<sup>st</sup> of April, 2017, after due notification to the consumers of the MSEZL.**
- 3. This Order is signed dated and issued by the Karnataka Electricity Regulatory Commission, at Bengaluru this day, the 11<sup>th</sup> April, 2017.**

Sd/-

**M.K.Shankaralinge Gowda**  
Chairman

Sd/-

**H.D.Arunkumar**  
Member

Sd/-

**D.B.Manival Raju**  
Member