

Annexure-9.

Actuaries & Consultants

Thanawala
Thanawala & Co. Pvt. Ltd.



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Place: Mumbai

Date: 11 June 2018

ACTUARIAL VALUATION REPORT OF COMPENSATED ABSENCE LIABILITY

INTRODUCTION:

- 1.1 This report has been prepared at the request of Hubli Electricity Supply Company Limited (the "Company") with the objective of determining and reporting the compensated absence liability of the Company in accordance with "Accounting Standard No. 15 (revised 2005)" ("AS15(R)") as prescribed in the Companies (Accounting Standards) Rules, 2006 issued by the Central Government.
- 1.2 The Company may provide a copy of this report to their auditor. However, unless expressly agreed in writing with us, this report should not be disclosed nor provided to any other third party nor be used by the Company for any purpose other than what it is intended for.
- 1.3 In preparing this report reliance has been placed on the completeness and accuracy of the information provided to us orally and in writing by or on behalf of the Company. We have not carried out any validation checks on the information provided to us. We have, however, carried out broad consistency checks on the key information supplied to us.

MEMBERSHIP DATA & BENEFITS VALUED:

- 1.4 The figures contained in this report are based on the employee data supplied by the Company. A summary of the data provided is contained in Annexure A of this report.
- 1.5 The benefits valued for the purpose of the actuarial valuation are those as advised by the Company. A summary of the benefits valued is set-out in Annexure A of this report. The scheme is a non-contributory defined benefit arrangement providing benefits expressed in terms of a multiple of final monthly salary.



METHOD OF VALUATION & ACTUARIAL ASSUMPTIONS:

1.6 The actuarial valuation has been carried out using the Projected Accrued Benefit Method which is same as the Projected Unit Credit Method in respect of past service. Under this method, the Defined Benefit Obligation is calculated taking into account pattern of avilment of leave whilst in service and qualifying salary on the date of avilment of leave. In addition, if encashment of leave on cessation of service is allowed as per the leave policy, the Defined Benefit Obligation is calculated taking into account all types of decrement and qualifying salary projected up to the assumed date of encashment. In calculating the Defined Benefit Obligation, we have not specifically valued any future leave encashment whilst the employee is in service with the Company. A table showing meaning attached to technical terms used throughout this report is given in Annexure C.

1.7 The discount rate used for the purposes of this exercise has been based on the methodology prescribed in the accounting standard. The assumptions on mortality rates have been recommended by us to the Company based on the most recently published mortality tables available on Indian lives.

The assumption on leave avilment ratio used in the valuation is based on Company's own leave record history, wherever credible long term past data is available or in absence of availability of credible company specific data, our knowledge of such rates used by other companies.

The assumptions for future salary growth and leaving service rates partly depends on the Company's own past experience but more importantly on the future long term expectations of these parameters. The future expectations on salary growth and leaving service rates are largely dependent on future market conditions of the industry in which Company operates as well as Company's own compensation and retention policies, on which we have limited visibility. We have, therefore, specifically relied upon the inputs given to us by the Company for these two assumptions.



We believe the assumptions chosen are within the range of what we would consider to be appropriate and acceptable for the purposes of such an exercise.

The results of the compensated absences valuation are particularly sensitive to discount rate, salary growth assumptions and avilment ratio.

A full description of all the assumptions used for the purposes of this valuation has been set-out in Annexure B of this report.

VALUATION RESULTS:

- 1.8 Based on the data provided to us, and using the method and assumptions discussed in this report, the Defined Benefit Obligation of compensated absence in respect of the employees of the Company as at 31 March 2018 works out to ₹ 1,141,848,748.

The break-up of the Defined Benefit Obligation (which equals to net liability assuming this liability is not externally funded) between current & non-current is as follows:

	(in ₹)
Current Liability	252,852,639
Non-Current Liability	888,996,109
Net Liability	1,141,848,748

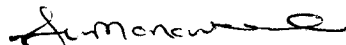


DISCLOSURES:

- 1.9 Para 132 of AS15 (R) does not require any specific disclosures except where expense resulting from compensated absence is of such size, nature or incidence that its disclosure is relevant under Accounting Standard No. 5 or Accounting Standard No. 18.

GENERAL:

- 1.10 The report is based on our understanding of the Accounting Standard No. 15 (revised 2005) and its application to the scheme. The report has been prepared in accordance with applicable provisions, to the extent they are material, under the Actuarial Practice Standard No.27 as issued by the Institute of Actuaries of India and current as at the date of the report.


Arpan N. Thanawala
Fellow of the Institute of Actuaries of India

ANNEXURE A: MEMBERSHIP DATA & BENEFITS

SUMMARY OF DATA:

A.1 We have been provided with the employee data of the Company. The following table summarizes the relevant information in respect of active members of the Scheme.

No. of Emps'	Avg. Per Day Leave Availment Salary	Avg. Per Day Leave Encashment Salary	Avg Age	Avg. Unrestricted Leave Balance	Avg. Restricted Leave Balance
	(in ₹)		(in Years)	(Days)	
7,113	1,671.58	1,671.58	41.09	91.52	91.52

A.2 We have not carried out an independent audit of the data supplied by the Company. We have no reason to doubt the accuracy of the data supplied.

SUMMARY OF THE COMPENSATED ABSENCE BENEFITS

The policy of compensated absence as applicable to the employees of the Company has been communicated to us and a summary of our understanding on the same is reproduced below:

Company's Compensated Absence Policy		
General Policy	Leave cycle Divisor used for per day salary	1 January to 31 December Annual salary / 365 days
Accrual of Leave	No. of leave that accrue during the year	30 days
Accumulation Limits	Maximum leave allowed to be accumulated: <ul style="list-style-type: none"> • for encashment • for availment Leave in excess of maximum	300 days 300 days Lapsed
Leave Encashment	Encashment allowed whilst in service Encashment allowed on separation, if yes, on what contingency Definition of salary for encashment	No All types of separation from the Company CTC
Leave Availment	Availment allowed whilst in service Definition of salary for availment	Yes CTC

ANNEXURE B: ACTUARIAL ASSUMPTIONS

FINANCIAL ASSUMPTIONS AT THE VALUATION DATE:

	31 Mar 2018
Discount Rate (p.a.)	7.70%
Salary Escalation Rate (p.a.)	6.00%

a) Discount Rate:

The discount rate is based on the prevailing market yields of Indian government securities as at the valuation date for the estimated term of the obligations.

b) Salary Escalation Rate:

The estimates of future salary increases considered takes into account the inflation, seniority, promotion and other relevant factors.



DEMOGRAPHIC ASSUMPTIONS AT THE VALUATION DATE:

c) Retirement Age:

The employees of the Company are assumed to retire at the age of 60 years.

d) Mortality:

Published rates under the Indian Assured Lives Mortality (2006-08) Ult table.

Rates of Indian Assured Lives Mortality table at specimen ages are as shown below:

Age (Years)	Rates (p.a.)
18	0.000800
23	0.000961
28	0.001017
33	0.001164
38	0.001549
43	0.002350
48	0.003983
53	0.006643
58	0.009944

e) Leaving Service:

Rates of leaving service at specimen ages are as shown below:

Age (Years)	Rates (p.a.)
21-44	2%
45-59	1%



f) Leave Encashment in Service:

If the company's leave policy allows any voluntary leave encashment whilst the employee is in service with the company then any such voluntary leave encashment at a future date is assumed to be Nil.

g) Leave Availment Pattern:

In absence of any company specific data to estimate the percentage of leave availed by the employee each year, we have assumed for the purposes of this exercise that 5% of leave balance as at the valuation date and each subsequent year following the valuation date is availed by the employee. The balance leave is assumed to be available for encashment on separation from the Company.

h) Disability:

Leaving service due to disability is included in the provision made for all causes of leaving service (paragraph (e) above).

ANNEXURE C: GLOSSARY OF KEY TERMS & CONCEPTS

	Terms Used	Attached Meaning
1.	Defined Benefit Obligation (DBO)	The discounted present value of the defined benefit (in this instance the accumulated leave balances) as at the valuation date
2.	Discount Rate	The rate at which liabilities of future costs/payouts are discounted back to the valuation date
3.	Projected Unit Credit Method	An actuarial method which defines the calculation of DBO
4.	Salary Escalation Rate	The rate at which salaries are expected to escalate in future and is used to determine the future costs/payouts on account of leave availment/encashment

A compensated absence valuation in context of the "Accounting Standard No. 15 (revised 2005)" as prescribed in the Companies (Accounting Standards) Rules, 2006 issued by the Central Government is the actuarial value of the company's liability towards the compensated absence of its employees in future.

An employee who has a right to accumulate and carry forward his leave to a future period can either avail this leave in future or encash the leave, as per the company's leave encashment policy. If the employee avails a part of this leave during a future period, the cost of such leave availment for the company will be based on employee's CTC (Cost-to-Company) during that year. On the other hand, cost to the company in respect of any encashment of leave on cessation of service will be based on the salary (as defined in the company's leave encashment policy) in that year.

Accordingly, in carrying out an actuarial valuation of compensated absence liability, it is assumed that part of the accumulated leave as at the valuation date will get availed in future and a part will get encashed on cessation of service. The leave which gets availed whilst in service is valued on employee's CTC basis whereas the leave encashment on cessation of service is valued on the basis of the definition prescribed in the company's leave encashment policy.

Based on the above principles, an actuarial valuation is based on leave that an employee can avail and/or encash at future dates allowing for increases in employee's salary. The leave availment / encashment under different contingencies is first determined and to this the relevant probabilities are applied and the amounts are discounted to present time to arrive at the Defined Benefit Obligation, which is the provision the company needs to hold on its balance sheet as at the valuation date in respect of the compensated absence liability.

CERTIFICATE

This is to certify the Actuarial Liability of the Employees' Family Benefit Fund Scheme of Hubli Electric Supply Company Limited as at 31 March 2018. The previous actuarial valuation was carried out by the Company as at 31 March 2017.

The actuarial valuation has been carried out at the request of Hubli Electric Supply Company Limited, to whom this Certificate is addressed.

We have carried out the actuarial valuation on the following basis:

A) Benefits under Family Benefit Fund :

Hubli Electric Supply Company Limited has a scheme under which a lumpsum amount is payable at the time of employees retirement or resignation or death in addition to the return of contribution made by the employees.

Lumpsum benefit payable under various contingencies is:

i) Death Benefit :

The benefit payable on death of an employee during employment is a fixed sum of ₹ 200,000.

ii) Retirement or resignation benefit :

The benefit payable on retirement or resignation of the employee is dependent on the service put-in by him at the time of separation.

The service for the above purpose is counted from the date of inception of the scheme viz. 1 July 1978 or from date of joining whichever is later. The Company revised the benefits payable effective from 1 November 1992 & 1 October 2007 respectively. The benefits payable for service rendered up to 1 November 1992, the benefits payable for service rendered between 1 November 1992 & 30 September 2007 and the benefits payable for service rendered after 1 October 2007 are given in the annexure.

Employees retire at the age of 60 years.



B) Membership Data :

No. of Emps'	Average Past Service	Average Age
	(Years)	(Years)
7,113	14.53	41.09

We have not carried out an independent audit of the data supplied by the Company. We have no reason to doubt the accuracy of the data supplied.

C) Method & Assumptions :

The actuarial valuation has been carried out using the Projected Accrued Benefit Method which is same as the Projected Unit Credit Method in respect of past service. The Defined Benefit Obligation is calculated taking into account all types of decrement up to the assumed date of leaving.

The discount rate used for the purposes of this exercise has been based on the methodology prescribed in the accounting standard. The assumptions on mortality rates have been recommended by us to the Company based on the most recently published mortality tables available on Indian lives.

The assumptions for leaving service rates partly depends on the Company's own past experience but more importantly on the future long term expectations of these parameters. The future expectations on leaving service rates are largely dependent on future market conditions of the industry in which Company operates as well as Company's own compensation and retention policies, on which we have limited visibility. We have, therefore, specifically relied upon the inputs given to us by the Company for these two assumptions.

We believe the assumptions chosen are within the range of what we would consider to be appropriate and acceptable for the purposes of such an exercise.

The results of the management widows' lumpsum benefit valuation are particularly sensitive to discount rate and leaving service rates assumptions.

The actuarial assumptions adopted for this valuation are as follows:

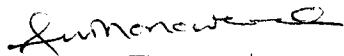
i.	Rate of Interest	: 7.70% per annum
ii.	Salary Increase Rate	: 6.00% per annum
iii.	Mortality	: Indian Assured Lives Mortality (2006-08) Ultimate Tables
iv.	Withdrawal Rate	: 2% upto age 44 and 1% upto age 59
v.	Disability	: Nil

We certify that as at 31 March 2018, the Actuarial Liability of the Employees' Family Benefit Fund Scheme of Hubli Electric Supply Company Limited, based on the above mentioned assumptions, is ₹ 76,675,078.

The break-up of the Defined Benefit Obligation (which equals to net liability assuming this liability is not externally funded) between current & non-current is as follows:

	(₹)
Current Liability	7,309,487
Non-Current Liability	69,365,591
Net Liability	76,675,078

This valuation has been carried out in accordance with applicable provisions, to the extent they are material, under the Actuarial Practice Standard No.27 as issued the Institute of Actuaries of India current as at the date of the letter.


 Arpan N. Thanawala
 Fellow of the Institute of Actuaries of India

Mumbai
 Dated: 11 June 2018

ANNEXURE

**Employees Family Benefit Fund Scheme of
 Hubli Electric Supply Company Limited
 as at 31 March 2018**

Completed No. of Years	Company's Contribution (₹)		
	For service between 1-Jul-78 and 1-Nov-92	For service between 1-Nov-92 and 1-Oct-2007	For service after 1-Oct-2007
1	4	20	80
2	16	80	320
3	36	180	720
4	64	320	1,280
5	100	500	2,000
6	144	720	2,880
7	196	980	3,920
8	256	1,280	5,120
9	324	1,620	6,480
10	400	2,000	8,000
11	484	2,420	9,680
12	576	2,880	11,520
13	676	3,380	13,520
14	784	3,920	15,680
15	900	4,500	18,000
16	1,024	5,120	20,480
17	1,156	5,780	23,120
18	1,296	6,400	25,920
19	1,444	7,220	28,880
20	1,600	8,000	32,000
21	1,764	8,820	35,280
22	1,936	9,680	38,720
23	2,116	10,580	42,320
24	2,304	11,520	46,080
25	2,500	12,500	50,000
26	2,704	13,520	54,080
27	2,916	14,580	58,320
28	3,136	15,680	62,720
29	3,364	16,820	67,280
30	3,600	18,000	72,000
31		19,220	76,880
32		20,480	81,920
33		21,780	87,120

X