

CHAPTER – 2

REVISED ANNUAL REVENUE REQUIREMENT FOR FY18

1 Revised Annual Revenue Requirement (ARR) for FY18

AEQUS SEZ's Application:

AEQUS SEZ in its application dated 30th November, 2016, has sought the 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 – AEQUS SEZ's Submission

Amount in Rs.Crores

Particulars	FY18
Energy at IF Point (MU)	19.07
Sales (MU)	18.69
Distribution Loss (MU)	0.38
Distribution Loss in %	2.00
Revenue	
Revenue from Sale of Power	13.66
Expenditure	
Power Purchase Cost	11.07
Employee Expenses	0.43
R&M Expenses	0.09
A&G Expenses	0.44
Total O&M Expenses	0.96
Depreciation	0.29
Interest on Capital Loan	0.76
Interest on Working Capital	0.29
Interest on Consumer Deposit	0.13
Return on Equity	0.40
Other Income	0.01
Total Expenses	13.89

The AEQUS SEZ has requested the Commission to approve the revised Annual Revenue Requirement of Rs.13.89 Crores for FY18. Considering the estimated revenue of Rs. 13.66 Crores, based on the existing retail supply tariff, AEQUS SEZ has projected a revenue gap of Rs. 0.24 Crores for FY18. The gap in revenue of Rs.0.24 Crores, for FY18 translates to an increase the retail supply tariff by 13 paise per unit. AEQUS SEZ, in its application, has submitted that the management of AEQUS SEZ has decided not to pass on this revenue gap to the consumers, but if there is any change power purchase rate from the present approved rate of Rs. 5.65 per unit, the same has to be passed on to the consumers through tariff revision for FY18.

Treatment of Revenue gap for FY16:

AEQUS SEZ in its application has proposed a revenue gap of Rs. 0.69 Crores. The Commission has not approved the ARR for FY16 and hence the same is not been taken up in this Order. However, the Commission notes the decision of AEQUS SEZ to absorb the revenue gap of FY16 without any recovery from its consumers.

2. Determination of revised ARR for FY18:

The analysis of the expenditure and revenue and the decisions thereon of the Commission on each of the items of expenditure of the AEQUS SEZ for FY18 are as detailed below:

i) Sales:

The Commission in its Tariff Order dated 30th March, 2016 had approved sales of 17.38 MU for FY18. The AEQUS SEZ in its application has estimated sales of 18.69 MU for FY18. Since the AEQUS SEZ has projected the sales duly considering its existing consumers the future growth and the progress of facilities available within its premises, the Commission has considered the sales projections of 18.69 MU, made by the AEQUS SEZ, for FY18.

ii) Distribution Losses:

AEQUS SEZ in its application has projected the distribution losses of 2.00% for FY18. The AEQUS SEZ has reported actual loss of 1.48% for FY16 and has projected distribution loss of 1.75% for FY17. The Commission, in its MYT Order dated 30th March, 2016 had fixed the distribution loss of at 2.23% for FY18. Since AEQUS SEZ is catering to additional consumers resulting in increased sales due to expansion in its distribution network, the Commission decides to consider the distribution losses at 2.00%, as proposed by the AEQUS SEZ. However, the losses will be subject to true up at the time of APR of FY18 based on the actual losses.

iii) Power Purchase cost:

AEQUS SEZ in its application has proposed a energy requirement of 19.59 MU at a cost of Rs.13.66 Crores for FY18 and the same is proposed to be procured from the HRECS. The Commission in its Tariff Order dated 30th March, 2016 had approved power purchase of 19.68 MU at a cost of Rs. 10.75 Crores for FY18.

The Commission had approved power purchase rate of Rs.5.65 per unit considering 5% of the HESCOM's total power purchase at the generation bus. For computing the total power purchase cost 95% of the said energy, at the marginal cost from long-term sources (excluding RE) and 5% from short term/medium term were considered. The Commission has adopted the same approach for projecting the power purchase cost for FY18. However, as no short-term purchases are envisaged during FY18, 5% energy 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 HESCOM	664.19				
BTPS-3	509.67	95.31	155.96	251.27	4.93
UPCL	121.31	20.62	38.82	59.44	4.90
Solar Power	33.21			22.02	6.63
Total PP cost				332.73	5.01
Transmission & SLDC Charges				36.93	0.56
Total PP & Transmission cost				369.66	5.57
Trading margin at 5 paise per unit				3.32	0.05
Total cost				372.99	5.62
Energy at Interface point (after considering Tr. loss @ 3.37%)	641.81			372.99	5.81

The above rate payable to the HRECS by AEQUS SEZ 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, 5.81 per unit of energy received and recorded at the IF point, for FY18 payable to the HRECS.

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

TABLE -3
Approved Sales and Power Purchase cost for FY18

Year	Sales in MU	Energy at IF point in MU	PP rate at IF point Rs. per unit	Total Power Purchase cost in Rs. Crs
FY18	18.69	19.59	5.81	11.38

Thus, the Commission decides to approve power purchase cost of Rs.11.38 Crores 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 AEQUS SEZ in its application has claimed O & M costs as follows:

TABLE – 4
O & M Expenses – AEQUS SEZ Proposal

Amount in Rs.Crores

Particulars	FY18
Employee Expenses	0.43
Repairs & Maintenances Expenses	0.09
General Administration Expenses	0.44
Total	0.96

The Commission has considered the actual O&M expenses of Rs. 0.50 Crores incurred in FY16, which include employee cost, R&M expenses and A&G expenses as the base year data. This base year cost is escalated by weighted inflation index of 7.71%, consumer growth rate and efficiency factor of 0.5% to arrive at the O & M expenses for the control period FY18. Based on this approach, the O&M expenses for FY18 is arrived at as follows:

TABLE - 5
Approved O & M Expenses-FY18

Amount in Rs. Crores

Particulars	FY16	FY17	FY18
No. of Installations	9	9	18
Consumer Growth rate-CAGR		18.32%	16.96%
Weighted Inflation Index		7.71%	7.71%
Base Year O&M Cost	0.50		
Approved O&M expenses		0.63	0.78

However, the Commission notes that the above O&M expenses are based on the actual O&M expenses incurred by it when it was a consumer of HRECS and had not started operations on its own, as a separate distribution licensee. Hence,

the Commission is of the view that AEQUS SEZ, which is in its initial period of operation needs adequate O&M expenses to meet its operational requirements. **Thus, the Commission decides to approve O & M expenses of Rs.0.96 Crores as proposed by AEQUS SEZ for FY18. However, this expenditure is subject to review during the APR of FY18, based on the norms as per the MYT Regulations.**

b) Depreciation:

The AEQUS SEZ has claimed depreciation of Rs.0.29 Crores for FY18 based on the average gross fixed assets. 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
Buildings	0.05
Civil	0.00
Plant & M/c	0.21
Line, Cable Network incl plant/Machinery	0.03
Furniture	0.00
Office Equipment	0.00
Depreciation	0.29

Thus, the Commission decides to approve depreciation of Rs.0.29 Crores for FY18.

c) Interest on Capital loans:

The AEQUS SEZ has considered the closing balance of capital loans of Rs.3.90 Crores of FY16 with an interest rate of 15% and new capital loans of Rs. 1.58 Crores with an interest rate of 11.50% and repayment of Rs.0.15 Crores for FY17. Further, new capital loans of Rs. 0.91 Crores and repayment of Rs.0.41 Crores

have been considered for FY18. AEQUS SEZ has claimed interest on Capital loans at Rs.0.76 Crores at an interest rate of 11.50% for FY18.

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 scenario, it is observed that there is a considerable reduction in the MCLR and also a downward trend is evident in the interest rates. Hence, in such a situation, the Commission is of the view that, the AEQUS SEZ can avail Capital loans at competitive interest rates, which would be less than the proposed rates of 11.50%. 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 capital loans.

The Commission has considered the amount of loans, repayments and new loans, as furnished by the AEQUS SEZ. The Commission notes that the actual weighted average rate of interest during FY16 is 11.50%. 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 repayments proposed by AEQUS SEZ as shown in the following Table:

TABLE - 7
Approved Interest on Loan for FY18

Amount in Rs. Crores	
Particulars	FY18
Opening Balance of Capital Loans	3.97
Add: New Loans	0.91
Less: Repayments	0.41
Total loan at the end of the year	4.47
Average Loan	4.22
Weighted average Interest Rate allowed in %	10.89%
Interest on Capital Loans	0.46

Thus, the Commission decides to approve interest on capital loans at Rs.0.46 Crores for FY18.

d) Interest on Working Capital Loan:

The AEQUS SEZ has claimed normative interest on Working Capital Loan at Rs.0.29 Crores for FY18. The Commission in its Tariff Order dated 30th March, 2016 had approved interest on working capital at Rs. 0.28 Crores for FY18.

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 approved interest on working capital is as follows:

TABLE – 8

Approved Interest on Working Capital - FY18

Particulars	Amount in Rs. Crores	
	FY 18	
One-twelfth of the amount of O&M Exp.	0.06	
Opening GFA as per Audited Accounts	4.96	
Stores, materials and supplies 1% of Opening balance of GFA	0.05	
One-sixth of the Revenue	2.28	
Total Working Capital	2.39	
Rate of Interest (% p.a.)	11.00%	
Interest on Working Capital	0.26	

Thus, the Commission decides to approve the interest on Working Capital loans at Rs.0.26 Crores for FY18.

e) Interest on Consumers' Security Deposits:

The AEQUS SEZ has claimed the interest on consumers' security deposit at Rs. 0.13 Crores for FY18, as approved by the Commission, in its Tariff Order dated 30th March, 2016.

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 1st April of the financial year for which interest is due. As per the Reserve Bank of India's Notification dated 4th 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.0.57 Crores as per the bifurcated audited accounts of FY16 for projection for FY18. The Commission has been considering the average of the opening and closing balances of consumer's deposits of the relevant years for allowing the interest on deposits. Hence, the interest on consumer's deposits for FY18 is computed as follows:

TABLE - 9

Approved Interest on Consumers' Security Deposits for FY18

Particulars	Amount in Rs. Crores
	FY18
Opening Balance of Consumers' Deposits	1.10
Addition of deposits	0.74
Closing Balance of Consumers' Deposits	1.84
Average Balance of Consumers' Deposits	1.47
Rate of Interest	6.75%
Interest on Consumers' Security Deposit	0.10

Thus, the Commission decides to approve interest on consumers' security deposits of Rs.0.10 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	0.46
Interest on Working Capital	0.27
Interest on Consumers' Security Deposit	0.10
Total Interest & Finance Charges	0.83

f) Return on Equity (RoE):

The AEQUS SEZ in its application has claimed Return on Equity of Rs. 0.40 Crores for FY18 based on equity of Rs.3.37 Crores, additional equity @ 30% of capex of Rs.0.39 Crores and negative reserves of Rs.1.15 Crores totalling to networth of Rs.2.60 Crores.

The Commission notes that, considering the closing balance of GFA of Rs.4.51 Crores as per the bifurcated audited accounts of the licensed activity and as per format D-15, the allowable equity as per the provisions of the MYT Regulations at 30% of the GFA for FY17 is Rs.1.35 Crores. Based on the proposed increase in the assets in FY18, the allowable equity will be Rs.1.49 Crores for FY18.

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 arrived at as follows:

TABLE - 11
Approved Return on Equity for FY18

Amount in Rs. Crores	
Particulars	FY18
Equity at 30% of opening GFA	1.49
Approved RoE with MAT at 19.706%	0.29

Thus, the Commission decides to approve RoE of Rs.0.29 Crores for FY18.

g) Other Income:

AEQUS SEZ has estimated the other income of Rs. 0.01 Crores due to interest earned on deposits given to HESCOM and HRECS. **The Commission decides to consider other income at Rs. 0.01 Crores for FY18.**

3 . Abstract of Approved ARR for FY18:

Based on the above discussions, the approved ARR for FY18 is as follows:

TABLE -12
Approved ARR for FY18

Particulars	Amount in Rs. Crores		
	As Approved Tariff Order 30.03.2016	As filed 30.11.2016	As Revised Approved
Power Purchase Cost	10.75	11.07	11.38
O&M Expenses	0.68	0.96	0.96
Depreciation	0.33	0.29	0.29
Interest on Capital Loan	1.03	0.76	0.46
Interest on Working Capital	0.28	0.29	0.26
Interest on Consumers' Security Deposit	0.16	0.13	0.10
Return on Equity	0.44	0.40	0.29
Less Other Income	0.22	0.01	0.01
Net ARR	13.44	13.89	13.74

4. Average Cost of Supply for FY18:

TABLE – 13
Average Cost of Supply-FY18

Particulars	FY18
Approved ARR in Rs. Crores	13.74
Sales in MU	18.69
Average cost of supply in Rs. per Unit	7.35

5 Gap in Revenue for FY18:

As discussed above, the Commission decides to approve the revised Annual Revenue Requirement (ARR) of AEQUS SEZ for its operations in FY18 at Rs.13.74 Crores as against AEQUS SEZ application proposing the revised ARR of Rs.13.90 Crores. Based on the existing retail supply tariff, the total realization of revenue will be Rs. 13.66 Crores, which is Rs.0.08 Crores less than the projected revenue requirement for FY18.

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

TABLE – 14
Revenue gap for FY18

Particulars	FY18
Net ARR (in Rs. Crores)	13.74
Approved sales (in MU)	18.69
Average cost of supply (in Rs./unit)	7.35
Revenue at existing tariff (in Rs. Crores)	13.66
Gap in revenue (in Rs. Crores)	(0.08)

6. Retail Supply Tariff of AEQUS SEZ for FY18:

Based on the approved ARR as above, the determination of revised retail supply tariff is detailed as follows:

TABLE – 15

The AEQUS SEZ has proposed approval of retail supply tariff as follows:

Category	Particulars	Rate
HT Industrial / Common Facility		
	Fixed Charges/KVA/month	180
	Energy Charges Rs/kWh	6.55
HT Construction		
	Fixed Charges/KVA	200
	Energy Charges Rs/kWh	9.00

Commission's analysis and decision:

The Commission, in order to ensure full recovery of the ARR, has approved the following retail supply tariff for FY18:

TABLE – 16
Approved Retail Supply tariff for FY18:

Particulars		Approved Tariff
HT Industrial / Common Facility		
	Fixed Charges/KVA/month	190
	Energy Charges Rs/kWh	6.55
HT Construction		
	Fixed Charges/KVA/month	200
	Energy Charges Rs/kWh	9.00

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 AEQUS SEZ.

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 AEQUS SEZ 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 1st of April, 2017, after due notification to the consumers of the AEQUS SEZ.
3. This Order is signed dated and issued by the Karnataka Electricity Regulatory Commission, at Bengaluru this day, the 11th of April, 2017.

Sd/-**M.K.Shankaralinge Gowda
Chairman****Sd/-****H.D.Arunkumar
Member****Sd/-****D.B.Manival Raju
Member**