

Jaipur Vidyut Vitran Nigam Ltd.

Shed No.11, Vdihut Bhawan,
 Jyoti Nagar,
 Jaipur

Sub - Actuarial valuation of the gratuity liability for the period from 01/04/2018 to 31/03/2019, as per AS-15(R).

INDEX

Sr. No.	Items	Paras
1	Scope & purpose	1
2	Summary of Results	2
3	Summary of membership data	3
4	Actuarial Assumptions	4
5	Actuarial Method	5
6	Plan Assets	6
7	Scale of Benefits	7
8	Change in Benefit Obligation	8
9	Fair value of plan assets	9
10	Actuarial gain / loss on plan asset	10
11	Actuarial gain / loss recognized	11
12	The amounts to be recognized in balance sheet and related analysis	12
13	Expenses recognized in the statement of profit and loss	13
14	Reconciliation statement of expenses in the statement of profit and loss	14
15	Amounts for the current period	15
16	Movement in the liability recognized in the balance sheet	16
17	Major Categories of plan assets	17
18	Enterprise best estimate of expense for the next Annual reporting period	18
19	Bifurcation of PBO in current & Non-current liability	19
20	Sensitivity Analysis of the defined benefit obligation	20
21	Disclosures & Disclaimers	21-22
22	Glossary	23
23	Unit wise distribution	Appx -B

Bill Attached Separately



Jaipur Vidyut Vitran Nigam Ltd.

Shed No.11, Vdihut Bhawan,
Jyoti Nagar,
Jaipur

Sub - Actuarial valuation of the gratuity liability for the period from 01/04/2018 to 31/03/2019, as per AS - 15 (R).

1. Scope & Purpose

I have carried out the actuarial valuation of your organization for the above purpose on request. This report has been prepared with the objective of identifying the financial status and required disclosure figures of the gratuity liability of the employees, in accordance with AS-15(R). This report does not constitute a formal funding actuarial valuation of the Plan and does not present any recommendation of contributions or funding levels. The amounts given in this report are in Indian rupees (INR). The report must be considered in its entirety. Individual sections if considered in isolation could be misleading.

2. Summary of results

The table below shows a summary of the key results of the report including past results as applicable.

A) Assets / Liabilities

As on	--	--	31/03/2017	31/03/2018	31/03/2019
PBO (C)	--	--	4,43,59,88,619	4,52,85,44,058	4,85,91,90,514
Plan Assets	--	--	1,77,65,00,000	2,52,22,22,222	2,85,45,00,000
Net Assets /Liability)	--	--	(2,65,94,88,619)	(2,00,63,21,836)	(2,00,46,90,514)

B) Experience on actuarial Gain / (Loss) for PBO and Plan Assets.

On Plan PBO	--	--	--	(89,06,33,340)	(38,39,75,731)
On Plan Assets	--	--	--	4,52,49,472	1,84,88,440



CHARAN GUPTA CONSULTANTS PVT LTD

Ref - CGCPI/80318/337/6/G/207

Dated : 29/06/2019

3. Summary of membership data

As at	31/03/2017	31/03/2018	31/03/2019
a) Number of employees	16295	15333	16439
b) Total Monthly Salary (Lakhs)	4320.12	4842.31	5402.48
c) Average Past Service (Years)	13.13	12.72	11.93
d) Average Age (Years)	37.16	36.91	36.29
e) Average remaining working life (Years)	22.84	23.09	23.71

4. Actuarial Assumptions

Company attention was drawn to provisions of accounting standard that actuarial assumptions are an entity's best estimates of variables that will determine the ultimate cost of providing post employment benefits and shall be unbiased & mutually compatible.

a) Economic Assumptions

The principal assumptions are the discount rate & salary growth rate. The discount rate is generally based upon the market yields available on Government bonds at the accounting date relevant to currency of benefit payments for a term that matches the liabilities. Salary growth rate is company's long term best estimate as to salary increases & takes account of inflation, seniority, promotion, business plan, HR policy and other relevant factors on long term basis as provided in relevant accounting standard. These valuation assumptions are as follows & have been received as input from you.

	31/03/2017	31/03/2018	31/03/2019
i) Discounting Rate	7.35	7.71	7.60
ii) Future salary Increase	10.00	8.00	8.00
iii) Expected Rate of return on plan assets	7.35	7.71	7.60

b) Demographic Assumption

Attrition rates are the company's best estimate of employee turnover in future determined considering factors such as nature of business & industry, retention policy, demand & supply in employment market, standing of the company, business plan, HR Policy etc as provided in the relevant accounting standard. Attrition rates as given below have been received as input from the company.

i) Retirement Age (Years)	60	60	60
ii) Mortality Table	IALM (2006 - 08)		
iii) Ages	Withdrawal Rate (%)	Withdrawal Rate (%)	Withdrawal Rate (%)
Up to 30 Years	1.00	1.00	1.00
From 31 to 44 years	1.00	1.00	1.00
Above 44 years	1.00	1.00	1.00



CHARAN GUPTA CONSULTANTS PVT LTD

Ref - CGCPI/80318/337/6/G/207

Dated : 29/06/2019

It should be noted that in case of employees above retirement age, for the purpose of valuation it is assumed they will retire immediately & benefit is considered up to actual retirement age.

Mortality & Morbidity rates - 100% of IALM (2006-08) rates have been assumed which also includes the allowance for disability benefits.

Mortality Rates for specimen ages

Age	Mortality Rate	Age	Mortality Rate	Age	Mortality Rate
15	0.000614	45	0.002874	75	0.039637
20	0.000888	50	0.004946	80	0.060558
25	0.000984	55	0.007888	85	0.091982
30	0.001056	60	0.011534	90	0.138895
35	0.001282	65	0.017009	95	0.208585
40	0.001803	70	0.025855	100	0.311628

c) Any changes in assumptions from previous valuation are evident as above tables show assumptions of previous & current valuation. Any changes in assumptions are reported by the Company.

d) Company attention was drawn to provisions of accounting standard that actuarial assumptions are an entity's best estimates of variables that will determine the ultimate cost of providing post-employment benefits and should be unbiased & mutually compatible. Determination of actuarial assumptions depend on factors such as nature of business & industry, retention policy, demand & supply in employment market, standing of the company, business plan, HR Policy etc. I do not have access to or possess full knowledge of all these factors & have used the assumptions provided by the company. Under the circumstances, I consider the assumptions provided by the company are in generality reasonable.

5. Actuarial Method

a) I have used the projected unit credit (PUC) actuarial method to assess the plan's liabilities allowing for retirements, deaths-in-service and withdrawals (Resignations / Terminations).

b) Under the PUC method a projected accrued benefit is calculated at the beginning of the period and again at the end of the period for each benefit that will accrue for all active members of the plan. The projected accrued benefit is based on the plan accrual formula and service as at the beginning and end of the period, but using member's final compensation, projected to the age at which the employee is assumed to leave active service. The plan liability is the actuarial present value of the projected accrued benefits as on the date of valuation.



CHARAN GUPTA CONSULTANTS PVT LTD

Ref - CGCPL/80318/337/6/G/207

Dated : 29/06/2019

6. Plan Assets

The details of the plan assets are as provided by the company.

7. Scale of Benefits

a)	Salary for calculation of gratuity	Last drawn qualifying salary.
b)	Vesting Period	5 years of service.
c)	Benefit on normal retirement	As per the provisions of payment of gratuity Act 1972 as amended.
d)	Benefit on early retirement / withdrawal / resignation	Same as normal retirement benefit based on service upto the date of exit.
e)	Benefit on death in service	Same as normal retirement benefit based on service upto the date of death & no vesting conditions apply.
f)	Limit	20.00 Lakhs.

No discretionary benefits policy of past & future have been reported & valued by me.

No change in benefit scales has been reported since the last valuation.

8. Change in Benefit Obligation

		31/03/2018	31/03/2019
a)	Present value of obligation as at the beginning of the period	4,43,59,88,019	4,52,85,44,058
b)	Acquisition adjustment	--	--
c)	Interest cost	32,60,45,163	34,91,50,747
d)	Past service cost	23,14,85,952	--
e)	Current service cost	27,97,01,361	30,35,84,808
f)	Curtailment cost/(Credit)	--	--
g)	Settlement cost/(Credit)	--	--
h)	Benefits paid	(66,82,00,000)	(75,62,00,000)
i)	Actuarial (gain)/loss on obligation	(7,64,77,037)	43,41,10,901
j)	Present value of obligation as at the end of period	4,52,85,44,058	4,85,91,90,514



CHARAN GUPTA CONSULTANTS PVT LTD

Ref - CGCPL/80318/337/6/G/207

Dated : 29/06/2019

9. Fair value of plan assets: All figures given in the table below are as provided by the company

		31/03/2018	31/03/2019
a)	Fair value of plan assets at the beginning of the period	1,77,65,00,000	2,52,22,22,222
b)	Difference in opening fund	--	2,13,77,778
c)	Acquisition adjustment	--	--
d)	Actual return on plan assets	17,58,22,222	21,46,00,000
e)	Employer contributions	1,23,81,00,000	85,25,00,000
f)	Benefits paid	(66,82,00,000)	(75,62,00,000)
g)	Fair value of plan assets at the end of the period	2,52,22,22,222	2,85,45,00,000
h)	Funded status	(2,00,63,21,836)	(2,00,46,90,514)
i)	Excess of actual over estimated return on plan assets	4,52,49,472	1,84,88,440

10. Actuarial Gain/Loss on plan assets

		31/03/2018	31/03/2019
a)	Expected return on plan assets	13,05,72,750	19,61,11,560
c)	Actual return on plan assets	17,58,22,222	21,46,00,000
f)	Actuarial gain/(loss) on plan assets	4,52,49,472	1,84,88,440

11. Actuarial Gain/ loss recognized

		31/03/2018	31/03/2019
a)	Actuarial gain /(loss) for the period-obligation	7,64,77,037	(43,41,10,901)
b)	Actuarial (gain)/loss for the period - plan assets	(4,52,49,472)	(1,84,88,440)
c)	Total (gain)/ loss for the period	(12,17,26,509)	41,56,22,461
d)	Actuarial (gain) / loss recognized in the period	(12,17,26,509)	41,56,22,461
e)	Unrecognized actuarial (gains) losses at the end of period	--	--



CHARAN GUPTA CONSULTANTS PVT LTD

Ref - CGCPL/80318/337/6/G/207

Dated : 29/06/2019

12. The amounts to be recognized in balance sheet and related analysis

		31/03/2018	31/03/2019
a)	Present value of obligation as at the end of the period	4,52,85,44,058	4,85,91,90,514
b)	Fair value of plan assets as at the end of the period	2,52,22,22,222	2,85,45,00,000
c)	Funded status / Difference	(2,00,63,21,836)	(2,00,46,90,514)
d)	Excess of actual over estimated	4 52 49.472	1,84,88 440
e)	Unrecognized actuarial (gains)/losses	--	--
f)	Net asset/(liability) recognized in balance sheet	(2,00,63,21,836)	(2,00,46,90,514)

13. Expense recognized in the statement of profit and loss

		31/03/2018	31/03/2019
a)	Current service cost	27,97,01,361	30,35,84,808
b)	Past service cost	23,14,85,952	--
c)	Interest cost	32,60,45,163	34,91,50,747
d)	Expected return on plan assets	(13,05,72,750)	(19,61,11,560)
e)	Curtailment cost / (Credit)	--	--
f)	Settlement cost / (credit)	--	--
g)	Net actuarial (gain)/ loss recognized in the period	(12,17,26,509)	41,56,22,461
h)	Expenses recognized in the statement of profit & losses	58,49,33,217	87,22,46,456

14. Reconciliation statement of expense in the statement of profit and loss

		31/03/2018	31/03/2019
a)	Present value of obligation as at the end of period	4,52,85,44,058	4,85,91,90,514
b)	Present value of obligation as at the beginning of the period	4,43,59,88,619	4,52,85,44,058
c)	Benefits paid	66,82,00,000	75,62,00,000
d)	Actual return on plan assets	(17,58,22,222)	(21,46,00,000)
e)	Acquisition adjustment	--	--
f)	Expenses recognized in the statement of profit & losses	58,49,33,217	87,22,46,456



CHARAN GUPTA CONSULTANTS PVT LTD

Ref - CGCPI/80318/337/6/G/207

Dated : 29/06/2019

15. Amount for the current period

		31/03/2018	31/03/2019
a)	Present value of obligation as at the end of period	4,52,85,44,058	4,85,91,90,514
b)	Fair value of plan assets at the end of the period	2,52,22,22,222	2,85,45,00,000
c)	Surplus / (Deficit)	(2,00,63,21,836)	(2,00,46,90,514)
d)	Experience adjustment on plan Liabilities (loss) / gain	(89,06,33,340)	(38,39,75,731)
e)	Experience adjustment on plan Assets (loss) / gain	4,52,49,472	1,84,88,440

Significance of actuarial gain/loss - Recurring significant amount of actuarial gain/loss arising from experience as percentage of PBO in a year indicates that valuation assumptions need reconsideration unless it is caused by some exceptional event during the inter-valuation period

16. Movement in the liability recognized in the balance sheet

		31/03/2018	31/03/2019
a)	Opening liability	4,43,59,88,619	4,52,85,44,058
b)	Expenses as above	58,49,33,217	87,22,46,456
c)	Benefits paid	(66,82,00,000)	(75,62,00,000)
d)	Actual return on plan assets	17,58,22,222	21,46,00,000
e)	Acquisition adjustment	--	--
f)	Closing liability	4,52,85,44,058	4,85,91,90,514

17. Major categories of plan assets (as percentage of total plan assets)

		31/03/2018	31/03/2019
a)	Government of India Securities	--	--
b)	State Government securities	--	--
c)	High Quality Corporate Bonds	--	--
d)	Equity Shares of listed companies	--	--
e)	Property	--	--
f)	Special Deposit Scheme	--	--
g)	Funds Managed by Insurer	100 %	100 %
h)	Bank Balance	--	--
	Total	100 %	100 %

18. Enterprise best estimate of expense for the next Annual reporting period is Rs.47,94,41,783/-

19. Bifurcation of PBO at the end of year as per schedule III to the companies Act, 2013.

		31/03/2018	31/03/2019
a)	Current liability	79,19,17,347	1,23,70,14,975
b)	Non-Current liability	3,73,66,26,711	3,62,21,75,539
c)	Total PBO at the end of year	4,52,85,44,058	4,85,91,90,514



20. Sensitivity Analysis of the defined benefit obligation.

a) Impact of the change in discount rate		
	Present Value of Obligation at the end of the period	4,85,91,90,514
a)	Impact due to increase of 0.50%	(21,98,34,815)
b)	Impact due to decrease of 0.50 %	24,38,33,019
b) Impact of the change in salary increase		
	Present Value of Obligation at the end of the period	4,85,91,90,514
a)	Impact due to increase of 0.50%	19,86,21,188
b)	Impact due to decrease of 0.50 %	(18,90,80,169)

Sensitivities due to mortality & withdrawals are not material & hence impact of change due to these not calculated.

Sensitivities as rate of increase of pensions in payment, rate of increase of pensions before retirement & life expectancy are not applicable.

21. In preparing this report

a) I have complied with APS (Actuarial Practice Standard) & guidance notes issued by the institute of Actuaries of India from time to time.

b) I have relied on the completeness and accuracy of the information provided to me orally and in writing by or on behalf of the company and its employees. I have not completed any detailed validation checks on the information provided. I have, however, carried out broad consistency checks. Company may ascertain the correctness of scale of benefits & other information provided by the company & contained in this report before using it.

c) No information is received & used from third party for the purpose of the valuation.


d) No uncertainty as to legislations has been reported as on the date of report.

e) No significant development has reported during inter-valuation period .

22. This Report is provided solely for the Company's use and for the specific purposes indicated above. Except where I expressly agree in writing, it should not be disclosed or provided to any third party, other than as provided below. In the absence of such consent and an express assumption of responsibility, no responsibility whatsoever is accepted by me for any consequences arising from any third party relying on this report or any advice relating to its contents. The Company may make a copy of this Report available to its auditors, but I make no representation as to the suitability of this Report for any purpose other than that for which it was originally provided and accept no responsibility or liability to the Company's auditors in this regard. The company should draw the provisions of this paragraph to the attention of its auditors when passing this report to them.

23. The main glossary of actuarial terms used is given in Appx - A.

AS-15G


K. K. DHARNI
FIAI M. No.- 00051
ACTUARY

Jaipur Vidyut Vitran Nigam Ltd. _ 31/03/2019 P-9

GLOSSARY

1. **Actuarial Gain or loss** - From one plan period to next, if the experience of the plan differs from that anticipated using the actuarial assumption, an actuarial gain or loss occurs. For example, an actuarial gain would occur if the plan asset earned 12 % for the period while the assumed rate of return used in the valuation was 8.00 %. Other causes of actuarial gain or losses would include changes in actuarial assumption and or demographic changes in the population profile.
2. **Balance sheet Assets/(Liability)** - The sponsor's balance sheet asset/(liability) entry, the net recognized amount, is the sum of the cumulative excess of contribution to the plan over net annual expense and other plan-related charges to income due either to business combination or accelerated recognition pursuant to AS - 15 (R). The difference between this account and the funded status is the unrecognized net loss/ (gain) unvested prior service costs (and net transition obligation).
3. **Funded status** - This is the excess / (shortfall) of the fair value of plan assets over the plan liability.
4. **Plan liability** - This quantity is the discounted present value of all benefits attributed by the plan's benefit formula to service rendered prior to the measurement date. It is measured using an assumption as to future pay levels.
5. **Service cost** - This is the discounted present value of benefits attributed by the plan benefit formula to service rendered by employees during the accounting period. It is measured using an assumption as to future pay levels.
6. **Interest cost** - This increase in the plan liability over the accounting period due to interest (the time value of money)
7. **Expected return on asset** - The expected return on assets over the accounting period, based on an assumed rate of return.
8. **Net periodic benefit cost** - This is the profit and loss charge for the accounting period, and comprises the sum of the service and interest cost less the expected return on asset, plus allowance for amortization of any net liabilities not recognized in the balance sheet.
9. **Projected benefit obligation (PBO)** - The actuarial present value of all benefits accrued to the calculation date for future salary increase if the gratuity benefit is based on future compensation level.
10. **Accumulated benefit obligation (ABO)** - The actuarial present value of benefits based on service compensation up to calculation date, without salary increase.
11. **Vested benefit obligation (VBO)** - The actuarial present value of vested accrued benefits. This is the vested portion of ABO.



Unit Wise Gratuity Liability as on 31.03.2019

S.No.	Unit Name	Numbers	Liability	CL	NCL
1	CPF	13191	2156811380	384601257	1772210123
2	GPF	3248	2702379134	852413718	1849965416
	Total	16439	4859190514	1237014975	3622175539

