India Power Corporation Limited

Leave Encashment Scheme

(Ind AS) 19 Reporting

Disclosure accounting for the period of one year commencing from 01/04/2016

Prepared by:

Retben Actuarial Services
04 April 2017

INDIA POWER CORPORATION LIMITED
Sector-V
Salt Lake City
Kolklata-700 091
Plot No.-X1-2&3, Block-EP

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Ref.: 1047/NCD

India Power Corporation Ltd.
Plot No.X 1,2,&3, Block-EP, Sector-V
Salt Lake City, Kolkata- 700 091

Dear Sirs,

(Ind AS) 19 valuations for India Power Corporation Ltd.
Leave Encashment Scheme

As requested, we have completed the (Ind AS) 19 calculations for the Employees Leave Encashment Scheme and prepared the attached report showing the balance sheet items recognised as at 31 March 2017 and calculations for the Employer expense for the period of one year commencing 01 April 2016.

We shall be happy to provide further information if required.

Yours faithfully,

(N C Das)
Fellow, Institute of Actuaries of India

INDIA POWER CORPORATION LIMITED
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1 Introduction

We have been requested by India Power Corporation Ltd. ("the Company") to report on the projected financial position of the liabilities of the Leave Encashment scheme as at 31/03/2017 and to calculate the accounting expenses associated with the Scheme for the financial year commencing 01 April 2016 in terms of Indian Accounting Standard (Ind AS) 19 published by the Ministry of Corporate Affairs, Government of India.

The result set out in this Report is based on our understanding of (Ind AS 19) and its application to the Scheme. They have been prepared for the specific requirements of (Ind AS 19) and should not be used for any other purpose. In any actuarial assessment there is inherent uncertainly associated with the results as assumptions are made about future events. In particular this Report does not constitute a formal funding actuarial valuation of the Scheme and does not present any recommendation of contributions or funding levels.

This Report is provided solely for the Company's use and for the specific purposes indicated above. Except where we 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 us 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 we 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.

2 Summary of Results

2.1 The table below shows a summary of the key results for the period ended on 31.03.2017:

	31.03.2016 (Rupees)	31.03.2017 (Rupees)
Assets / Liabilities		
1. Present value of obligation	27,412,000	26,761,761
2. Fair value of Plan Assets	0	0
3. Net asset/(liability) recognized in Balance Sheet	(27,412,000)	(26,761,761)

Employer Expense	Period ended 31.03.2017 (Rupees)
1. Current Service Cost	2,575,442
2. Total Employer Expense recognised in P&L A/c	9,126,761
3. Total Employer Expense recognised in Other Comprehensive Income	0

2.2 Current Service Cost represents the cost associated with the benefit accruals for the current accounting period.

2.3 Break-up of the liabilities is given below:

Unit	Number of employees	As at 31.03.2017 (Rupees)
IPCL	546	26,664,693
Wind Power	2	97,068
Total	**548**	**26,761,761**

2.4 We give below the bifurcation of the current and non-current obligations at the respective dates of valuation:

	As at 31.03.2016 (Rupees)	As at 31.03.2017 (Rupees)
Current Obligation	3,440,000	5,385,346
Non-Current Obligation	23,972,000	21,376,415
Total	**27,412,000**	**26,761,761**

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3 Key Points

This report presents the results of actuarial calculations made to determine the Net Asset/(Liability) recognised in the Balance Sheet as at 31 March 2017 and the P & L expense for the year commencing 01 April 2016 that need to be reported under the Indian Accounting Standard (Ind AS) 19 in respect of the Leave Encashment Scheme.

The results are particularly sensitive to some assumptions, such as the discount rate, level of salary inflation, level of assumed price inflation and mortality. A decrease in the discount rate assumed or an increase in salary inflation will lead to an increase in reported cost.

A summary of data used for the calculations are set out in Appendix **A**.

The key assumptions used in the calculations are set out in Appendix **B**.

The benefits valued in this report are summarised in Appendix **C**.

The methodology used in the calculations are summarised in Appendix **D**.

The various risk factors to which the scheme is exposed are summarised in Appendix **E**.

The definitions of various terms used in this report are given in the GLOSSARY in Appendix **F**.

The Disclosure Tables are given in Appendix **G**.

A Summary of Data

A.1 Membership Data

The calculations have been based on the membership information for the Scheme as at 31 March 2016 and 31 March 2017 as supplied by the company. The data are summarised in the table below:

As at	31-March 2016	31-March 2017
Number of employees	611	548
Total monthly salaries (Rs).	16,339,312	15,515,091
Total leave valued (days)	39,851	35,793
Average future service (years)	12.87	11.45
Decrement adjusted future service (years)	10.24	9.60

A.2 Plan Assets

The Scheme is unfunded.

In preparing this Report we have relied on the completeness and accuracy of the information provided to us orally and in writing by or on behalf of the Company and its advisers. We have not carried out any detailed validation checks on the information provided. We have, however, carried out broad consistency checks.

B Assumptions

B.1 One of the principal assumptions is the discount rate, which should be based upon the yields available on high quality corporate bonds at the accounting date with a term that matches that of the liabilities. However in countries where there is no deep market in such bonds, such as India, the market yields (at the balance sheet date) on government bonds should be used. The other assumptions should be chosen to reflect a best estimate of the future long-term experience.

B.2 The financial assumptions employed for the calculations as at 31 March 2016 as well as 31 March 2017 are as follows:-

- *Discount Rate:* The discounting rate for the purposes of the (Ind AS) 19 calculations has to be chosen by reference to yields on long term government bonds as no deep market in high quality corporate bonds exits in India. The discount rates have been used at 7.76% per annum as at 31 March 2016 and at 7.12% per annum as at 31 March 2017.

- *Interest Income on Plan Assets: Not Applicable.*

- *Salary Increases:* It has been assumed that employed members' pay will increase at an average rate of 3.50% per annum as at 31 March 2017. Following discussions with the Company we understand that the salary escalation rate is reasonable as a long term assumption. The salary escalation rate of 3.50% per annum had been assumed for the valuation as at 31 March 2016. Future salary increase assumed here has three basic components, namely, increase due to price inflation, increase due to increase in future living standard (periodic wage re-negotiation) and increase due to career progress by way of promotion as more skill is acquired.

B.3 *Demographic assumptions*: Mortality rates prior to retirement for the valuation as at 31 March 2017 were taken from the standard table – Indian Assured Lives Mortality (2006-08) ultimate. The same for the valuation as at 31 March 2016 were also taken from the same standard table – Indian Assured Lives Mortality (2006-08) ultimate.

Withdrawal rates: The following average withdrawal rates per thousand have been assumed both for the valuation as at 31 March 2016 and 31 March 2017:

	Age	**Rate**
Withdrawal rate:	Upto 40 years	4.2
	40 years and above	Nil
Early retirement and disability	40-54 years	1.8
	55-59 years	2.2

INDIA POWER CORPORATION LIMITED Sector-V Salt Lake City Kolkata-700 091 Plot No.-X1-2&3, Block-EP

C Principal Plan Provisions

We give below a summary of the principal rules of the Leave Encashment Plan.

Normal Retirement Age	60 years for Officers and Assistants 58 years for the Staff and Workers
Salary for calculation of leave encashment	Basic Salary + Dearness Allowance
Leave encashment benefit	Cash equivalent of unutilized leave balance at the time of exit
Annual Leave Entitlement	➢ Earned Leave – 30 days
Maximum allowable leave accumulation at the time of exit from service	➢ Earned Leave – 150 days for Officers & Assistants ➢ Earned Leave – 240 days for Staff & Workers
Leave encashment formula	$\frac{\text{Number of days of leave balance x salary at exit}}{30}$

D Methodology Used

The methodology used in the calculations is set out below:

I have used the Projected Unit Credit (PUC) actuarial method to assess the Plan's liabilities, including those to death-in-service and incapacity benefits in respect of the existing employees.

Under the PUC method a 'projected accrued benefit' is calculated at the beginning of the year and again at the end of the year for each benefit that will accrue for all active members of the Plan. The 'projected accrued benefit' is based on the Plan's accrual formula and upon service as of the beginning or end of the year, but using a 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 of the beginning of the year for active members.

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Kolklata-700 091

E Descriptions of Risk Exposure etc.

Characteristics of Defined Benefit Leave Encashment Plan:

- A final salary defined benefit plan

Regulatory requirements:

- No direct Act/Regulations exist as on date. Scheme rules are important. A distinction should be made between a scheme which allows in service PL encashment (other long term employee benefit) and which allows encashment only at final exit (long term post-retirement benefit).
- Funding is preferable and if funded it is expected to be fully funded on final salary projected accrued benefit basis
- Asset ceiling as applicable, (A net defined benefit asset may arise where a defined benefit plan has been overfunded or where actuarial gains have arisen. Future economic benefits are available to the entity in the form of a reduction in future contributions or a cash refund, either directly to the entity or indirectly to another plan in deficit. The asset ceiling is the present value of those future benefits.)
- Funded scheme must be managed by trustees and specific trust rules are applicable unless the scheme is insured
- Responsibilities of trustees, their appointments and removals are subject to the laid down rules

Risks to which the plan exposes the entity i.e. the valuation results may go wrong:

- Credit Risk: If the scheme is insured and fully funded on PUC basis there is a credit risk to the extent the insurer(s)is/ are unable to discharge their obligations including failure to discharge in timely manner
- Pay-as-you-go Risk: For unfunded schemes financial planning could be difficult as the benefits payable will directly affect the revenue and this could be widely fluctuating from year to year. Moreover there may be an opportunity cost of better investment returns affecting adversely the cost of the scheme.
- Discount Rate risk: The Company is exposed to the risk of fall in discount rate. A fall in discount rate will eventually increase in the ultimate cost of providing the above benefit thereby increasing the value of the liability.

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- Liquidity Risk: If funded this risk may arise from the short term asset and liability cash-flow mismatch thereby causing the company being unable to pay the benefits as they fall due in the short term. Such a situation could be the result of holding large illiquid assets disregarding the results of cash-flow projections and cash outgo inflow mismatch. (Or it could be due to insufficient assets/cash.)

- Future Salary Increase Risk: The Scheme cost is very sensitive to the assumed future salary escalation rates for all final salary defined benefit Schemes. If actual future salary escalations are higher than that assumed in the valuation actual Scheme cost and hence the value of the liability will be higher than that estimated.

- Demographic Risk: In the valuation of the liability certain demographic (mortality and attrition rates) assumptions are inherent. The Company is exposed to this risk to the extent of actual experience eventually being worse compared to that assumed thereby causing an increase in the scheme cost.

- Regulatory Risk: new Act/Regulations may come up in future which could increase the liability significantly.

- The above is a set of risk exposures relating to the Leave Encashment Scheme in general. It is strongly advised that the Company should carefully examine the above list and add more risks if appropriate while preparing its financial disclosure statements.

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F Glossary

The definitions of various terms used in this report are given in the GLOSSARY below:

Actuarial Gain or Loss	It comprises of the following two components: i) Experience Adjustments: The effect of differences between the previous actuarial assumptions and actual experience during the current accounting period. ii) The effect of changes in actuarial assumptions.
Balance Sheet Asset/(Liability)	This is the amount recognised as net defined benefit liability or asset representing the net total of the following amounts :- 1. The present value of defined benefit obligation at the Balance Sheet date 2. Minus Past Service Cost not yet recognised. 3. Minus the fair value at the Balance Sheet date of Plan Assets out of which the obligations are expected to be settled directly.
Funded Status	This is the excess/(shortfall) of the fair value of plan assets over the Plan Liability.
Plan Liability / Present Value of Defined Benefit Obligation	It is the present value, without deducting any plan assets, of expected future payments required to settle the obligation resulting from employee service in the current and prior periods.
Current Service Cost	It is the increase in the present value of the defined benefit obligation resulting from employee service in the current period.
Past Service Costs	It is the change in the present value of obligation for employee service in the prior periods, resulting in the current period from the introduction of, or changes to, post employment benefits or other long-term employee benefits.
Interest Costs / (Income)	The increase in the net Defined Benefit Liability / (asset) over the accounting period due to interest (the time value of money)
Amount to be recognised in Income Statement Comprises of:	1. Current Service Cost 2. Any Past Service Cost and gain or loss on settlement 3. Net Interest on the net defined benefit liability / (Asset)
Amount to be recognised in Other Comprehensive Income Comprises of:	1. Actuarial Gain / Losses 2. Return on Plan Assets, excluding amount included in net interest on the net defined benefit liability / (Asset) 3. Any changes in the effect of the asset ceiling, excluding amount included in net interest on the net defined benefit liability / (Asses)

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G Disclosure Tables

Defined benefit plan (Ind AS 19)

File No: 1047

India Power Corporation Limited Leave Encashment Scheme

Rupees

	31/03/2016	31/03/2017
Defined benefit obligation (DBO)		
Opening balance	29,362,000	27,412,000
Inc-/(decrease) in scope of consolidation	0	0
Current service cost	2,304,000	2,575,442
Interest cost	1,767,000	1,747,824
Past service cost	0	0
Actuarial (gains) / losses from financial assumptions	41,000	1,157,588
Actuarial (gains) / losses from demographic assumptions	0	0
Actuarial (gains) / losses from experience adjustments	7,233,000	3,645,907
Contributions by plan participants	0	0
Benefits paid	-13,295,000	-9,777,000
Curtailments - (gains)/losses	0	0
Settlements - (gains)/losses	0	0
Closing balance	27,412,000	26,761,761

	31/03/2016	31/03/2017
Fair value of plan assets		
Opening balance	0	0
Inc-/(decrease) in scope of consolidation	0	0
Interest income on plan assets	0	0
Contributions by employer	13,295,000	9,777,000
Contributions by plan participants	0	0
Benefits paid	-13,295,000	-9,777,000
Excess / (insufficient) return on plan assets (excluding interest income)	0	0
Settlements - gains / (losses)	0	0
Closing balance	0	0
Check benefits paid: DBO vs. Plan assets	*0*	*0*
Check contributions by plan participants: DBO vs. Plan assets	*0*	*0*

	31/03/2016	31/03/2017
Reimbursement rights		
Opening balance	0	0
Inc-/(decrease) in scope of consolidation	0	0
Cost of reimbursement rights through P&L	0	0
Contributions by employer	0	0
Benefits paid / settlements	0	0
Excess / (insufficient) return on plan assets (excl. Interest income)	0	0
Closing balance	0	0

INDIA POWER CORPORATION LIMITED * Plot No.-X1-2&3, Block-EP * Sector-V Salt Lake City Kolkata-700 091

Calculation Net position		
Actuarial present value of retirement pension commitment (DBO)	27,412,000	26,761,761
Fair value of plan assets	0	0
Net funded status - liability/(asset)	**27,412,000**	**26,761,761**
Unrecognized assets	0	0
Reimbursement rights	0	0
Net liability / (asset) recognized in BS	**27,412,000**	**26,761,761**

Unrecognized assets		
Unrecognized assets as of 01/04	0	0
Change in unrecognized assets	0	0
Interests on unrecognized assets (share of interest income on plan assets)	0	0
Unrecognized assets as of 31/03	0	0

Profit & Loss		
Current service cost	2304000	2575442
Interest cost on net DBO	1767000	1747824
Past service cost	0	0
The effect of any curtailment or settlement	0	0
Interests on unrecognized asset (share of interest income on plan assets)	0	0
Cost / (return) on reimbursement rights	0	0
Actuarial (gains) / losses	7274000	4803495
Employee benefit cost of the period	**11345000**	**9126761**
Actual return on plan assets	0	0

Other comprehensive income		
Actuarial (gains) / losses	0	0
(Excess) / insufficient return on plan assets (excl. interest income)	0	0
Change in unrecognized assets	0	0
Revaluation of reimbursement right	0	0
Expense / (income) recognized in OCI	**0**	**0**

Movements in net liability/(asset)		
Opening balance - Net liability/(asset)	29,362,000	27,412,000
Mov. in inc-/(decrease) in scope of consolidation	0	0
Mov. in benefits paid	0	0
Mov. in contributions by the employer	-13,295,000	-9,777,000
Mov. in contributions by the plan participants	0	0
Mov. in reimbursement rights	0	0
Expenses (income) recognized in income statement	11,345,000	9,126,761
Expense (income) recognized in OCI	0	0
Net liability/(assets) - Status	**27,412,000**	**26,761,761**
Check total from movements vs. calculation net position	*0*	*0*

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Actuarial assumptions		
Discount rate current year (%)	7.76%	7.12%
Expected rate for salary increases (%)	3.50%	3.50%
Pension trend (%)	0	0
Number of insured employees	611	548
Number of insured retired persons	0	0
Number of defined contribution plans	0	0
Number of defined benefit plans	1	1
thereof number of defined benefit funded	0	0
thereof number of defined benefit unfunded	1	1
Expected contributions to be paid for next year	0	0
Weighted average duration of the defined benefit plan (in years)	10.24	9.60

Sensitivity		
DBO at 31.3 with discount rate +1%		24,997,056
Corresponding service cost		2,324,404
DBO at 31.3 with discount rate -1%		28,798,042
Corresponding service cost		2,873,408
DBO at 31.3 with +1% salary escalation		28,853,055
Corresponding service cost		2,881,574
DBO at 31.3 with -1% salary escalation		24,923,136
Corresponding service cost		2,314,044
DBO at 31.3 with +50% withdrawal rate		26,821,460
Corresponding service cost		2,582,606
DBO at 31.3 with -50% withdrawal rate		26,700,992
Corresponding service cost		2,568,041
DBO at 31.3 with +10% mortality rate		26,783,728
Corresponding service cost		2,579,284
DBO at 31.3 with -10% mortality rate		26,739,690
Corresponding service cost		2,571,582

Major categories of total plan assets		
Cash- & cash equivalents	0	0
thereof non-quoted market price	0	0
Equity instruments	0	0
thereof non-quoted market price	0	0
Debt instruments	0	0
thereof non-quoted market price	0	0
Real estate investments	0	0
thereof non-quoted market price	0	0
All other instruments	0	0
thereof non-quoted market price	0	0
Total	**0**	**0**
Check total categories vs. Plan assets	*0*	*0*

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Annual comparison		
in absolute terms:		
Defined benefit obligation (DBO)	27,412,000	26,761,761
Fair value of plan assets	0	0
Asset ceiling	0	0
Net funded status	**27,412,000**	**26,761,761**

Estimated Cash Flows (Undiscounted) in subsequent years		
1st year		5,573,768
2 to 5 years		9,665,648
6 t0 10 years		8,693,178
More than 10 years		28,084,540

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India Power Corporation Limited Gratuity Scheme
(Ind AS) 19 Reporting

Disclosure accounting for the period of one year commencing from 01/04/2016

Prepared by:

Retben Actuarial Services
10 April 2017

INDIA POWER CORPORATION LIMITED
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Kolklata-700 091
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Retben Actuarial Services
ACTUARY - N C DAS, *FIAI*
Membership No. : IAI 00046
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Ground Floor, 109/21-B Hazra Road, Kolkata-700 026, WB, India ✆ : 2474-0264, 8820407855. Fax : 2454-0555. e-mail : retben@gmail.com, retben_services@yahoo.in

Ref.: 1046/NCD

India Power Corporation Ltd.
Plot No.X 1,2,&3, Block-EP, Sector-V
Salt Lake City, Kolkata- 700 091

Dear Sirs,

(Ind AS) 19 valuations for India Power Corporation Ltd. Gratuity Scheme

As requested, we have completed the (Ind AS) 19 calculations for the Gratuity Scheme and prepared the attached report showing the balance sheet items recognised as at 31 March 2017 and calculations for the Employer expense for the period of one year commencing 01 April 2016.

We shall be happy to provide further information if required.

Yours faithfully,

NC Das
(N C Das)
Fellow, Institute of Actuaries of India

INDIA POWER CORPORATION LIMITED
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N. C. Das - ✆ (M): 9874375734, e-mail: nc06das@yahoo.co.in **Anita Dhar** - ✆ (M): 98304 58382, 98301 05382, e-mail: anitadhar08@yahoo.com

1 Introduction

We have been requested by India Power Corporation Ltd. ("the Company") to report on the projected financial position of the liabilities of the Gratuity scheme as at 31/03/2017 and to calculate the accounting expenses associated with the Scheme for the financial year commencing 01 April 2016 in terms of Indian Accounting Standard (Ind AS) 19 published by the Ministry of Corporate Affairs, Government of India.

The result set out in this Report is based on our understanding of (Ind AS 19) and its application to the Scheme. They have been prepared for the specific requirements of (Ind AS 19) and should not be used for any other purpose. In any actuarial assessment there is inherent uncertainly associated with the results as assumptions are made about future events. In particular this Report does not constitute a formal funding actuarial valuation of the Scheme and does not present any recommendation of contributions or funding levels.

This Report is provided solely for the Company's use and for the specific purposes indicated above. Except where we 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 us 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 we 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.

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2 Summary of Results

The table below shows a summary of the key results for the period ending on 31.03.2017:

Assets / Liabilities	31.03.2016 (Rupees)	31.03.2017 (Rupees)
1. Present value of obligation	130,543,000	131,161,453
2. Fair value of Plan Assets	5,045,000	6,948,633
3. Net asset/(liability) recognized in Balance Sheet	(125,498,000)	(124,212,820)

Employer Expense	Period ended 31.03.2017 (Rupees)
1. Current Service Cost	6,288,093
2. Total Employer Expense recognised in P&L A/c	13,611,689
3. Total Employer Expense recognised in Other Comprehensive Income	7,619,564

2.2 Current Service Cost represents the cost associated with current fiscal period benefit accruals.

2.3 Break-up of the liabilities is given below:

Unit	**Number of employees**	**As at 31.03.2017 (Rupees)**
IPCL	546	131,074,583
Wind Power	2	86,870
Total	**548**	**131,161,453**

2.4 We give below the bifurcation of the current and non-current obligations at the respective dates of valuation:

	As at 31.03.2016 (Rupees)	**As at 31.03.2017 (Rupees)**
Current Obligation	15,030,000	34,209,833
Non-Current Obligation	115,513,000	96,951,620
Total	**130,543,000**	**131,161,453**

3 Key Points

This report presents the results of actuarial calculations made to determine the Net Asset/(Liability) recognised in the Balance Sheet as at 31 March 2017 and the P & L expense for the year commencing 01 April 2016 that need to be reported under the Indian Accounting Standard (Ind AS) 19 in respect of the Executive Gratuity scheme.

The results are particularly sensitive to some assumptions, such as the discount rate, level of salary inflation, level of assumed price inflation and mortality. A decrease in the discount rate assumed or an increase in salary inflation will lead to an increase in reported cost.

A summary of data used for the calculations are set out in Appendix **A**.

The key assumptions used in the calculations are set out in Appendix **B**.

The benefits valued in this report are summarised in Appendix **C**.

The methodology used in the calculations are summarised in Appendix **D**.

The various risk factors to which the scheme is exposed are summarised in Appendix **E**.

The definitions of various terms used in this report are given in the GLOSSARY in Appendix **F**.

The Disclosure Tables are given in Appendix **G**.

INDIA POWER CORPORATION LIMITED
KP
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A Summary of Data

A.1 **Membership Data**

The calculations have been based on the membership information for the Scheme as at 31 March 2016 and 31 March 2017 as supplied by the company. The data are summarised in the table below:

As at	31-March 2016	31-March 2017
Number of employees	611	548
Total monthly salaries (Rs).	16,339,312	15,515,091
Average past service (years)	19.17	19.05
Average future service (years)	12.87	11.45
Decrement adjusted future service (years)	7.76	6.45

A.2 **Plan Assets**

The assets of the Fund are lying mainly with LIC and partly with Yule Group Gratuity Fund,, Axis Bank, HDFC bank and State Bank of India. The company has provided us LICI statement for the period from 01.04.2016 to 31.03.2017 showing the contribution paid, settlements made and interest earned during the period from 1.04.2016 to 31.03.2017. We have taken the opening Fund position as per report on the valuation as at 31.03.2016 and estimated the total Fund as at 31.03.2017 having regard to the contributions paid and settlements made as per LIC statement. As advised by the Company in estimating the Fund as at 31.03.2017 we have ignored the Fund with Yule Group Gratuity Fund. We have, however taken the last Fund balance with Axis bank, HDFC Bank and State Bank of India as at 31.03.2017.

In preparing this Report we have relied on the completeness and accuracy of the information provided to us orally and in writing by or on behalf of the Company and its advisers. We have not carried out any detailed validation checks on the information provided. We have, however, carried out broad consistency checks.

B Assumptions

B.1 One of the principal assumptions is the discount rate, which should be based upon the yields available on high quality corporate bonds at the accounting date with a term that matches that of the liabilities. However in countries where there is no deep market in such bonds, such as India, the market yields (at the balance sheet date) on government bonds should be used. The other assumptions should be chosen to reflect a best estimate of the future long-term experience.

B.2 The financial assumptions employed for the calculations as at 31 March 2016 as well as 31 March 2017 are as follows:-

- *Discount Rate:* The discounting rate for the purposes of the (Ind AS)19 calculations has to be chosen by reference to yields on long term government bonds as no deep market in high quality corporate bonds exits in India. The discount rates have been used at 7.76% per annum as at 31 March 2016 and at 6.93% per annum as at 31 March 2017.

- *Interest Income on Plan Assets:* The discounting rate for the purpose of actuarial valuation for the previous year was assumed to be the rate of interest income of plan assets during the valuation year.

- *Salary Increases:* It has been assumed that employed members' pay will increase at an average rate of 3.50% per annum as at 31 March 2017. Following discussions with the Company we understand that the salary escalation rate is reasonable as a long term assumption. The salary escalation rate of 3.50% per annum had been assumed for the valuation as at 31 March 2016. Future salary increase assumed here has three basic components, namely, increase due to price inflation, increase due to increase in future living standard (periodic wage re-negotiation) and increase due to career progress by way of promotion as more skill is acquired.

B.3 *Demographic assumptions*: Mortality rates prior to retirement for the valuation as at 31 March 2017 were taken from the standard table – Indian Assured Lives Mortality (2006-08) ultimate. The same for the valuation as at 31 March 2016 were also taken from the same standard table – Indian Assured Lives Mortality (2006-08) ultimate.

Withdrawal rates: The following average withdrawal rates per thousand have been assumed both for the valuation as at 31 March 2016 and 31 March 2017:

	Age	Rate
Withdrawal rate:	Upto 40 years	4.2
	40 years and above	Nil
Early retirement and disability	40-54 years	1.8
	55-59 years	2.2

INDIA POWER CORPORATION LIMITED * Plot No.-X1-2&3, Block-EP * Sector-V Salt Lake City Kolkata-700 091

C Principal Plan Provisions

We give below a summary of the principal rules of the Gratuity Plan.

	Payment of Gratuity Act
Normal retirement age	58 year for Staff & Workers 60 year for Officers & Assistants
Salary for calculation of gratuity	Last drawn basic salary plus dearness allowance
Vesting period	5 years of service
Benefit on normal retirement	15/26 x salary x number of years of completed service
Benefit on early retirement	Same as normal retirement benefit
Withdrawal/resignation	Same as normal retirements benefit
Benefit on death in service	Same as normal retirements benefit except that no vesting condition apply
Maximum limit	Rs.10,00,000

INDIA POWER CORPORATION LIMITED
Sector-V
Salt Lake City
Kolklata-700 091
Plot No.-X1-2&3, Block-EP

D Methodology Used

The methodology used in the calculations is set out below:

I have used the Projected Unit Credit (PUC) actuarial method to assess the Plan's liabilities, including those to death-in-service and incapacity benefits in respect of the existing employees.

Under the PUC method a 'projected accrued benefit' is calculated at the beginning of the year and again at the end of the year for each benefit that will accrue for all active members of the Plan. The 'projected accrued benefit' is based on the Plan's accrual formula and upon service as of the beginning or end of the year, but using a 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 of the beginning of the year for active members.

E Descriptions of Risk Exposure etc.

Characteristics of Defined Benefit Gratuity Plan:

- A final salary defined benefit plan

Regulatory requirements:

- Minimum benefit must comply with the requirements of the Payment of Gratuity Act 1972 as amended up-to-date. Subject to this more liberal benefit may be allowed but the excess over the Ceiling as per the Act is subject to Income Tax at the hand of the beneficiary.

- Funding requirements usually applicable and usually expected to be fully funded on final salary projected accrued benefit basis

- Asset ceiling as applicable, (A net defined benefit asset may arise where a defined benefit plan has been overfunded or where actuarial gains have arisen. Future economic benefits are available to the entity in the form of a reduction in future contributions or a cash refund, either directly to the entity or indirectly to another plan in deficit. The asset ceiling is the present value of those future benefits.)

- Funded scheme must be managed by trustees and specific trust rules are applicable unless the scheme is insured

- Responsibilities of trustees, their appointments and removals are subject to the laid down rules

Risks to which the plan exposes the entity i.e. the valuation results may go wrong:

- Credit Risk: If the scheme is insured and fully funded on PUC basis there is a credit risk to the extent the insurer(s)is/ are unable to discharge their obligations including failure to discharge in timely manner

- Pay-as-you-go Risk: For unfunded schemes financial planning could be difficult as the benefits payable will directly affect the revenue and this could be widely fluctuating from year to year. Moreover there may be an opportunity cost of better investment returns affecting adversely the cost of the scheme.

- Discount Rate risk: The Company is exposed to the risk of fall in discount rate. A fall in discount rate will eventually increase in the ultimate cost of providing the above benefit thereby increasing the value of the liability.

INDIA POWER CORPORATION LIMITED Sector-V Salt Lake City Kolkata-700 091 Plot No.-X1-2&3, Block-EP

- Liquidity Risk: This risk arises from the short term asset and liability cash-flow mismatch thereby causing the company being unable to pay the benefits as they fall due in the short term. Such a situation could be the result of holding large illiquid assets disregarding the results of cash-flow projections and cash outgo inflow mismatch. (Or it could be due to insufficient assets/cash.)

- Future Salary Increase Risk: The Scheme cost is very sensitive to the assumed future salary escalation rates for all final salary defined benefit Schemes. If actual future salary escalations are higher than that assumed in the valuation actual Scheme cost and hence the value of the liability will be higher than that estimated.

- Demographic Risk: In the valuation of the liability certain demographic (mortality and attrition rates) assumptions are made. The Company is exposed to this risk to the extent of actual experience eventually being worse compared to the assumptions thereby causing an increase in the scheme cost.

- Regulatory Risk: Gratuity Benefit must comply with the requirements of the Payment of Gratuity Act, 1972 (as amended up-to-date). There is a risk of change in the regulations requiring higher gratuity payments (e.g. raising the present ceiling of Rs.10,00,000, raising accrual rate from 15/26 etc.)

- The above is a set of risk exposures relating to Gratuity Scheme in general. It is strongly advised that the Company should carefully examine the above list and add more risks if appropriate while preparing its financial disclosure statements.

F Glossary

The definitions of various terms used in this report are given in the **GLOSSARY** below:

Actuarial Gain or Loss	It comprises of the following two components: i) Experience Adjustments: The effect of differences between the previous actuarial assumptions and actual experience during the current accounting period. ii) The effect of changes in actuarial assumptions.
Balance Sheet Asset/(Liability)	This is the amount recognised as net defined benefit liability or asset representing the net total of the following amounts :- 1. The present value of defined benefit obligation at the Balance Sheet date 2. Minus Past Service Cost not yet recognised. 3. Minus the fair value at the Balance Sheet date of Plan Assets out of which the obligations are expected to be settled directly.
Funded Status	This is the excess/(shortfall) of the fair value of plan assets over the Plan Liability.
Plan Liability / Present Value of Defined Benefit Obligation	It is the present value, without deducting any plan assets, of expected future payments required to settle the obligation resulting from employee service in the current and prior periods.
Current Service Cost	It is the increase in the present value of the defined benefit obligation resulting from employee service in the current period.
Past Service Costs	It is the change in the present value of obligation for employee service in the prior periods, resulting in the current period from the introduction of, or changes to, post employment benefits or other long-term employee benefits.
Interest Costs / (Income)	The increase in the net Defined Benefit Liability / (asset) over the accounting period due to interest (the time value of money)
Amount to be recognised in Income Statement Comprises of:	1. Current Service Cost 2. Any Past Service Cost and gain or loss on settlement 3. Net Interest on the net defined benefit liability / (Asset)
Amount to be recognised in Other Comprehensive Income Comprises of:	1. Actuarial Gain / Losses 2. Return on Plan Assets, excluding amount included in net interest on the net defined benefit liability / (Asset) 3. Any changes in the effect of the asset ceiling, excluding amount included in net interest on the net defined benefit liability / (Asses)

INDIA POWER CORPORATION LIMITED * Sector-V Salt Lake City Kolkata-700 091 * Plot No.-X1-2&3, Block-EP * VIONI

G Disclosure Tables

Defined benefit plan (Ind AS 19)

File No: 1046

India Power Corporation Limited Gratuity Scheme

Rupees

	31/03/2016	31/03/2017
Defined benefit obligation (DBO)		
Opening balance	**130,063,000**	**130,543,000**
Inc-/(decrease) in scope of consolidation	0	0
Current service cost	6,014,000	6,288,093
Interest cost	9,371,000	9,359,431
Past service cost	0	0
Actuarial (gains) / losses from financial assumptions	155,000	5,176,885
Actuarial (gains) / losses from demographic assumptions	0	0
Actuarial (gains) / losses from experience adjustments	4,178,000	-342,409
Contributions by plan participants	0	0
Benefits paid	-19,238,000	-19,863,547
Curtailments - (gains)/losses	0	0
Settlements - (gains)/losses	0	0
Closing balance	**130,543,000**	**131,161,453**

Fair value of plan assets		
Opening balance	**22,980,000**	**5,045,000**
Inc-/(decrease) in scope of consolidation	0	0
Interest income on plan assets	1,039,000	2,035,835
Contributions by employer		22,516,433
Contributions by plan participants	0	0
Benefits paid	-19,238,000	-19,863,547
Excess / (insufficient) return on plan assets (excluding interest income)	264,000	-2,785,088
Settlements - gains / (losses)	0	0
Closing balance	**5,045,000**	**6,948,633**
***Check** benefits paid: DBO vs. Plan assets*	*0*	*0*
***Check** contributions by plan participants: DBO vs. Plan assets*	*0*	*0*

Reimbursement rights		
Opening balance	0	**0**
Inc-/(decrease) in scope of consolidation	0	0
Cost of reimbursement rights through P&L	0	0
Contributions by employer	0	0
Benefits paid / settlements	0	0
Excess / (insufficient) return on plan assets (excl. Interest income)	0	0
Closing balance	**0**	**0**

INDIA POWER CORPORATION LIMITED * Plot No: X1-283, Block-EP Sector-V Salt Lake City Kolkata-700 091

Calculation Net position		
Actuarial present value of retirement pension commitment (DBO)	130,543,000	131,161,453
Fair value of plan assets	5,045,000	6,948,633
Net funded status - liability/(asset)	**125,498,000**	**124,212,820**
Unrecognized assets	0	0
Reimbursement rights	0	0
Net liability / (asset) recognized in BS	**125,498,000**	**124,212,820**

Unrecognized assets		
Unrecognized assets as of 01/04	0	0
Change in unrecognized assets	0	0
Interests on unrecognized assets (share of interest income on plan assets)	0	0
Unrecognized assets as of 31/03	0	0

Profit & Loss		
Current service cost	6,014,000	6,288,093
Net Interest cost on net DBO	8,332,000	7,323,596
Past service cost	0	0
The effect of any curtailment or settlement	0	0
Interests on unrecognized asset (share of interest income on plan assets)	0	0
Cost / (return) on reimbursement rights	0	0
Employee benefit cost of the period	**14,346,000**	**13,611,689**
Actual return on plan assets	1,303,000	-749,253

Other comprehensive income		
Actuarial (gains) / losses	4,333,000	4,834,476
(Excess) / insufficient return on plan assets (excl. interest income)	-264,000	2,785,088
Change in unrecognized assets	0	0
Revaluation of reimbursement right	0	0
Expense / (income) recognized in OCI	**4,069,000**	**7,619,564**

Movements in net liability/(asset)		
Opening balance - Net liability/(asset)	107,083,000	125,498,000
Mov. in inc-/(decrease) in scope of consolidation	0	0
Mov. in benefits paid	0	0
Mov. in contributions by the employer	0	-22,516,433
Mov. in contributions by the plan participants	0	0
Mov. in reimbursement rights	0	0
Expenses (income) recognized in income statement	14,346,000	13,611,689
Expense (income) recognized in OCI	4,069,000	7,619,564
Net liability/(assets) - Status	**125,498,000**	**124,212,820**
Check total from movements vs. calculation net position	*0*	*0*

INDIA POWER CORPORATION LIMITED * Plot No.-X1-2&3, Block-EP * Sector-V Salt Lake City Kolkata-700 091

Actuarial assumptions		
Discount rate current year (%)	7.76%	6.93%
Expected rate for salary increases (%)	3.50%	3.50%
Pension trend (%)	0.00%	0
Number of insured employees	611	548
Number of insured retired persons	0	0
Number of defined contribution plans	0	0
Number of defined benefit plans	1	1
thereof number of defined benefit funded	1	0
thereof number of defined benefit unfunded	0	0
Expected contributions to be paid for next year	141,069,000	140,080,427
Weighted average duration of the defined benefit plan (in years)	7.76	6.45

Sensitivity		
DBO at 31.3 with discount rate +1%	123,196,000	124,981,888
Corresponding service cost	5,558,000	5,844,019
DBO at 31.3 with discount rate -1%	138,763,000	138,088,921
Corresponding service cost	6,542,000	6,802,401
DBO at 31.3 with +1% salary escalation	138,617,000	138,004,636
Corresponding service cost	6,542,000	6,803,738
DBO at 31.3 with -1% salary escalation	123,149,000	124,897,479
Corresponding service cost	5,548,000	5,832,205
DBO at 31.3 with +50% withdrawal rate	130,786,000	131,319,130
Corresponding service cost	6,034,000	6,301,408
DBO at 31.3 with -50% withdrawal rate	130,298,000	131,001,894
Corresponding service cost	5,994,000	6,274,510
DBO at 31.3 with +10% mortality rate	130,659,000	131,228,559
Corresponding service cost	6,022,000	6,293,809
DBO at 31.3 with -10% mortality rate	130,427,000	131,094,095
Corresponding service cost	6,006,000	6,282,352

Major categories of total plan assets		
Cash- & cash equivalents	5,045,000	6,948,633
thereof non-quoted market price	5,045,000	6,948,633
Equity instruments	0	0
thereof non-quoted market price	0	0
Debt instruments	0	0
thereof non-quoted market price	0	0
Real estate investments	0	0
thereof non-quoted market price	0	0
All other instruments	0	0
thereof non-quoted market price	0	0
Total	**5,045,000**	**6,948,633**
Check total categories vs. Plan assets	*0*	*0*

INDIA POWER CORPORATION LIMITED
Sector-V
Salt Lake City
Kolklata-700 091
Plot No.-X1-2&3, Block-EP

Annual comparison		
in absolute terms:		
Defined benefit obligation (DBO)	130,543,000	131,161,453
Fair value of plan assets	5,045,000	6,948,633
Asset ceiling	0	0
Net funded status	**125,498,000**	**124,212,820**

Estimated Cash Flows (Undiscounted) in subsequent years		
1st year	15,602,000	35,375,350
2 to 5 years	64,890,000	58,275,009
6 t0 10 years	59,841,000	40,346,339
More than 10 years	92,978,000	70,125,775

INDIA POWER CORPORATION LIMITED * Plot No.-X1-283, Block-EP * Sector-V Salt Lake City Kolkata-700 091

India Power Corporation Limited Superannuation Fund I (Ind AS) 19 Reporting

Disclosure accounting for the period of one year commencing from 01/04/2016

Prepared by:

Retben Actuarial Services
06 April 2017

INDIA POWER CORPORATION LIMITED * Plot No.-X1-2&3, Block-EP * Sector-V Salt Lake City Kolkata-700 091

Retben Actuarial Services
ACTUARY - N C DAS, *FIAI*
Membership No. : IAI 00046
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Ground Floor. 109/21-B Hazra Road, Kolkata-700 026, WB, India ✆ : 2474-0264, 8820407855. Fax : 2454-0555 e-mail : retben@gmail.com, retben_services@yahoo.in

Ref.: 623/NCD

India Power Corporation Ltd.
Plot No.X 1,2,&3, Block-EP, Sector-V
Salt Lake City, Kolkata- 700 091

Dear Sirs,

(Ind AS) 19 valuations for India Power Corporation Ltd. Superannuation Fund I

As requested, we have completed the (Ind AS) 19 calculations for the Superannuation Fund I and prepared the attached report showing the balance sheet items recognised as at 31 March 2017 and calculations for the Employer expense for the period of one year commencing 01 April 2016.

We shall be happy to provide further information if required.

Yours faithfully,

(N C Das)
Fellow, Institute of Actuaries of India

INDIA POWER CORPORATION LIMITED * Plot No.-X1-2&3, Block-EP * Sector-V Salt Lake City Kolkata-700 091

N. C. Das - ✆ (M): 9874375734, e-mail: nc06das@yahoo.co.in Anita Dhar - ✆ (M): 98304 58382, 98301 05382, e-mail: anitadhar08@yahoo.com

1 Introduction

We have been requested by India Power Corporation Ltd. ("the Company") to report on the projected financial position of the liabilities of the Superannuation Fund I as at 31/03/2017 and to calculate the accounting expenses associated with the Scheme for the financial year commencing 01 April 2016 in terms of Indian Accounting Standard (Ind AS) 19 published by the Ministry of Corporate Affairs, Government of India.

The result set out in this Report is based on our understanding of (Ind AS 19) and its application to the Scheme. They have been prepared for the specific requirements of (Ind AS 19) and should not be used for any other purpose. In any actuarial assessment there is inherent uncertainly associated with the results as assumptions are made about future events. In particular this Report does not constitute a formal funding actuarial valuation of the Scheme and does not present any recommendation of contributions or funding levels.

This Report is provided solely for the Company's use and for the specific purposes indicated above. Except where we 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 us 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 we 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.

2 Summary of Results

The table below shows a summary of the key results for the period ending on 31.03.2017:

Assets / Liabilities	31.03.2016 (Rupees)	31.03.2017 (Rupees)
1. Present value of obligation	15,51,000	20,91,153
2. Fair value of Plan Assets	20,08,000	7,87,678
3. Net asset/(liability) recognized in Balance Sheet	4,57,000	(13,03,475)

Employer Expense	Period ended 31.03.2017 (Rupees)
1. Current Service Cost	0
2. Total Employer Expense recognised in P&L A/c	(33,718)
3. Total Employer Expense recognised in Other Comprehensive Income	17,93,653

2.2 Current Service Cost represents the cost associated with current fiscal period benefit accruals.

2.4 We give below the bifurcation of the current and non-current obligations at the respective dates of valuation:

	As at 31.03.2016 (Rupees)	As at 31.03.2017 (Rupees)
Current Obligation	13,000	15,172
Non-Current Obligation	15,38,000	20,75,981
Total	**15,51,000**	**20,91,153**

INDIA POWER CORPORATION LIMITED * Plot No.-X1-2&3, Block-EP * Sector-V Salt Lake City Kolkata-700 091

3 Key Points

This report presents the results of actuarial calculations made to determine the Net Asset/(Liability) recognised in the Balance Sheet as at 31 March 2017 and the P & L expense for the year commencing 01 April 2016 that need to be reported under the Indian Accounting Standard (Ind AS) 19 in respect of the Executive Gratuity scheme.

The results are particularly sensitive to some assumptions, such as the discount rate, level of salary inflation, level of assumed price inflation and mortality. A decrease in the discount rate assumed or an increase in salary inflation will lead to an increase in reported cost.

A summary of data used for the calculations are set out in Appendix **A**.

The key assumptions used in the calculations are set out in Appendix **B**.

The benefits valued in this report are summarised in Appendix **C**.

The methodology used in the calculations are summarised in Appendix **D**.

The various risk factors to which the scheme is exposed are summarised in Appendix **E**.

The definitions of various terms used in this report are given in the GLOSSARY in Appendix **F**.

The Disclosure Tables are given in Appendix **G**.

INDIA POWER CORPORATION LIMITED * Plot No.-X1-283, Block-EP * Sector-V Salt Lake City Kolkata-700 091

A Summary of Data

A.1 Membership Data

The calculations have been based on the membership information for the Scheme as at 31 March 2016 and 31 March 2017 as supplied by the company. The data are summarised in the table below:

As at	31-March 2016	31-March 2017
Number of employees	1	1
Total monthly salaries (Rs).	26,291	28,394
Average past service (years)	33.00	34.00
Average future service (years)	2.75	1.84
Decrement adjusted future service (years)	2.75	1.83

A.2 Plan Assets

The assets of the Fund are lying partly with Yule Agency Superannuation Fund and partly with LICI and Axis Bank. The company has provided us with the bank statement of Axis Bank as well as the LIC statement for the period from 01.04.2016 to 31.03.2017. We have taken the opening Fund position as per report on the valuation as at 31.03.2016. For determining the closing Fund we have taken into consideration the movement in the AXIS Bank as well as the LIC Fund. As advised by the Company we have ignored the Fund lying with Yule Agency Superannuation Fund.

In preparing this Report we have relied on the completeness and accuracy of the information provided to us orally and in writing by or on behalf of the Company and its advisers. We have not carried out any detailed validation checks on the information provided. We have, however, carried out broad consistency checks.

B Assumptions

B.1 One of the principal assumptions is the discount rate, which should be based upon the yields available on high quality corporate bonds at the accounting date with a term that matches that of the liabilities. However in countries where there is no deep market in such bonds, such as India, the market yields (at the balance sheet date) on government bonds should be used. The other assumptions should be chosen to reflect a best estimate of the future long-term experience.

B.2 The financial assumptions employed for the calculations as at 31 March 2016 as well as 31 March 2017 are as follows:-

- *Discount Rate:* The discounting rate for the purposes of the (Ind AS)19 calculations has to be chosen by reference to yields on long term government bonds as no deep market in high quality corporate bonds exits in India. The discount rates have been used at 7.26% per annum as at 31 March 2016 and at 6.26% per annum as at 31 March 2017.

- *Interest Income on Plan Assets:* The discounting rate for the purpose of actuarial valuation for the previous year was assumed to be the rate of interest income of plan assets during the valuation year.

- *Salary Increases:* It has been assumed that employed members' pay will increase at an average rate of 3.50% per annum as at 31 March 2017. Following discussions with the Company we understand that the salary escalation rate is reasonable as a long term assumption. The salary escalation rate of 3.50% per annum had been assumed for the valuation as at 31 March 2016. Future salary increase assumed here has three basic components, namely, increase due to price inflation, increase due to increase in future living standard (periodic wage re-negotiation) and increase due to career progress by way of promotion as more skill is acquired.

B.3 *Demographic assumptions*: Mortality rates prior to retirement for the valuation as at 31 March 2017 were taken from the standard table – Indian Assured Lives Mortality (2006-08) ultimate. The same for the valuation as at 31 March 2016 were also taken from the same standard table – Indian Assured Lives Mortality (2006-08) ultimate.

Withdrawal rates: The following average withdrawal rates per thousand have been assumed both for the valuation as at 31 March 2016 and 31 March 2017:

	Age	Rate
Withdrawal rate:	Upto 40 years	4.2
	40 years and above	Nil
Early retirement and disability	40-54 years	1.8
	55-59 years	2.2

INDIA POWER CORPORATION LIMITED Sector-V Salt Lake City Kolkata-700 091 Plot No.-X1-2&3, Block-EP

C Principal Plan Provisions

We give below a summary of the principal rules of the Gratuity Plan.

Normal Retirement Age	60 years
Salary for calculation of pension	Retiring salary which is average of last drawn salary over 36 months
Pension fraction	1/50 th part of retiring salary for each year of service for employees in grade F and Whole time Directors and 1/60 th part of retiring salary for each year of service for employees in Grades A,B,C1,C2,D1,D2and E
Maximum Period of Service	30 years
Nature of pension	Guaranteed for 15 years and for life thereafter for employees in grade F and Whole time Directors and Guaranteed for 10 years and for life thereafter for employees in Grades A,B,C1,C2,D1,D2 and E
Pension on death in service	Pension guaranteed for 10 years to the dependents will be 50% of the pension the employee would have been entitled for the period of service rendered on the date of death provided the period of service on the date of death is 10 years or more.
Net Pension payable	Net pension payable will be the pension as calculated above as reduced by the pension payable out of the accumulated contribution with Yule Agency Superannuation fund

INDIA POWER CORPORATION LIMITED * Plot No.-X1-2&3, Block-EP Sector-V Salt Lake City Kolkata-700 091

D Methodology Used

The methodology used in the calculations is set out below:

I have used the Projected Unit Credit (PUC) actuarial method to assess the Plan's liabilities, including those to death-in-service and incapacity benefits in respect of the existing employees.

Under the PUC method a 'projected accrued benefit' is calculated at the beginning of the year and again at the end of the year for each benefit that will accrue for all active members of the Plan. The 'projected accrued benefit' is based on the Plan's accrual formula and upon service as of the beginning or end of the year, but using a 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 of the beginning of the year for active members.

E Descriptions of Risk Exposure etc.

Characteristics of Defined Benefit Pension Plan:

- A final salary defined benefit plan.

Regulatory requirements:

- No direct Act/Regulations exist as on date. Scheme rules are important.
- Funding requirements usually applicable and usually expected to be fully funded on final salary projected accrued benefit basis.
- Asset ceiling as applicable, (A net defined benefit asset may arise where a defined benefit plan has been overfunded or where actuarial gains have arisen. Future economic benefits are available to the entity in the form of a reduction in future contributions or a cash refund, either directly to the entity or indirectly to another plan in deficit. The asset ceiling is the present value of those future benefits.)
- Funded scheme must be managed by trustees and specific trust rules are applicable unless the scheme is insured
- Responsibilities of trustees, their appointments and removals are subject to the laid down rules

Risks to which the plan exposes the entity i.e. the valuation results may go wrong:

- Credit Risk: If the scheme is insured and fully funded on PUC basis there is a credit risk to the extent the insurer(s) is/ are unable to discharge their obligations including failure to discharge in timely manner
- Pay-as-you-go Risk: For unfunded schemes financial planning could be difficult as the benefits payable will directly affect the revenue and this could be widely fluctuating from year to year. Moreover there may be an opportunity cost of better investment returns affecting adversely the cost of the scheme.
- Discount Rate risk: The Company is exposed to the risk of fall in discount rate. A fall in discount rate will eventually increase in the ultimate cost of providing the above benefit thereby increasing the value of the liability.

INDIA POWER CORPORATION LIMITED Sector-V Salt Lake City Kolklata-700 091 Plot No.-X1-2&3, Block-EP

- Liquidity Risk: This risk arises from the short term asset and liability cash-flow mismatch thereby causing the company being unable to pay the benefits as they fall due in the short term. Such a situation could be the result of holding large illiquid assets disregarding the results of cash-flow projections and cash outgo inflow mismatch. (Or it could be due to insufficient assets/cash.)

- Future Salary Increase Risk: The Scheme cost is very sensitive to the assumed future salary escalation rates for all final salary defined benefit Schemes. If actual future salary escalations are higher than that assumed in the valuation actual Scheme cost and hence the value of the liability will be higher than that estimated.

- Demographic Risk: In the valuation of the liability certain demographic (mortality and attrition rates) assumptions are inherent. The Company is exposed to this risk to the extent of actual experience eventually being worse compared to that assumed thereby causing an increase in the scheme cost.

- Regulatory Risk: new Act/Regulations may come up in future which could increase the liability significantly.

- The above is a set of risk exposures relating to DB Pension Scheme in general. It is strongly advised that the Company should carefully examine the above list and add more risks if appropriate while preparing its financial disclosure statements.

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KP

F Glossary

The definitions of various terms used in this report are given in the **GLOSSARY** below:

Actuarial Gain or Loss	It comprises of the following two components: i) Experience Adjustments: The effect of differences between the previous actuarial assumptions and actual experience during the current accounting period. ii) The effect of changes in actuarial assumptions.
Balance Sheet Asset/(Liability)	This is the amount recognised as net defined benefit liability or asset representing the net total of the following amounts :- 1. The present value of defined benefit obligation at the Balance Sheet date 2. Minus Past Service Cost not yet recognised. 3. Minus the fair value at the Balance Sheet date of Plan Assets out of which the obligations are expected to be settled directly.
Funded Status	This is the excess/(shortfall) of the fair value of plan assets over the Plan Liability.
Plan Liability / Present Value of Defined Benefit Obligation	It is the present value, without deducting any plan assets, of expected future payments required to settle the obligation resulting from employee service in the current and prior periods.
Current Service Cost	It is the increase in the present value of the defined benefit obligation resulting from employee service in the current period.
Past Service Costs	It is the change in the present value of obligation for employee service in the prior periods, resulting in the current period from the introduction of, or changes to, post employment benefits or other long-term employee benefits.
Interest Costs / (Income)	The increase in the net Defined Benefit Liability / (asset) over the accounting period due to interest (the time value of money)
Amount to be recognised in Income Statement Comprises of:	1. Current Service Cost 2. Any Past Service Cost and gain or loss on settlement 3. Net Interest on the net defined benefit liability / (Asset)
Amount to be recognised in Other Comprehensive Income Comprises of:	1. Actuarial Gain / Losses 2. Return on Plan Assets, excluding amount included in net interest on the net defined benefit liability / (Asset) 3. Any changes in the effect of the asset ceiling, excluding amount included in net interest on the net defined benefit liability / (Asses)

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G Disclosure Tables

Defined benefit plan (Ind AS 19)

File No: 623

India Power Corporation Limited Superannuation Fund 1

Rupees

	31/03/2016	31/03/2017
Defined benefit obligation (DBO)		
Opening balance	7,129,000	1,551,000
Inc-/(decrease) in scope of consolidation	0	0
Current service cost	0	0
Interest cost	321,000	112,603
Past service cost	0	0
Actuarial (gains) / losses from financial assumptions	25,000	296,398
Actuarial (gains) / losses from demographic assumptions	0	0
Actuarial (gains) / losses from experience adjustments	177,000	131,152
Contributions by plan participants	0	0
Benefits paid	-6,101,000	0
Curtailments - (gains)/losses	0	0
Settlements - (gains)/losses	0	0
Closing balance	1,551,000	2,091,153

	31/03/2016	31/03/2017
Fair value of plan assets		
Opening balance	2,079,000	2,008,000
Inc-/(decrease) in scope of consolidation	0	0
Interest income on plan assets	157,000	145,781
Contributions by employer	5,938,000	0
Contributions by plan participants	0	0
Benefits paid	-6,101,000	0
Excess / (insufficient) return on plan assets (excluding interest income)	-65,000	-1,366,103
Settlements - gains / (losses)	0	0
Closing balance	2,008,000	787,678
Check benefits paid: DBO vs. Plan assets	*0*	*0*
Check contributions by plan participants: DBO vs. Plan assets	*0*	*0*

	31/03/2016	31/03/2017
Reimbursement rights		
Opening balance	0	0
Inc-/(decrease) in scope of consolidation	0	0
Cost of reimbursement rights through P&L	0	0
Contributions by employer	0	0
Benefits paid / settlements	0	0
Excess / (insufficient) return on plan assets (excl. Interest income)	0	0
Closing balance	0	0

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Calculation Net position		
Actuarial present value of retirement pension commitment (DBO)	1,551,000	2,091,153
Fair value of plan assets	2,008,000	787,678
Net funded status - liability/(asset)	**-457,000**	**1,303,475**
Unrecognized assets	0	0
Reimbursement rights	0	0
Net liability / (asset) recognized in BS	**-457,000**	**1,303,475**

Unrecognized assets		
Unrecognized assets as of 01/04	0	0
Change in unrecognized assets	0	0
Interests on unrecognized assets (share of interest income on plan assets)	0	0
Unrecognized assets as of 31/03	0	0

Profit & Loss		
Current service cost	0	0
Net Interest cost on net DBO	164,000	-33178
Past service cost	0	0
The effect of any curtailment or settlement	0	0
Interests on unrecognized asset (share of interest income on plan assets)	0	0
Cost / (return) on reimbursement rights	0	0
Employee benefit cost of the period	**164,000**	**-33178**
Actual return on plan assets	92,000	-1220322

Other comprehensive income		
Actuarial (gains) / losses	202,000	427550
(Excess) / insufficient return on plan assets (excl. interest income)	65,000	1366103
Change in unrecognized assets	0	0
Revaluation of reimbursement right	0	0
Expense / (income) recognized in OCI	**267,000**	**1793653**

Movements in net liability/(asset)		
Opening balance - Net liability/(asset)	5,050,000	-457,000
Mov. in inc-/(decrease) in scope of consolidation	0	0
Mov. in benefits paid	0	0
Mov. in contributions by the employer	-5,938,000	0
Mov. in contributions by the plan participants	0	0
Mov. in reimbursement rights	0	0
Expenses (income) recognized in income statement	164,000	-33,178
Expense (income) recognized in OCI	267,000	1,793,653
Net liability/(assets) - Status	**-457,000**	**1,303,475**
Check total from movements vs. calculation net position	*0*	*0*

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Actuarial assumptions		
Discount rate current year (%)	7.26%	6.26%
Expected rate for salary increases (%)	3.50%	3.50%
Pension trend (%)	0.00%	0.00%
Number of insured employees	1	1
Number of insured retired persons	0	0
Number of defined contribution plans	0	0
Number of defined benefit plans	1	1
thereof number of defined benefit funded	1	1
thereof number of defined benefit unfunded	0	0
Expected contributions to be paid for next year	0	1416078
Weighted average duration of the defined benefit plan (in years)	2.75	1.83

Sensitivity		
DBO at 31.3 with discount rate +1%	1,516,000	2,062,118
Corresponding service cost	0	0
DBO at 31.3 with discount rate -1%	1,588,000	2,120,879
Corresponding service cost	0	0
DBO at 31.3 with +1% salary escalation	1,574,000	2,101,613
Corresponding service cost	0	0
DBO at 31.3 with -1% salary escalation	1,528,000	2,080,776
Corresponding service cost	0	0
DBO at 31.3 with +50% withdrawal rate	1,550,000	2,090,131
Corresponding service cost	0	0
DBO at 31.3 with -50% withdrawal rate	1,553,000	2,092,173
Corresponding service cost	0	0
DBO at 31.3 with +10% mortality rate	1,550,000	2,090,152
Corresponding service cost	0	0
DBO at 31.3 with -10% mortality rate	1,553,000	2,092,152
Corresponding service cost	0	0

Major categories of total plan assets		
Cash- & cash equivalents	2,008,000	787,678
thereof non-quoted market price	2,008,000	787,678
Equity instruments	0	0
thereof non-quoted market price	0	0
Debt instruments	0	0
thereof non-quoted market price	0	0
Real estate investments	0	0
thereof non-quoted market price	0	0
All other instruments	0	0
thereof non-quoted market price	0	0
Total	**2,008,000**	**787,678**
Check total categories vs. Plan assets	*0*	*0*

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Annual comparison		
in absolute terms:		
Defined benefit obligation (DBO)	1,551,000	2,091,153
Fair value of plan assets	2,008,000	787,678
Asset ceiling	0	0
Net funded status	**-457,000**	**1,303,475**

Estimated Cash Flows (Undiscounted) in subsequent years		
1st year	13,000	15,640
2 to 5 years	1,881,000	2,075,941
6 t0 10 years	0	0
More than 10 years	0	0

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India Power Corporation Limited

Retirement Benefit Scheme by payment of Onetime lumpsum amount in lieu of Pension

(Ind AS) 19 Reporting

Disclosure accounting for the period of one year commencing from 01/04/2016

INDIA POWER CORPORATION LIMITED
Sector-V
Salt Lake City
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Plot No.-X1-2&3, Block-EP

Prepared by:

Retben Actuarial Services
04 April 2017

Retben Actuarial Services
ACTUARY - N C DAS, *FIAI*
Membership No. : IAI 00046
EMPLOYEES BENEFIT CONSULTANTS
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Ref.: 622/NCD

India Power Corporation Ltd.
Plot No.X 1,2,&3, Block-EP, Sector-V
Salt Lake City, Kolkata- 700 091

Dear Sirs,

(Ind AS) 19 valuations for India Power Corporation Ltd.
Retirement Benefit Scheme by payment of Onetime lumpsum amount in lieu of Pension

As requested, we have completed the (Ind AS) 19 calculations for the Retirement Benefit Scheme by payment of Onetime lumpsum amount in lieu of Pension and prepared the attached report showing the balance sheet items recognised as at 31 March 2017 and calculations for the Employer expense for the period of one year commencing 01 April 2016.

We shall be happy to provide further information if required.

Yours faithfully,

(N C Das)
Fellow, Institute of Actuaries of India

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N. C. Das - ✆ (M): 9874375734, e-mail: nc06das@yahoo.co.in Anita Dhar - ✆ (M): 98304 58382, 98301 05382, e-mail: anitadhar08@yahoo.com

1 Introduction

We have been requested by India Power Corporation Ltd. ("the Company") to report on the projected financial position of the liabilities of the Retirement Benefit Scheme by payment of Onetime lumpsum amount in lieu of Pension as at 31/03/2017 and to calculate the accounting expenses associated with the Scheme for the financial year commencing 01 April 2016 in terms of Indian Accounting Standard (Ind AS) 19 published by the Ministry of Corporate Affairs, Government of India.

The result set out in this Report is based on our understanding of (Ind AS 19) and its application to the Scheme. They have been prepared for the specific requirements of (Ind AS 19) and should not be used for any other purpose. In any actuarial assessment there is inherent uncertainly associated with the results as assumptions are made about future events. In particular this Report does not constitute a formal funding actuarial valuation of the Scheme and does not present any recommendation of contributions or funding levels.

This Report is provided solely for the Company's use and for the specific purposes indicated above. Except where we 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 us 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 we 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.

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2 Summary of Results

2.1 The table below shows a summary of the key results for the period ended on 31.03.2017:

Assets / Liabilities	31.03.2016 (Rupees)	31.03.2017 (Rupees)
1. Present value of obligation	4,185,000	3,892,223
2. Fair value of Plan Assets	0	0
3. Net asset/(liability) recognized in Balance Sheet	(4,185,000)	(3,892,223)

Employer Expense	Period ended 31.03.2017 (Rupees)
1. Current Service Cost	132,834
2. Total Employer Expense recognised in P&L A/c	431,982
3. Total Employer Expense recognised in Other Comprehensive Income	(64,758)

2.2 Current Service Cost represents the cost associated with the benefit accruals for the current accounting period.

2.3 We give below the bifurcation of the current and non-current obligations at the respective dates of valuation:

	As at 31.03.2016 (Rupees)	As at 31.03.2017 (Rupees)
Liability to materialize within 12 months	662,000	507,044
Liability beyond 12 months	3,523,000	3,385,179
Total	**4,185,000**	**3,892,223**

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3 Key Points

This report presents the results of actuarial calculations made to determine the Net Asset/(Liability) recognised in the Balance Sheet as at 31 March 2017 and the P & L expense for the year commencing 01 April 2016 that need to be reported under the Indian Accounting Standard (Ind AS) 19 in respect of the Leave Encashment Scheme.

The results are particularly sensitive to some assumptions, such as the discount rate, level of salary inflation, level of assumed price inflation and mortality. A decrease in the discount rate assumed or an increase in salary inflation will lead to an increase in reported cost.

A summary of data used for the calculations are set out in Appendix **A**.

The key assumptions used in the calculations are set out in Appendix **B**.

The benefits valued in this report are summarised in Appendix **C**.

The methodology used in the calculations are summarised in Appendix **D**.

The various risk factors to which the scheme is exposed are summarised in Appendix **E**.

The definitions of various terms used in this report are given in the GLOSSARY in Appendix **F**.

The Disclosure Tables are given in Appendix **G**.

INDIA POWER CORPORATION LIMITED * Sector-V Salt Lake City Kolklata-700 091 Plot No.-X1-2&3, Block-EP * KP

A Summary of Data

A.1 Membership Data

The calculations have been based on the membership information for the Scheme as at 31 March 2016 and 31 March 2017 as supplied by the company. The data are summarised in the table below:

As at	31-March 2016	31-March 2017
Number of employees	363	328
Average age (years)	50.06	50.23
Decrement adjusted future service (years)	9.51	9.35

A.2 Plan Assets

The Scheme is unfunded.

In preparing this Report we have relied on the completeness and accuracy of the information provided to us orally and in writing by or on behalf of the Company and its advisers. We have not carried out any detailed validation checks on the information provided. We have, however, carried out broad consistency checks.

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B Assumptions

B.1 One of the principal assumptions is the discount rate, which should be based upon the yields available on high quality corporate bonds at the accounting date with a term that matches that of the liabilities. However in countries where there is no deep market in such bonds, such as India, the market yields (at the balance sheet date) on government bonds should be used. The other assumptions should be chosen to reflect a best estimate of the future long-term experience.

B.2 The financial assumptions employed for the calculations as at 31 March 2016 as well as 31 March 2017 are as follows:-

- *Discount Rate:* The discounting rate for the purposes of the (Ind AS) 19 calculations has to be chosen by reference to yields on long term government bonds as no deep market in high quality corporate bonds exits in India. The discount rates have been used at 7.76% per annum as at 31 March 2016 and at 7.12% per annum as at 31 March 2017.

- *Interest Income on Plan Assets:* Not Applicable.

- *Salary Increases:* Not Applicable as the scheme is not dependent on salaries.

B.3 *Demographic assumptions*: Mortality rates prior to retirement for the valuation as at 31 March 2017 were taken from the standard table – Indian Assured Lives Mortality (2006-08) ultimate. The same for the valuation as at 31 March 2016 were also taken from the same standard table – Indian Assured Lives Mortality (2006-08) ultimate.

Withdrawal rates: The following average withdrawal rates per thousand have been assumed both for the valuation as at 31 March 2016 and 31 March 2017:

	Age	Rate
Withdrawal rate:	Upto 40 years	4.2
	40 years and above	Nil
Early retirement and disability	40-54 years	1.8
	55-59 years	2.2

C Principal Plan Provisions

We give below a summary of the principal rules of the Leave Encashment Plan.

Normal Retirement Age	60 years
Nature of Benefit	One time retirement benefit in lieu of monthly pension by paying a lumpsum amount depending on the period of service
Quantum of lumpsum benefit	25 years to 30 years : Rs 18000 Over 30 years to 35 years : Rs 24000 Above 35 years : Rs 30000
Benefit on death in service	As above depending on the period of service rendered

D Methodology Used

The methodology used in the calculations is set out below:

I have used the Projected Unit Credit (PUC) actuarial method to assess the Plan's liabilities, including those to death-in-service and incapacity benefits in respect of the existing employees.

Under the PUC method a 'projected accrued benefit' is calculated at the beginning of the year and again at the end of the year for each benefit that will accrue for all active members of the Plan. The 'projected accrued benefit' is based on the Plan's accrual formula and upon service as of the beginning or end of the year, but using a 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 of the beginning of the year for active members.

E Descriptions of Risk Exposure etc.

Characteristics of Defined Benefit Retirement Benefit Scheme by payment of Onetime lumpsum amount in lieu of Pension:

- Defined benefit plan.

Regulatory requirements:

- No direct Act/Regulations exist as on date. Scheme rules are important.
- Funding is preferable and if funded it is expected to be fully funded.
- Asset ceiling does not apply as the scheme is unfunded.

Risks to which the plan exposes the entity i.e. the valuation results may go wrong:

- Credit Risk: If the scheme is insured and fully funded on PUC basis there is a credit risk to the extent the insurer(s) is/ are unable to discharge their obligations including failure to discharge in timely manner
- Pay-as-you-go Risk: For unfunded schemes financial planning could be difficult as the benefits payable will directly affect the revenue and this could be widely fluctuating from year to year. Moreover there may be an opportunity cost of better investment returns affecting adversely the cost of the scheme.
- Discount Rate risk: The Company is exposed to the risk of fall in discount rate. A fall in discount rate will eventually increase in the ultimate cost of providing the above benefit thereby increasing the value of the liability.
- Liquidity Risk: If funded this risk may arise from the short term asset and liability cash-flow mismatch thereby causing the company being unable to pay the benefits as they fall due in the short term. Such a situation could be the result of holding large illiquid assets disregarding the results of cash-flow projections and cash outgo inflow mismatch. (Or it could be due to insufficient assets/cash.)
- Future Benefit Increase Risk: The Scheme cost is very sensitive to the assumed future benefit escalation rates. If actual future benefit escalations are higher than that assumed in the valuation actual Scheme cost and hence the value of the liability will be higher than that estimated.
- Demographic Risk: In the valuation of the liability certain demographic (mortality and attrition rates) assumptions are inherent. The Company is exposed to this risk to the extent of actual experience eventually being worse compared to that assumed thereby causing an increase in the scheme cost.
- Regulatory Risk: new Act/Regulations may come up in future which could increase the liability significantly.
- The above is a set of risk exposures relating to the Retirement Benefit Scheme in general. It is strongly advised that the Company should carefully examine the above list and add more risks if appropriate while preparing its financial disclosure statements.

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F Glossary

The definitions of various terms used in this report are given in the GLOSSARY below:

Actuarial Gain or Loss	It comprises of the following two components: i) Experience Adjustments: The effect of differences between the previous actuarial assumptions and actual experience during the current accounting period. ii) The effect of changes in actuarial assumptions.
Balance Sheet Asset/(Liability)	This is the amount recognised as net defined benefit liability or asset representing the net total of the following amounts :- 1. The present value of defined benefit obligation at the Balance Sheet date 2. Minus Past Service Cost not yet recognised. 3. Minus the fair value at the Balance Sheet date of Plan Assets out of which the obligations are expected to be settled directly.
Funded Status	This is the excess/(shortfall) of the fair value of plan assets over the Plan Liability.
Plan Liability / Present Value of Defined Benefit Obligation	It is the present value, without deducting any plan assets, of expected future payments required to settle the obligation resulting from employee service in the current and prior periods.
Current Service Cost	It is the increase in the present value of the defined benefit obligation resulting from employee service in the current period.
Past Service Costs	It is the change in the present value of obligation for employee service in the prior periods, resulting in the current period from the introduction of, or changes to, post employment benefits or other long-term employee benefits.
Interest Costs / (Income)	The increase in the net Defined Benefit Liability / (asset) over the accounting period due to interest (the time value of money)
Amount to be recognised in Income Statement Comprises of:	1. Current Service Cost 2. Any Past Service Cost and gain or loss on settlement 3. Net Interest on the net defined benefit liability / (Asset)
Amount to be recognised in Other Comprehensive Income Comprises of:	1. Actuarial Gain / Losses 2. Return on Plan Assets, excluding amount included in net interest on the net defined benefit liability / (Asset) 3. Any changes in the effect of the asset ceiling, excluding amount included in net interest on the net defined benefit liability / (Asses)

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G Disclosure Tables

Defined benefit plan (Ind AS 19)

File No: 622

India Power Corporation Limited
Retirement Benefit Scheme by payment of
Onetime lumpsum amount in lieuof pension

Rupees

	31/03/2016	31/03/2017	Remarks
Defined benefit obligation (DBO)			
Opening balance	4,367,000	4,185,000	
Inc-/(decrease) in scope of consolidation	0	0	
Current service cost	142,000	132,834	
Interest cost	304,000	299,148	
Past service cost	0	0	
Actuarial (gains) / losses from financial assumptions	4,000	121,654	
Actuarial (gains) / losses from demographic assumptions	0	0	
Actuarial (gains) / losses from experience adjustments	293,000	-186,412	
Contributions by plan participants	0	0	
Benefits paid	-925,000	-660,000	
Curtailments - (gains)/losses	0	0	
Settlements - (gains)/losses	0	0	
Closing balance	4,185,000	3,892,223	

Fair value of plan assets			
Opening balance	0	0	Unfunded Scheme
Inc-/(decrease) in scope of consolidation	0	0	
Interest income on plan assets	0	0	
Contributions by employer	925,000	660,000	
Contributions by plan participants	0	0	
Benefits paid	-925,000	-660,000	
Excess / (insufficient) return on plan assets (excluding interest income)	0	0	
Settlements - gains / (losses)	0	0	
Closing balance	0	0	
Check benefits paid: DBO vs. Plan assets	*0*	*0*	
Check contributions by plan participants: DBO vs. Plan assets	*0*	*0*	

Reimbursement rights			
Opening balance	0	0	
Inc-/(decrease) in scope of consolidation	0	0	
Cost of reimbursement rights through P&L	0	0	
Contributions by employer	0	0	
Benefits paid / settlements	0	0	
Excess / (insufficient) return on plan assets (excl. Interest income)	0	0	
Closing balance	0	0	

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Calculation Net position			
Actuarial present value of retirement pension commitment (DBO)	4,185,000	3,892,223	
Fair value of plan assets	0	0	
Net funded status - liability/(asset)	**4,185,000**	**3,892,223**	
Unrecognized assets	0	0	
Reimbursement rights	0	0	
Net liability / (asset) recognized in BS	**4,185,000**	**3,892,223**	

Unrecognized assets		
Unrecognized assets as of 01/04	0	0
Change in unrecognized assets	0	0
Interests on unrecognized assets (share of interest income on plan assets)	0	0
Unrecognized assets as of 31/03	0	0

Profit & Loss			
Current service cost	142,000	132834	
Interest cost on net DBO	304,000	299148	
Past service cost	0	0	
The effect of any curtailment or settlement	0	0	
Interests on unrecognized asset (share of interest income on plan assets)	0	0	
Cost / (return) on reimbursement rights	0	0	
Employee benefit cost of the period	**446,000**	**431982**	
Actual return on plan assets	0	0	

Other comprehensive income			
Actuarial (gains) / losses	297,000	-64758	
(Excess) / insufficient return on plan assets (excl. interest income)	0	0	
Change in unrecognized assets	0	0	
Revaluation of reimbursement right	0	0	
Expense / (income) recognized in OCI	**297,000**	**-64758**	

Movements in net liability/(asset)		
Opening balance - Net liability/(asset)	4,367,000	4,185,000
Mov. in inc-/(decrease) in scope of consolidation	0	0
Mov. in benefits paid	0	0
Mov. in contributions by the employer	-925,000	-660,000
Mov. in contributions by the plan participants	0	0
Mov. in reimbursement rights	0	0
Expenses (income) recognized in income statement	446,000	431,982
Expense (income) recognized in OCI	297,000	-64,758
Net liability/(assets) - Status	**4,185,000**	**3,892,223**
Check total from movements vs. calculation net position	*0*	*0*

INDIA POWER CORPORATION LIMITED
KP
Sector-V
Salt Lake City
Kolklata-700 091
Plot No.-X1-2&3, Block-EP

Actuarial assumptions			
Discount rate current year (%)	7.76%	7.12%	
Expected rate for salary increases (%)	0.00%	0.00%	
Pension trend (%)	0	0	
Number of insured employees	363	328	
Number of insured retired persons	0	0	
Number of defined contribution plans	0	0	
Number of defined benefit plans	1	1	
thereof number of defined benefit funded	0	0	
thereof number of defined benefit unfunded	1	1	
Expected contributions to be paid for next year	0	0	
Weighted average duration of the defined benefit plan (in years)	9.51	9.35	

Sensitivity			
DBO at 31.3 with discount rate +1%		3,705,341	
Corresponding service cost		125,161	
DBO at 31.3 with discount rate -1%		4,098,309	
Corresponding service cost		141,459	
DBO at 31.3 with +1% salary escalation		0	
Corresponding service cost		0	
DBO at 31.3 with -1% salary escalation		0	
Corresponding service cost		0	
DBO at 31.3 with +50% withdrawal rate		3,891,670	
Corresponding service cost		132,778	
DBO at 31.3 with -50% withdrawal rate		3,892,783	
Corresponding service cost		132,890	
DBO at 31.3 with +10% mortality rate		3,901,079	
Corresponding service cost		133,196	
DBO at 31.3 with -10% mortality rate		3,883,306	
Corresponding service cost		132,468	

Major categories of total plan assets			
Cash- & cash equivalents	0	0	Unfunded Scheme
thereof non-quoted market price	0	0	
Equity instruments	0	0	
thereof non-quoted market price	0	0	
Debt instruments	0	0	
thereof non-quoted market price	0	0	
Real estate investments	0	0	
thereof non-quoted market price	0	0	
All other instruments	0	0	
thereof non-quoted market price	0	0	
Total	0	0	
Check total categories vs. Plan assets	*0*	*0*	

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Annual comparison			
in absolute terms:			
Defined benefit obligation (DBO)	4,185,000	3,892,223	
Fair value of plan assets	0	0	
Asset ceiling	0	0	
Net funded status	**4,185,000**	**3,892,223**	

Estimated Cash Flows (Undiscounted) in subsequent years		
1st year		524,784
2 to 5 years		2,337,262
6 t0 10 years		1,434,870
More than 10 years		1,702,192

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