BEFORE BIHAR ELECTRICITY REGULATORY COMMISSION



FILING OF THE PETITION FOR TRUING UP OF FY 2016-17, ANNUAL PERFORMANCE REVIEW FOR FY 2017-18 AND ANNUAL REVENUE REQUIREMENT FOR FY 2018-19 BY BIHAR STATE POWER GENERATION COMPANY LIMITED UNDER BERC (TERMS AND CONDITIONS FOR DETERMINATION OF TARIFF) REGULATIONS, 2007 ALONG WITH THE OTHER GUIDELINES AND DIRECTIVES ISSUED BY THE BERC FROM TIME TO TIME AND UNDER SECTION 45, 46, 47, 61, 62, 64 AND 86 OF THE ELECTRICITY ACT 2003 READ WITH THE RELEVANT GUIDELINES

FILED BY,

BIHAR STATE POWER GENERATION COMPANY LIMITED, Patna



Chief Engineer (Generation)

5TH FLOOR, VIDYUT BHAWAN-1, J. L. NEHRU MARG, PATNA - 800 001

Date: 8 December 2017



BEFORE THE BIHAR ELECTRICITY REGULATORY COMMISSION, PATNA

IN THE MATTER OF:

Filing of the Petition in regards to Truing up for the FY 2016-17, Annual Performance Review (APR) for FY 2017-18 and Annual Revenue Requirement (ARR) for FY 2018-19 under BERC (Terms and Conditions for Determination of Tariff) Regulations, 2007 along with the other guidelines and directions issued by the BERC from time to time and under Section 45, 46, 47, 61, 62, 64 and 86 of The Electricity Act 2003 read with the relevant guidelines.

AND

IN THE MATTER OF:

The Petitioner respectfully submits as under: -

- 1. BSPGCL was formerly integrated part of Bihar State Electricity Board (hereinafter referred to as "BSEB" or "Board") which was engaged in electricity generation, transmission, distribution and related activities in the State of Bihar.
- 2. The Board is now unbundled into five (5) successor companies Bihar State Power (Holding) Company Limited, Bihar State Power Generation Company Limited (hereinafter referred to as "Genco"), Bihar State Power Transmission Company Limited (hereinafter referred to as "Transco"), North Bihar Power Distribution Company Limited and South Bihar Power Distribution Company Limited (hereinafter referred to as "Discoms") as per Energy Department, Government of Bihar Notification no: प्र०-2/बोर्ड पुर्न० सं०-31/ 2008 (खंड-I) 17 under the Bihar State Electricity Reforms Transfer Scheme 2012.
- 3. Pursuant to the enactment of the Electricity Act, 2003, every utility is required to submit its Aggregate Revenue Requirement (ARR) for the control period and Tariff Petitions as per procedures outlined in section 61, 62 and 64, of Electricity Act 2003, and the governing regulations thereof.
- 4. BSPGCL filed its first Petition on 10th December 2015 for True up of ARR of FY 2014-15, Annual Performance Review (APR) of ARR of FY 2015-16 and determination of ARR and Generation tariff for FY 2016-17. The Commission issued the order dated 21st March, 2016, truing up ARR for FY 2014-15, review of ARR for FY 2015-16 and determination of ARR and Generation tariff for FY 2016-17.
- 5. Later on, BSPGCL filed its next Petition on 18th November 2016 for true up of ARR for FY 2015-16, performance review of ARR of FY 2016-17 and determination of ARR and Generation tariff for FY 2017-18. The Commission issued the order dated 9th March, 2017,



truing up ARR for FY 2015-16, review of ARR for FY 2016-17 and determination of ARR and Generation tariff for FY 2017-18.

- 6. The present petition is filed with the Hon'ble Commission for Truing up of the ARR for the FY 2016-17, Annual Performance Review (APR) for FY 2017-18 and Annual Revenue Requirement (ARR) for FY 2018-19.
- 7. This petition has been prepared in accordance with the provisions of Sections 61, 62 of the Electricity Act, 2003 and has taken into consideration the Chapter 6 Multi-Year Tariff of the BERC (Terms and Conditions for Determination of Tariff) Regulations 2007.
- 8. BSPGCL along with this petition is submitting the regulatory formats with data & information to an extent applicable and would make available any further information/additional data required by the Hon'ble Commission during the course of proceedings.

Prayers to the Commission:

BSPGCL respectfully prays that the Hon'ble Commission may:

- a) Admit this Petition;
- b) Condone the delay in filing this petition in view of the time extension sought by the Petitioner;
- c) Examine the proposal submitted by the Petitioner in the enclosed petition for a favorable dispensation;
- d) Pass suitable orders with respect to the Truing up for FY 2016-17 for unit existing plant;
- e) Pass suitable orders with respect to APR for FY 2017-18 as per the revised estimates;
- f) Pass suitable orders with respect to ARR for 2018-19 to be recovered from Distribution Licensees towards supply of power from power plant;
- g) Pass separate tariff order for the Petitioner against the present petition;
- h) Condone any inadvertent omissions/errors/shortcomings and permit Petitioner to add/change/modify/alter this filing and make further submissions as may be required at a future date;
- i) Pass such Order, as the Hon'ble Commission may deem fit and appropriate keeping in view the facts and circumstances of the case.

Bihar State Power Generation Company Limited Petitioner

Patna

Dated: 7th December 2016



BEFORE THE BIHAR ELECTRICITY REGULATORY COMMISSION, PATNA

IN THE MATTER OF:

Filing of the Petition in regards to approval of Tariff for the FY 2018-19 for Barauni Thermal Power Station Barauni along with APR for FY 2017-18 and True Up for FY 2016-17 under BERC (Terms and Conditions for Determination of Tariff) Regulations, 2007 along with the other guidelines and directions issued by the BERC from time to time and under Section 45, 46, 47, 61, 62, 64 and 86 of the Electricity Act 2003 read with the relevant guidelines.

AND

IN THE MATTER OF:

BIHAR STATE POWER GENERATION COMPANY LIMITED (hereinafter referred to as "BSPGCL" which shall mean for the purpose of this petition the Petitioner), having its registered office at Vidyut Bhawan, Bailey Road, Patna.

.....Petitioner

AFFIDAVIT

I, Amar Kant Jha, son of Late Sri Radha Kant Jha, aged 59 years residing at B - 9, BSEB Colony, Patel Nagar, Patna - 800 023 at present and do hereby solemnly affirm and state as follows:-

- 1. I am posted as Chief Engineer (Generation) at the Bihar State Power Generation Company Limited (BSPGCL), as such am well acquainted with facts and circumstances and duly authorized to make this affidavit.
- 2. I, the deponent named above do hereby verify that the contents of the accompanying tariff petition are based on the records of the BSPGCL maintained in the ordinary course of business and believed by them to be true and I believe that no part of it is false and no material has been concealed there from.



Details of Enclosure

a) Tariff petition for the FY 2018-19 for Barauni Thermal Power Station Barauni along with APR for FY 2017-18 and True Up for FY 2016-17.
b) Petition Fee - Rs. 27,50,000/- vide Chq. No. _____ dated _____

	В	Chief Engineer (Generation) Bihar State Power Generation Company Limited Petitioner			
Place: Patna Dated:	6 th December 2017				
the person m	Advocate, aking this affidavit is know he is the same person alle	vn to me through th	ne perusal of record		
Advocate					
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CHAPTER 1 INTRODUCTION

1.1. Background

- 1.1.1. Bihar State Electricity Board ("Board" or "BSEB") was originally constituted on 1st April 1958 under Section 5 of the Electricity (Supply) Act, 1948. The Board was engaged in the management of electricity generation, transmission, distribution and related activities in the State of Bihar.
- 1.1.2. Under the 'Bihar State Electricity Reforms Transfer Scheme 2012', BSEB has been unbundled into five companies: Bihar State Power (Holding) Company, Bihar State Power Transmission Company, Bihar State Power Generation Company, South Bihar Power Distribution Company and North Bihar Power Distribution Company with effect from 1st November' 2012 vide notification no. प्र०-2/बोर्ड पुर्नि० सं०-31/ 2008 (खंड-I) 17 dated 30.10.2012
 - a. "Bihar State Power Holding Company Limited" The Company owning shares of newly incorporated reorganized four companies i.e. Bihar State Power Generation Company Limited, Bihar State Power Transmission Company Limited, South Bihar Power Distribution Company Limited, and North Bihar Power Distribution Company Limited with function of developing integrated policy and planning and funds management
 - b. "Bihar State Power Generation Company Limited" The Company to which the Generating Undertakings of the Board have been transferred with function of owning and operating the power plants in the State of Bihar
 - c. "Bihar State Power Transmission Company Limited"- The Company to which the Transmission Undertakings of the Board have been transferred with function of transmission of electricity within the State of Bihar
 - d. "South Bihar Power Distribution Company Limited" And "North Bihar Power Distribution Company Limited" The Companies to which the Distribution Undertakings of the Board have been transferred on the basis of location of assets in respective jurisdiction of distribution companies.

1.2. Profile of BSPGCL

- 1.2.1. Barauni Thermal Power Station (BTPS): Barauni Thermal Power Station (BTPS) is the only power station under the aegis of BSPGCL. The Barauni Thermal Power Plant was constructed in three stages.
 - a) **Stage –I of 2 X 15 MW** and **Stage II of 2 X 50 MW** have already been retired due to their old technology and high polluting nature.
 - b) **Stage -III: 2 X 110 MW**: These thermal units are coal based and of BHEL make. The unit 6 was commissioned on 01 May, 1983 and the unit 7 was



commissioned on 31 March, 1985. While Unit 6 is in the final stages of Renovation & Modernisation, Unit 7 was operational from November 2017 to May 2017 after its R&M. However, Unit 7 has been shut down on the orders of Central Pollution Control Board as BSPGCL was not able to share online data on the CPCB web portal.

c) The Petitioner also commissioning a **2** x **250 MW BTPS Extension Project** consisting of Units 8 and Unit 9. The detailed status of the BTPS is also given in the table below:

Table 1: Present status of Units of BTPS, Barauni

Generating Unit	Capacity/ De-rated Capacity (MW)	CoD	Present Status
Unit – 1	15 MW	26.10.1966	Retired on 16.02.1983
Unit – 2	15 MW	16.01.1963	Retired on 26.11.1985
Unit – 3	15 MW	20.10.1963	Retired on 05.10.1985
Unit – 4	50 MW	09.11.1969	Retired on 12.03.2012
Unit – 5	50 MW	01.12.1971	Retired on 12.03.2012
Unit - 6	110/105 MW	01.05.1983	Under R&M (Expected CoD on 10 Jan 2018)
Unit – 7	110/105 MW	31.03.1985	Operational from November 2016 to May 2017 (Expected synchronisation on 25 Dec 2017)
Unit - 8	250 MW	Expected 15.12.2017	Being Commissioned
Unit – 9	250 MW	Expected 24.02.2018	Being Commissioned
Total	720/710 MW		

1.3. Procedural History

1.3.1. The procedural history of the filings of petitions related to this instant Petition is tabulated below for ready reference:

Table 2: Procedural History of Filing

S.l	Scope of Filing in Petition	Filing Date	Order Date	Remarks
1	Petition for True-up of FY 2014-15, APR for FY 2015-16 and ARR for FY 2016-17 for BSPGCL	10 th December 2015	21st March 2016	-
2	Petition for True-up of FY 2015-16, APR for FY 2016-17 and ARR for FY 2017-18 for BSPGCL	18 th November 2016	9 th March 2017	
3	Petition for determination of Provisional Tariff for BTPS Extension Unit 8 and 9 for FY 2017-18	25 th October 2017		Provisional tariff for Unit 8 and 9 for FY 2017-18.



1.4. Current petition

- 1.4.1. Under Section 62 of the Electricity Act 2003, licensee is required to furnish details as may be specified by the Commission for determination of tariff. In addition, as per the regulations issued by the Hon'ble Commission, BSPGCL is required to file petition for all reasonable expenses which it believes it would incur over the next financial year and seek the approval of the Hon'ble Commission for the same. The filing is to be done based on the projections of the expected revenue and costs.
- 1.4.2. This Petition consists of proposal towards the Truing up of FY 2016-17, APR of FY 2017-18 and ARR for FY 2018-19 and the BERC Tariff Formats (**Annexure I**).
- 1.4.3. The current petition has been prepared in accordance with the provisions of the following Acts/ Policies/ Regulations:
 - a. Electricity Act 2003;
 - b. National Electricity Policy;
 - c. National Tariff Policy;
 - d. BERC (Terms and Conditions for Determination of Tariff) Regulations, 2007
- 1.4.4. BSPGCL has made genuine efforts for compiling all relevant information relating to the Truing-up/ APR / ARR petition as required by the regulations issued by the Hon'ble Commission and has also made every effort to ensure that information provided to the Hon'ble Commission is accurate and free from material errors. However, there may be certain deficiencies owing to the limited operations of Generation Company due to inevitable circumstances. BSPGCL submits that it would be able to stabilise its operations in terms of MIS and other compliances by mid of FY 2018-19 after completion of R&M of Units 6 and 7 and Commissioning of Units 8 and 9. Hence, BSPGCL prays to the Hon'ble Commission that the information provided may be accepted for the current filing and at the same time BSPGCL assures that it is taking appropriate measures to improve its MIS for improved data collection.

1.5. Contents of the petition

- 1.5.1. This petition comprises of main section namely:
 - ✓ Truing up for FY 2016-17
 - ✓ Annual Performance Review for FY 2017-18
 - ✓ Aggregate Revenue Requirement (ARR) for FY 2018-19



CHAPTER 2 TRUING-UP FOR FY 2016-17

2.1. Approach of Truing-up Petition for FY 2015-16

- 2.1.1. The Hon'ble Commission in the order dated 9th March 2017 undertook the performance review for FY 2016-17 and approved the same based on the revised estimates as proposed by BSPGCL after due consideration and analysis.
- 2.1.2. The Petitioner now seeks for truing-up of the expenses for the FY 2016-17 as per the Annual accounts (Enclosed as **Annexure II**) as applicable for various heads of expenditure and requests the Commission to approve the same.

2.2. Summary of True-up for FY 2016-17

2.2.1. The following table summarizes the truing-up computation for FY 2016-17 on an overall basis for reference purpose. The Petitioner has provided the details of the truing up in the subsequent paragraphs.

Table 3: Summary of Revised ARR proposed as per Truing-up for FY 2016-17

Sr. No	Particular	Approved in MYT Order for FY 2016-17	Approved in T.O. FY 2017-18 (RE)	Submitted in R.E. (Petition FY 2017-18)	As per Accounts FY 2016- 17
1	Fuel Cost	299.19	63.67	66.10	51.01
2	O&M expenses (Gross)	51.29	47.19	51.58	62.73
3	Interest and finance charges	-	3.28	-	-
4	Interest on working capital	18.25	5.59	9.88	5.70
5	Depreciation	-	-	0.80	9.58
6	Return on Equity	44.41	7.19	13.96	8.53
7	Less: Expenses Capitalized	-	ı	23.18	-
8	Annual Revenue Requirement	413.14	126.92	119.15	137.55
9	Less: Non-tariff income	0.20	0.50	0.50	13.36
10	Net ARR	412.94	126.42	118.65	124.19
11	Surplus of FY 2015-16 adjusted	-	-	-	(1.82)
12	Net ARR cost	412.94	126.42	118.65	126.01

2.3. Capital Investment

2.3.1. The following table summarizes the actual capital expenditure across various schemes till FY 2016-17.

Table 4: Break-up of Capex for FY 2016-17

Sl. No.	Cost Component	Total project cost	Capex till FY 2016-17
1	Cost associated with R&M of BTPS units	581.2	539.63
2	Cost allocated to Ganga Water Scheme	173	31.71



Sl. No.	Cost Component	Total project cost	Capex till FY 2016-17
3	Cost allocated to BTPS Railway Siding	25.64	22.02
	Grand Total	779.84	593.36

2.3.2. Following table summarizes the truing up of the Capital Investment that as per Audited Accounts for FY 2016-17.

Table 5: CWIP for FY 2016-17

Sr. No.	Particular	Approved in MYT Order for FY 2016-17	Approved in T.O. FY 2017-18 (RE)	Submitted in R.E. (Petition FY 2017-18)	As per Accounts FY 2016-17
1	Opening CWIP	927.00	763.21	760.51	936.78
2	Less: CWIP Portion of Extension Project	-	-	-	
3	Net Opening CWIP (1-2)	927.00	763.21	760.51	936.78
4	Add: New Investment	61.00	62.26	62.26	135.18
5	Add: Expenditure of R&M of 6 & 7	-	47.19	24.57	-
6	Total Investment (3+4+5)	988.00	872.66	847.34	1,071.96
7	Less: Capitalisation from CWIP	988.00	532.16	507.77	146.19
8	Less: Capitalisation from New Investments	-	-	-	
9	Total Capitalisation (7+8)	988.00	532.16	507.77	146.19
10	Net Closing CWIP (6-9)	-	340.50	339.57	925.77

- 2.3.3. The Petitioner hereby submits the reasons for the deviations as follows:
 - a) The Opening CWIP has got revised due to finalization of the Annual Accounts of FY 2016-17.
 - b) As per the Annual Accounts for FY 2016-17, complete investment for Existing Project and 21.65% of investment for works shared between Existing and Extension Project i.e. 176.27 Cr for Development, Office and Other Expenses have formed part of the CWIP for Existing Project for FY 2016-17.
 - c) The capitalization as reflected in the table above is only for the Existing Project.
- 2.3.4. The Petitioner requests Hon'ble Commission to approve the revised Capital Investment and CWIP figures as proposed in this filing for FY 2016-17.

2.4. Gross Fixed Assets

- 2.4.1. It is submitted that the opening and closing GFA for FY 2016-17, do not include any capitalisation with respect to the BTPS Extension project.
- 2.4.2. Following table summarizes the truing up of the Gross Fixed Assets for FY 2016-17:



Sr. No.	Particular	Approved in MYT Order for FY 2016-17	Approved in T.O. FY 2017-18 (RE)	Submitted in R.E. (Petition FY 2017-18)	As per Accounts FY 2016- 17
1	Opening GFA	69.28	395.12	395.11	395.12
2	Less: Assets Revalued	-	-	-	-
3	Original Value of GFA	69.28	395.12	395.11	395.12
4	Less: Asset Retirements	-	105.00	105.00	-
5	Original Value of GFA	69.28	290.12	290.11	395.12
6	Additions during the year	988.00	532.16	507.77	184.91
7	Closing GFA (Depreciable Assets)	1,057.28	822.28	797.88	580.03

Table 6: Gross Fixed Asset as per Truing-up for FY 2016-17

- 2.4.3. The Petitioner hereby submits the reasons for the deviations in GFA are as follows:
 - a) An addition of Rs. 184.91 Cr. in the GFA has taken place during the year 2016-17;
 - b) An additional amount of Rs 37.83 Cr has been capitalized directly without forming part of CWIP.
- 2.4.4. The Petitioner requests Hon'ble Commission to approve the revised Gross Fixed Asset as proposed in this filing for FY 2016-17.

2.5. Depreciation

2.5.1. The Petitioner submits that it is claiming depreciation for FY 2016-17 as per the Annual accounts for FY 2016-17. The Hon'ble Commission is requested to approve the amount of depreciation as per the Annual Accounts of FY 2016-17.

Table 7: Depreciation proposed as per Truing-up for FY 2016-17

Sr. No.	Particular	Approved in MYT Order for FY 2016- 17	Approved in T.O. FY 2017-18 (RE)	Submitted in R.E. (Petition FY 2017-18)	As per Accounts FY 2016-17
1	Opening GFA	69.28	395.12	395.11	395.12
2	Less: Value of Land	-	135.66	-	135.66
3	Net Opening GFA (1-2)	69.28	259.46	395.11	259.45
4	Less: Asset retirement	-	105.00	105.00	-
5	Additions during the year	988.00	532.16	507.77	184.91
6	Closing GFA (3-4+5)	1,057.28	686.62	797.88	444.37
7	Average GFA {(3+6)/2}	563.28	473.04	596.50	351.91
8	Weighted average rate of depreciation	4.99%	6.00%	4.99%	6.00%
9	Gross Depreciation (7*8)	28.11	28.38	12.40	21.11
10	Opening Grants	2,487.93	534.39	534.39	534.39
11	Add: Grants during the year	988.00	46.81	46.81	46.81



Sr. No.	Particular	Approved in MYT Order for FY 2016- 17	Approved in T.O. FY 2017-18 (RE)	Submitted in R.E. (Petition FY 2017-18)	As per Accounts FY 2016-17
12	Closing Grants (10+11)	3,475.93	581.20	581.20	581.20
13	Average Grants {(10+12)/2}	2,981.93	557.80	557.80	557.80
	Weighted average rate of				
14	depreciation	4.99%	6.00%	4.99%	6.00%
	Depreciation for GFA on				
15	Grants (13*14)	148.80	33.47	11.60	33.47
	Depreciation as per				
16	Accounts	-	-	0.80	9.58

2.5.2. It is submitted that the depreciation amount as per Annual Accounts for FY 2016-17, is less than proportional to 6% of average GFA on the account that the Plant was operational for only 5 months during FY 2016-17.

2.6. Interest and Finance Charges

2.6.1. In the APR order for 2016-17, the Hon'ble Commission had approved an interest and finance charge of Rs 3.28 Cr for 5 months of plant operation on normative basis as against no claim made by the Petitioner. The Petitioner submits that there is "**NIL**" interest and finance charges incurred by it during FY 2016-17.

2.7. Return on Equity

- 2.7.1. In the APR order for FY 2016-17, the Commission had calculated RoE for a period of 5 months.
- 2.7.2. The Petitioner submits that it has calculated the RoE on normative basis for FY 2016-17 for plant operational period of 5 months, as per the following table:

Table 8: RoE for True-up for FY 2016-17

Sr. No.	Particular	Approved in MYT Order for FY 2016- 17	Approved in T.O. FY 2017-18 (RE)	Submitted in R.E. (Petition FY 2017-18)	As per Accounts FY 2016-17
1	Opening GFA	69.28	290.12		395.12
2	Opening Equity Balance (30% of GFA)	20.78	87.04		118.54
3	Add: Equity During the year (30% of Capitalisation)	296.40	72.47		55.47
4	Closing equity balance (1+2)	317.18	159.51		174.01
5	Average Equity {(2+4)/2}		123.27		146.27
6	Closing GFA			797.88	580.03



Sr. No.	Particular	Approved in MYT Order for FY 2016- 17	Approved in T.O. FY 2017-18 (RE)	Submitted in R.E. (Petition FY 2017-18)	As per Accounts FY 2016-17
7	Equity to be considered for			220.26	146 27
/	GFA (@30% of average GFA)			239.36	146.27
8	Rate of Return per annum %	14.00%	14.00%	14.00%	14.00%
9	Return on Equity	44.41	7.19	13.96	8.53

2.7.3. The Petitioner requests the Hon'ble Commission to approve the RoE as determined above for FY 2016-17.

2.8. Operation & Maintenance Expenses

2.8.1. Employee Cost

2.8.1.1. The Petitioner submits that the actual expense for FY 2016-17 has been claimed for True Up of FY 2016-17. Employee expense to the tune of 30% have been deducted towards employee expenses for BTPS extension project. Following table summarizes the truing up of the Employee Cost that is proposed for FY 2016-17:

Table 9: Employee Expenses proposed as per Truing-up for FY 2016-17

Sr. No.	Particular	Approved in MYT Order for FY 2016- 17	Approved in T.O. FY 2017-18 (RE)	Submitted in R.E. (Petition FY 2017-18)	As per Accounts FY 2016-17
1	Employee cost	27.72	29.46	29.46	29.62
2	Add: Indexation	1.29	-	-	-
3	Add: New Manpower cost	6.00	5.00	5.00	-
4	Sub-total (1+2+3)	35.01	34.46	34.46	29.62
5	Less: Manpower cost for extension project (30% cost)	8.71	10.34	8.84	8.88
6	Total Employee Cost	26.30	24.12	25.62	20.73

2.8.1.2. The Petitioner requests the Hon'ble Commission to approve the employee cost for FY 2016-17 as per the above table.

2.8.2. Repair and Maintenance Expenses

- 2.8.2.1. Based on the Audited Accounts, the Petitioner has claimed the actual R&M expense as per the following table. The Hon'ble Commission is requested to approve the amount of R&M as per the Annual Accounts of FY 2016-17.
- 2.8.2.2. It is also submitted that the amount of R&M solely belongs to the Existing units since the Extension units of BTPS were under commissioning during FY 2016-17. Hence the amount has not been reduced by 30%.



Table 10: R&M Expenses proposed as per Truing-up for FY 2016-17

Sr. No.	Particular	Approved in MYT Order for FY 2016- 17	Approved in T.O. FY 2017-18 (RE)	Submitted in R.E. (Petition FY 2017-18)	As per Accounts FY 2016-17
1	R&M Cost	5.00	5.00	8.89	18.07
2	Add: Water Cost	2.00	1.00		
3	Total R&M Cost	7.00	6.00	8.89	18.07

2.8.3. Administration & General (A&G) Expenses

- 2.8.3.1. The Petitioner submits that it is claiming A&G expenses as per Audited accounts of FY 2016-17. A&G expense to the tune of 30% has been reduced for Extension project.
- 2.8.3.2. It is also submitted that the payments made to CISF as per the Annual Accounts have been shown separately in the table below. Only 70% of the amount paid to CISF is being claimed for the True up of 2016-17.
- 2.8.3.3. Following table summarizes the truing up of the A&G Expenses that is proposed for FY 2016-17:

Table 11: A&G Expenses proposed as per Truing-up for FY 2016-17

Sr. No.	Particular	Approved in MYT Order for FY 2016-17	Approved in T.O. FY 2017-18 (RE)	Submitted in R.E. (Petition FY 2017-18)	As per Accounts FY 2016-17
1	A&G Expenses (excluding CISF)	2.50	3.60	3.60	7.44
2	CISF Expenses				16.25
3	Gross A&G Expense	2.50	3.60	3.60	23.69
4	Add: Indexation	0.12	-	-	-
5	Sub-total (1+4)	2.62	3.60	3.60	7.44
6	Less: A&G cost for extension project (30%)	0.79	1.08	1.08	2.23
7	Add: Payment to CISF @70%	7.00	8.50	8.50	11.38
8	Total A&G expenses	8.83	11.02	11.02	16.58

2.8.3.4. The Petitioner requests Hon'ble Commission to approve the revised A&G Expenses as proposed in this filing for FY 2016-17.

2.8.4. **Holding Company Cost**

- 2.8.4.1. In the APR order for FY 2016-17, the Commission had approved an expense of Rs 6.05 towards Holding Company Cost.
- 2.8.4.2. The Petitioner submits that it has incurred an expense of Rs 7.35 Cr towards Holding Company Cost for FY 2016-17 as per Audited Accounts for FY 2016-17.



2.8.4.3. The Hon'ble Commission is requested to approve the expenses towards Holding Company Cost.

2.8.5. Summary of O&M Expenses for FY 2016-17

2.8.5.1. Based on above, following table summarizes the truing up of the O&M Expenses that are proposed for FY 2016-17:

Table 12: Summary of O&M Expenses proposed as per Truing-up for FY 2016-17

Sr. No.	Particular	Approved in MYT Order for FY 2016-17	Approved in T.O. FY 2017-18 (RE)	Submitted in R.E. (Petition FY 2017-18)	As per Accounts FY 2016-17
1	Employee cost	26.30	24.12	25.62	20.73
2	A&G Expenses	8.83	11.02	11.02	16.58
3	R&M expenses	7.00	6.00	8.89	18.07
4	Holding Company Expenses allocated	9.16	6.05	6.05	7.35
5	Total O&M cost	51.29	47.19	51.58	62.73
6	Expenses Capitalised	-	-	23.18	-
7	Net O&M Expenses	51.29	47.19	28.40	62.73

2.8.5.2. The Petitioner requests Hon'ble Commission to approve the revised O&M Expenses as proposed in this filing for FY 2016-17 based on the Audited accounts.

2.9. Non-Tariff Income

- 2.9.1. In the APR order for 2016-17, the Hon'ble Commission had approved Non-Tariff Income of Rs. 0.50 Cr.
- 2.9.2. As per the Audited accounts for FY 2016-17, the Petitioner has earned a Non Tariff Income of Rs 13.36.
- 2.9.3. The Petitioner requests the Hon'ble Commission to approve the revised Non-Tariff Income as proposed in this filing for FY 2016-17.

2.10. Fuel Cost

- 2.10.1. In the APR order for FY 2016-17, the Hon'ble Commission had approved Fuel cost of Rs 66.10 Cr for FY 2016-17.
- 2.10.2. The Actual Plant Operating Parameters for the 5 operational months of FY 2016-17 are as given below:



Table 13: Plant Operating Parameters for FY 2016-17

SL	M/Y	PLF	SHR		SFC		Auxiliary	Gross	Coal
No.		(%)	(Kcal/K wh)	Secondary fuel consumption	Specific Fuel Consumption	Specific Fuel Consumption	Consumption (MU)	Generatio n (MU)	Consum ption
				(LDO) (KL)	(coal) (Kg/Kwh)	(LDO) (Ml/Kwh)			(MT)
1	Nov'16	21.80	4767.85	523.31	0.8	30.31	2.07168	23.044	18713
2	Dec'16	40.52	4516.28	796	0.77	24	3.97896	33.149	25758
3	Jan'17	55.71	4195.397	406	0.75	8.9	5.4714	45.595	34206
4	Feb'16	20.93	4068.125	67	0.75	4.33	1.85688	15.474	11611
5	Mar'17	24.35	4564.209	319.48	0.75	16.033	2.39112	19.926	14948

- 2.10.3. The Petitioner submits that it is claiming Rs 51.01 Cr towards Fuel Cost for cost of coal and oil as per the Audited accounts for FY 2016-17.
- 2.10.4. The Hon'ble Commission is requested to approve the fuel cost as per Audited accounts for FY 2016-17.

2.11. Interest on Working Capital

- 2.11.1. The Petitioner submits that it has claimed the Interest on Capital on Normative basis as per the actual base parameters it is dependent on.
- 2.11.2. The Hon'ble Commission is requested to approve the Interest on Working Capital as determined by the Petitioner.

Table 14: Interest on Working Capital proposed as per Truing-up for FY 2016-17

Sr. No.	Particular	Approved in MYT Order for FY 2016-17	Approved in T.O. FY 2017-18 (RE)	Submitted in R.E. (Petition FY 2017-18)	As per Accounts FY 2016-17
	Cost of coal & secondary fuel	40.05	10.51	44.00	0.70
1	Oil for 2 months	49.87	10.61	11.02	8.50
2	O&M exp. (1 month)	4.27	3.93	4.30	5.23
3	Maintenance spares @1% of opening GFA with 6% escalation	0.73	4.19	4.19	4.19
4	Receivables -2 months (from total ARR)	68.82	21.07	47.50	20.70
5	Total working capital	123.70	39.80	67.00	38.62
6	Rate of interest	14.75%	14.05%	14.75%	14.75%
7	Interest on working capital	18.25	5.59	9.88	5.70

2.12. Annual Revenue Requirement for FY 2016-17

2.12.1. Based on above, following table summarizes the truing up of FY 2016-17:



Table 15: Annual Revenue Requirement as per Truing-up for FY 2016-17

Sr. No.	Particular	Approved in MYT Order for FY 2016-17	Approved in T.O. FY 2017-18 (RE)	Submitted in R.E. (Petition FY 2017-18)	As per Accounts FY 2016- 17
1	Fuel Cost	299.19	63.67	66.10	51.01
2	O&M expenses (Gross)	51.29	47.19	51.58	62.73
3	Interest and finance charges	-	3.28	-	-
4	Interest on working capital	18.25	5.59	9.88	5.70
5	Depreciation	-	-	0.80	9.58
6	Return on Equity	44.41	7.19	13.96	8.53
7	Less: Expenses Capitalized	-	-	23.18	-
8	Annual Revenue Requirement	413.14	126.92	119.15	137.55
9	Less: Non-tariff income	0.20	0.50	0.50	13.36
10	Net ARR	412.94	126.42	118.65	124.19
11	Carry Forward: Deficit of FY 2015-16 as per Accounts	-	-	-	(1.82)
12	Final ARR cost	412.94	126.42	118.65	126.01

- 2.12.2. The Petitioner requests the Hon'ble Commission to approve the True Up amount as proposed in this filing for FY 2016-17
- 2.12.3. The Petitioner also requests the Hon'ble Commission to approve the carry forward of the deficit amount to Tariff Order of FY 2018-19 along with appropriate holding cost interest in accordance with Regulation 22 (4) of Chapter 1 from BERC Tariff Regulations 2007.



CHAPTER 3 ANNUAL PERFORMANCE REVIEW FOR FY 2017-18

This Chapter deals with the performance of BSPGCL for the FY 2017-18 and covers the details of revised Capital Investment Plan, Capitalization, Depreciation, Interest, Return on Equity and O&M Expenses of BSPGCL excluding all charges incurred for Extension Project Unit-8 & 9. With significant progress being made in the Infrastructure Strengthening and Ganga River Water Schemes, the apportioned costs associated with R&M units have been considered under this petition.

3.1 Approach of Annual Performance Review for FY 2017-18

- 3.1.1 The Hon'ble Commission in the tariff order dated 9th March 2017 approved the Aggregate Revenue Requirement for FY 2017-18 based on the estimates as proposed by BSPGCL after due consideration and analysis.
- 3.1.2 The Petitioner now seeks revision in the estimated expenses for the FY 2017-18 based on the actual expenses incurred in the last six months (April'2017 to Sep' 2017) and further projections for entire year as applicable for various heads of expenditure and request the Commission to approve the same. It is also submitted that the actual O&M expenses for last 6 months have been proportioned on the basis of 50-50 between the Existing and the Extension Project for year FY 2017-18.
- 3.1.3 At the outset, the Petitioner would like to submit before the Hon'ble Commission that Unit 8 and Unit 9 of the BTPS extension project are scheduled for CoD during FY 2017-18. The ARR for fixed and variable charges for generation during FY 2017-18 from the Extension project has been claimed in a separate petition filed before the Hon'ble Commission for approval of the provisional tariff for the project. The capitalisation of the extension project also, has not been considered as a part of the petition for APR for FY 2017-18.

3.2 Plant Availability and Plant Load Factor

3.2.1 The Petitioner would like to reiterate the revised schedule of R&M of Units 6&7 for ready reference in this chapter.

Table 16: BTPS (Unit - 6 and 7 Completion schedule- Revised)

	R&M Declared	
BTPS Unit	Date(Previous)	Revised CoD
Unit - 06	June – 2016	10 th January 2018
Unit - 07	March – 2016	Operational since Nov - 2016
		Presently under shutdown since
		7:26 AM, May 7 th 2017
		Expected resynchronization date:
		25 December 2017

3.2.2 After completion of R&M, the Unit 6 will require some time to stabilize to pass some performance tests and then scheduled maintenance thereafter, before the declaration of CoD.



- 3.2.3 As per the current status, Unit -7 was operational from April 1st 2017 to May 7th 2017 of the FY 2017-18. Unit 7 has been shut down due to orders from Central Pollution Control Board. Unit 7 is expected to start its generation again from the date as mentioned in the table above.
- 3.2.4 Considering the vintage nature of the units and performance parameters in terms of PLF achieved by similar sized power plants that had undergone R&M, Hon'ble commission had approved the Plant Availability Factor as 70% for FY 2017-18 in its Tariff Order dated 9th March 2017.
- 3.2.5 Considering the above submissions and the impact of R&M activity, the Petitioner requests the Hon'ble Commission to approve the Plant Availability Factor for the operational as well as remaining period of the FY 2017-18, in line with the last year's approval.

Table 17: Projected Availability Factor for FY 2017-18

Unit	PAF approved in TO for FY 2017-18	Projected Available Days for FY 2017-18
6	70%	81
7	70%	133

3.2.6 Based on the above PAF and considering the revised Commissioning Schedule for each unit, the Petitioner requests the Hon'ble Commission to approve the revised Plant Load Factor as follows:

Table 18: Projected Plant Load Factor for FY 2017-18

	Projected Available	Projected PLF for FY 2017-
Unit	Days	18
6	81	70%
7	133	70%

3.2.7 BSPGCL requests the Hon'ble Commission to approve the Availability and Plant Load Factor for above units as proposed in the table considering the ground realities of the project.

3.3 Auxiliary Consumption

- 3.3.1 In the T.O. dated 9th March 2017, the Commission had approved the Auxiliary Consumption at 12% for FY 2017-18, considering that the Unit 6 would come into operation during FY 2017-18 and that there will be some Auxiliary Consumption as a result of trial run of Units during 2017-18.
- 3.3.2 The Petitioner requests the Hon'ble Commission to consider Auxiliary Consumption for FY 2017-18 at 12% as approved.
- 3.3.3 The Petitioner would endeavour to keep the same within the limits specified by Hon'ble Commission; however in the present situation, the auxiliary consumption as proposed may kindly be approved.



Table 19: Projected Auxiliary Consumption for FY 2017-18

Unit	As approved in TO for FY 2017-18	R.E. for FY 2017- 18
6	12%	12%
7	12%	12%

3.4 Gross/ Net Generation of BTPS

3.4.1 Based on aforesaid assumptions, the unit wise projected Gross & Net generation (MU) from BTPS Unit-6 & 7 are summarized below:

Table 20: Unit wise Projected Gross and Net Generation for FY 2017-18

Particulars	Unit No	Revised Estimated Generation in MU for FY 2017-18
Gross Generation	6	150
Gross Generation	7	246
Total Gross Generation	All Units	395
Auxiliary consumption	All Units	47
Net generation	All Units	348

3.4.2 The Petitioner humbly prays to the Hon'ble Commission to approve the Gross Generation and Net Generation as per the revised estimate submitted in the table above and also allow the generation to be adjusted at the end of year during Truing-up of FY 2017-18 based on actual generation achieved.

3.5 Station Heat Rate (SHR)

3.5.1 The Hon'ble Commission in its T.O. dated 9th March 2017 has approved SHR of 3,000 kcal/kWh for FY 2017-18. The Petitioner has estimated that both the Units would operate at SHR of 3,000 kcal/kWh as approved by the Hon'ble Commission.

3.6 Specific Oil Consumption

3.6.1 The Hon'ble Commission in its T.O. dated 9th March 2017 has approved the Specific Oil Consumption at 3.0 ml/kWh for FY 2017-18 with the direction that the same shall be reviewed after study of performance of Unit 6 & 7 post R&M. Petitioner requests the Hon'ble Commission to consider the specific oil consumption of 3.0 ml/kWh for FY 2017-18 as approved in the tariff order.

3.7 Transit Loss of Coal

3.7.1 The Transit loss of 0.80% is considered in line with the approval by the Hon'ble Commission for determination of tariff for FY 2017-18.



3.8 Cost of Oil

- 3.8.1 The Hon'ble Commission in its T.O. dated 9th March 2017 for FY 2017-18 had approved the cost of Oil as Rs 52171/ KL.
- 3.8.2 The Petitioner has relied on the actual bills received from Indian Oil Corporation Limited (IOCL) and Hindustan Petroleum Corporation Limited (HPCL) (attached as **Annexure III**) for determination of Landed Cost of Oil as per the table below:

Table 21: Landed Price of Oil (LDO and Industrial Oil)

	Tubic 21: Eunacu i fice of on	(,	
Sl. No.	Particulars	Rate	Quantity (KL)	Amount (in Rs.)
1	LDO Basic Price (IOCL)	32524.17	3151.27	102492441.20
2	Net Transportation Charge (Rail)	1267.10		3992973.00
3	Taxable Value (1+2)			106485414.20
4	Integrated Tax	18%		19167374.56
5	Gross Landed Cost (3+4)			125652788.76
6	Landed Cost/ KL			39873.70
	Industrial Oil (HPCL)			-
1	Total Value		22 KL	817857.92
2	Discount			14300
3	Taxable Value (1-2)			803557.92
4	Tax	18%		144640.43
5	Gross Landed Price (3+4)			948198.35
6	Landed Cost/ KL			43099.95
	Average Price of Oil			41,486.83

- 3.8.3 The Petitioner submits that both LDO and Industrial Oil are used in the generation units for firing the boilers. Accordingly, the Petitioner has considered the average landed price of both the oils as per the table above, for the purpose of APR of FY 2017-18.
- 3.8.4 The Petitioner also submits that any variation in the cost of Oil procurement shall be brought into the notice of the Hon'ble Commission during True Up for FY 2017-18.
- 3.8.5 Further, the Petitioner submits that any variation in the oil costs approved by the Hon'ble Commission shall be subject to FPPCA from Distribution Licensees on actual basis after the Units start generation.

3.9 Cost of Coal

- 3.9.1 The Hon'ble Commission in its Tariff Order for determination of tariff for FY 2017-18, approved the GCV and cost of coal @ 5,672 Kcal/Kg and Rs. 4,320/ MT respectively.
- 3.9.2 In order to assess the present price of coal, the Petitioner has obtained copies of recent bills of M/s Eastern Coalfields Limited (ECL) for supply of coal from its various



collieries to Barauni Thermal Power Station (Enclosed at **Annexure – III**). Following is the summary of the coal bills:

Table 22: Price of Coal being supplied by ECL

Invoice Number	Invoice Date	Net Weight (MT)	GCV (kcal/kg)	Basic Price (Rs /MT)	Total landed cost (Rs)	Wt. Average Price (Rs /MT)
081018C512300460	11/9/2017	1056	5950	2750	4926778.56	4666
081018C512300461	11/9/2017	660	5350	1600	2127040.74	3223
081018C512300462	11/9/2017	858	5950	2750	4003007.58	4666
081018C512300463	11/9/2017	660	5950	2750	3079236.60	4666
081018C512300464	11/9/2017	528	5950	2750	2463389.28	4666
		3762	5844.74		16599452.76	4412.40

- 3.9.3 It is submitted that the Petitioner has added the expenses towards Railway Freight, Coal Sampling fee to the price of coal from ECL as per the Landed Cost Calculation Sheet attached at **Annexure III**, to determine the landed cost of coal.
- 3.9.4 The Petitioner submits that it has appointed Central Institute of Mining and Fuel Research (CIMFR) for coal sampling at loading side at the ECL mines and unloading at BTPS in accordance with CEA guidelines. A tri-partied agreement between ECL, CIMFR and BTPS was signed on 20 June 2017 for sampling at loading side. Additionally, a bilateral agreement was also signed between BTPS and CIMFR for sampling at unloading end on 20 July 2017. The Petitioner would pay Rs 4.25/MT for coal sampling at loading side and Rs 8.50/MT at unloading end excluding service tax.
- 3.9.5 It is also submitted that the Petitioner has considering the GCV and cost of coal as determined in the table above for the purpose of APR for Units 6 & 7.
- 3.9.6 Further, the Petitioner submits that any variation in the above costs shall be subject to FPPCA from Distribution Licensees on actual basis.

3.10 Variable Cost

3.10.1 Based on the Petitioner's approach to cost parameters in the earlier paragraphs, the performance and cost parameters proposed by the Petitioner for arriving of the fuel cost for FY 2017-18 for BTPS station as given in the Table below:

Table 23: Revised Performance and Cost Parameters for the FY 2017-18

PLF (%)	Auxiliary Consumption (%)	SHR (Kcal/Kwh)	Specific Oil Consumption (MI/Kwh)	Transit Loss of Coal (%)	Wt. Avg GCV of Coal (Kacl/ kg)	Wt. Avg GCV of Oil (Kcal/ L)	Price of Coal (Rs./ MT)	Price of Oil (Rs/ KL)
70%	12%	3,000	3	0.8	5,845	10,153	4,412.40	41,487

3.10.2 Based on the above projected parameters, the computation of variable cost for FY 2017-18 is determined as follows:



61	T v.		- -		D ' 1
Sl.	Item	Derivation	Unit	Approved	Revised
No.				for FY 2017-	Estimate for
				18	FY 2017-18
1	Gross Generation	A	MU	1,181	395.47
2	Station Heat Rate	В	KCal/KWH	3,000	3,000
3	Sp. Oil Consumption	С	ml/kWh	3	3
4	Calorific value of Oil	D	kcal/l	10,153	10,153
5	Gross Calorific Value of coal	Е	kcal/kg	5,672	5,845
6	Overall Heat	F= A*B	G Cal	35,42,616	1,186,416
7	Heat from Oil	G=(A*C*D)/1000	G Cal	35,968	12,045.68
8	Heat from Coal	H = (F-G)	G Cal	35,06,648	1,174,370
9	Actual Oil Consumption	I=A*C	Kl	3,543	1,186
10	Actual Coal Consumption	J=(H*1000)/E	MT	6,18,238	200,928
11	Coal Consumption Transit	J1=J/(1-0.008)	MT		
	Loss			6,23,224	202,548
12	Cost of Oil per KL	K	Rs/kl	52,171	41,487
13	Cost of Coal per MT	L	Rs/MT	4,320.43	4,412.40
14	Cost of Oil	M=I*K/100000	Rs Lakh	1,848.00	492
15	Cost of Coal	N=J1*L/100000	Rs Lakh	26,926	8,937
16	Total Fuel Cost	O= M+N	Rs Lakh	28,774	9,429
17	Other Fuel related cost	P	Rs Lakh	-	-
18	Total Fuel Cost	Q= 0+P	Rs Lakh	28,774	9,429
19	Fuel Cost/Unit Gross	Q/(A*10)	Rs/kWh	2.44	2.38
20	Auxiliary Consumption	R	%	12%	12%
21	Auxiliary Consumption	S=A*R	MUs	142	47
22	Net Generation	T=A-S	MUs	1,039	348
	i			1	

Table 24: Variable Cost of Generation projected for FY 2017-18

3.10.3 We hereby request Commission to approve Rs. 2.71 /kWh as variable cost of power generation from Unit 6 & 7 for FY 2017-18.

Rs/kWh

Q/(T*10)

3.10.4 The Petitioner also requests the Hon'ble Commission to frame a suitable formulae for FPPCA for adjustment of variable charges with the Distribution Licensees.

3.11 Capital Investment Plan & Capitalisation Schedule

Fuel Cost/Unit Net

3.11.1 The Ganga water scheme has been envisaged to provide water supply to both existing as well as extension projects. It was approved by the Commission in its ARR order dated 12th March 2015 considering the Petitioner's proposal to apportion the costs in the ratio of capacities of the units as per following details:

Table 25: Cost Allocation Matrix for Ganga Water Scheme

Sl. No.	Description	Unit	Amount			
1	Total Project Cost	Rs. Cr.	173			
2	Capacity of Existing Plant	MW	220			
3	Capacity of Proposed Plant		500			
4	Total BTPS Capacity	MW	720			
5	Allocation ratio for Existing Plant	No.	31%			
6	Allocation ratio for Extension Plant	No.	69%			
7	Project Cost Allocation for Existing Plant	Rs.Cr.	52.86			

2.71

2.77



3.11.2 Accordingly, the Hon'ble Commission in its ARR Order dated 12th March 2015 had considered the Petitioner's proposal for Cost Apportionment of Ganga Water Scheme between R&M units and Extension project detailed in the table below:

Table 26: Cost apportionment of Ganga Water Scheme between R&M units and Extension project

Sl. No.	Scheme	Approved Capital Outlay	Cost allocated to R&M of Unit No. 6 & 7	Cost allocated to Extension Project
1	Ganga Water Scheme	173	52.86	120.14

3.11.3 The following table details out the total expenditure plan for various schemes for BTPS:

Table 27: Capital Expenditure for FY 2017-18 (Rs. Crore)

		Total	Fund	Capex for	FY 2017-18
Sl. No	Particulars	Project Cost	released till FY 2016-17	Upto Sep 2017	Remaining half of FY 2017-18
1	Cost associated with R&M of BTPS units 6 & 7	581.2	539.63	5	36.57
2	Cost allocated to Ganga Water Scheme	173	31.71	1	5.78
3	Cost allocated to BTPS Railway Siding	25.64	22.02	•	-
4	Total investment	779.84	593.36	5.00	42.35

3.11.4 Based on above mentioned capex schemes, Capital Work in Progress for FY 2017-18 is provided in the table below:

Table 28: Computation of Revised CWIP for FY 2017-18

Sr. No.	Particulars	Approved for FY 2017-18 in T.O.	Revised Estimate for FY 2017-18
1	Opening CWIP	293.31	925.77
2	Less: CWIP Portion of Extension Project	-	-
3	Net Opening CWIP (1-2)	293.31	925.77
4	Add: New Investment	15.45	47.35
5	Add: Expenditure of R&M of 6 & 7	•	•
6	Total Investment (3+4+5)	308.76	973.12
7	Less: Capitalization from CWIP	308.76	925.77
8	Less: Capitalization from New Investments	•	41.57
9	Total Capitalization (7+8)	308.76	967.34
10	Net Closing CWIP (6-9)	0.00	5.78

- 3.11.5 The explanation to the above computations is as under:
 - a) Opening CWIP amount has been taken from Annual accounts of FY 2016-17 (closing balance);



- b) New Investments amounting to Rs. 47.35 Cr. have been estimated in FY 2017-18 pertaining to R&M of units 6 & 7 and Ganga Water Scheme (apportioned cost);
- c) The expenditure for only "R&M of BTPS units 6 & 7" shall be capitalised during the FY 2017-18. This scheme is funded through Govt Grants.
- 3.11.6 The Petitioner requests Hon'ble Commission to approve the revised Capital Expenditure and Capitalisation schedule as proposed in this filing for FY 2017-18.
- 3.11.7 The Petitioner submits that after preparation of the Annual accounts for FY 2017-18 i.e. financial year for commissioning of all units under R&M and commissioning, actual numbers for CWIP, GFA and capitalisation shall be shared with the Hon'ble Commission along with the Trup Up petition for FY 2017-18.

3.12 Funding of Capital Investments

3.12.1 In the ARR order dated 9th March 2017 for FY 2017-18, the Commission had approved the funding of the entire Project cost for R&M of unit 6 & 7 by way of Grants from Govt. of India and by way of Equity infusion in the company from Govt. of Bihar for Ganga Water Scheme as well as BTPS Infrastructure Strengthening scheme. The same has been considered for the purpose of review.

3.13 Gross Fixed Assets & Depreciation

- 3.13.1 In accordance with True Up petition for FY 2016-17, the Petitioner has considered the closing GFA balance as on 31st March 2017 as per Annual accounts for the purpose of computation of opening GFA for FY 2017-18.
- 3.13.2 It is also submitted that the Petitioner has allocated Rs 92.41 Cr of land from the GFA of Existing Project to the Extension Project, leaving the net value of land with Existing Project amounting to Rs 43.25 Cr.
- 3.13.3 It is also submitted that the capitalisation for BTPS extension project for Unit 8 and 9, scheduled for commissioning before the end of FY 2017-18 is not being reflected in the GFA in this instant petition. The Hon'ble Commission would acknowledge the fact the Petitioner has filed a separate petition for determination of provisional tariff for FY 2017-18 for Units 8 and Unit 9 and the project expenses, capitalisation and addition to GFA related to Unit 8 and Unit 9 have been claimed in the separate petition.
- 3.13.4 Based on revised capitalization schedule for R&M of Unit 6 & 7, following is the expected additions in GFA for BSPGCL:

Table 29: Computation of Revised Gross Fixed Asset for FY 2017-18 (Rs Cr)

Sr.		Projected for	Approved in T.O. for 2017-	R.E. for FY
No.	Particular	FY 2017-18	18	2017-18
1	Opening GFA	797.88	822.28	580.03



Sr. No.	Particular	Projected for FY 2017-18	Approved in T.O. for 2017-18	R.E. for FY 2017-18
	Less: Land assigned to			
2	Extension Project	-	-	92.41
3	Original Value of GFA	797.88	822.28	487.62
4	Less: Asset Retirements	-	-	-
5	Additions during the year	355.01	308.76	967.34
6	Closing GFA	1,152.89	1,131.04	1,454.96

3.13.5 The Petitioner submits that based on the actual GFA and grants for FY 2017-18 as on date, depreciation is being claimed for FY 2017-18, prorated for the average operation period for Units 6 and 7. The revised computation of depreciation is provided in the table below:

Table 30: Depreciation for FY 2017-18 (Rs Cr)

Sr.			Approved in	
No.	Particular	Projected for FY 2017-18	T.O. for 2017-18	R.E. for FY 2017-18
1	Opening GFA (as per table 29)	797.88	822.28	580.03
2a	Less: Land transfer to Extension	797.00	022.20	300.03
Za				92.41
2b	project Less: Value of Land for Existing	-	-	92.41
20	<u> </u>		125 66	42.25
3	Project Net Opening GFA for depreciation	-	135.66	43.25
3		797.88	606.62	444.37
	(1-2)		686.62	
4	Additions during the year	355.01	308.76	967.34
5	Closing GFA (3+4)	1,152.89	995.38	1411.71
6	Average GFA {(3+5)/2}	975.39	841.00	928.04
7	Weighted average rate of			
	depreciation	4.99%	6.00%	6%
8	Gross Depreciation (6*7)	48.67	50.46	55.68
9	Opening Grants (grants capitalised)	581.20	581.20	539.63
10	Add: Grants during the year	-	-	41.57
11	Closing Grants (9+10)	581.20	581.20	581.20
12	Average Grants {(9+11)/2}	581.2	581.2	560.42
13	Weighted average rate of			
	depreciation	4.99%	6.00%	6%
14	Depreciation for GFA on Grants			
	(12*13)	29.00	34.87	33.62
15	Depreciation for GFA on loans (8-			
	14) prorated for average			
	operational days	19.67	15.59	6.47

- 3.13.6 The explanation to the above computations is as under:
 - a) The Opening GFA value has been taken from Annual Accounts of FY 2016-17 (closing balance)
 - b) The amount of land allocated to the Extension Project and Existing Project has been netted off to determine the net GFA for purpose of depreciation;



- c) The depreciation rate of 6% has been assumed as per MYT order on the GFA after exclusion of the value of land;
- d) Depreciation is calculated on prorated basis for average operational period of the Existing Units.
- 3.13.7 The Petitioner requests Hon'ble Commission to consider the above methodology and approve the depreciation as estimated.

3.14 Interest & Finance Charges

- 3.14.1 In the ARR order dated 9th March 2017 for 2017-18, the Hon'ble Commission had determined Rs 15.59 Cr as Normative Interest on Loan on the basis of Normative Loan associated with the GFA.
- 3.14.2 It is submitted that the Petitioner has no opening loan balance associated with the Existing Project for FY 2017-18 in accordance with the Annual Accounts for FY 2016-17.
- 3.14.3 Also, the entire capital expenditure for the Existing Project is being funded by the Grant by Govt of India and Equity Infusion by Govt of Bihar.
- 3.14.4 In light of the debt: equity ratio as per BERC Tariff Regulations 2007 and also as per the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 under section 9 (Capital Cost) and Section 19 "(Debt-Equity Ratio) (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;"
- 3.14.5 Accordingly, the Petitioner is claiming Interest on Normative Loan for APR of FY 2017-18 for the Existing Project.

Table 31: Interest and Finance Charges for FY 2017-18

Sr. No.	Particular	Projected for FY 2017-18	Approved in T.O. for 2017-18	R.E. for FY 2017-18
1	Opening Loan balance		169.09	-
2	Less: Loan assumed in CWIP Ratio for extension project		-	-
3	Net opening loan balance		169.09	-
4	Add: Loans during the year		12.72	648.04
5	Less: Repayments		15.59	6.47
6	Net Closing Loan Balance		166.22	641.57
7	Average of Net Loan Balance	225.83	167.66	320.79
8	Interest rate	12%	9.30%	12.00%



Sr. No.	Particular	Projected for FY 2017-18	Approved in T.O. for 2017-18	R.E. for FY 2017-18
	Interest Expenses on Loan -			
9	prorated for operational days	27.10	15.59	11.28

- 3.14.6 It is submitted that the addition to loans during the year is 70% of the difference between the capitalisation during the year and addition through grants during the year.
- 3.14.7 The amount of loan repayment is equal to the depreciation calculated for the year FY 2017-18.
- 3.14.8 The Hon'ble is requested to approve the interest on loan as calculated in the table above.

3.15 Return on Equity

- 3.15.1 In the ARR order dated 9th March 2017 for FY 2017-18, the Hon'ble Commission had considered the RoE for FY 2017-18 subject to true up based on the actual commissioning of the R&M units and audited accounts made available for FY 2016-17.
- 3.15.2 In accordance with the BERC Tariff Regulations 2007 regarding debt equity ratio, the Petitioner can claim Return on Equity on only 30% of the investment and the rest of expenditure is to be treated as normative loan.
- 3.15.3 The Petitioner submits that the RoE being claimed by it for FY 2017-18 is prorated for the average operational days during the year. Following table summarizes the computation of revised RoE for FY 2017-18:

Table 32: Computation of Revised Return on Equity for FY 2017-18 (Rs Cr)

Table 32. computation of Reviseu Return on Equity for 11 2017 10 (RS c)					
Sr. No.	Particular	Projected for FY 2017-18	Approved in T.O. for 2017-18	R.E. for FY 2017-18	
	Opening Equity Balance				
1	(30% of GFA)		159.50	146.29	
	Add: Equity During the year				
2	(30% of new capitalisation)		5.45	290.20	
	Closing equity balance				
3	(1+2)		164.95	436.49	
	Average Equity Balance				
4	{(1+3)/2}		162.23	291.39	
5	Closing GFA	1,152.89		1,454.96	
6	Equity to be considered for RoE (30% of GFA)	345.87		436.49	
	Rate of Return per annum				
7	%	15.50%	14.00%	14.00%	
	Return on Equity (4*7)				
8	prorated basis	53.61	22.71	11.96	



- 3.15.4 The explanation to the above computations is as under:
 - a) The Opening GFA with equity portion at 30% has been considered.
 - b) The grants provided by the Govt have been considered as Equity.
 - c) 30% of New capitalization has been assumed to be funded through equity.
 - d) The RoE rate has been assumed as 14.00% as approved by Hon'ble Commission in its Tariff order.
 - e) The rate of RoE has not been grossed up by the Tax rate. The Petitioner seeks permission of the Hon'ble Commission to claim Tax on the RoE on actual basis during True Up of FY 2017-18.
- 3.15.5 The Petitioner requests Hon'ble Commission to approve the RoE amount as revised in this filing for FY 2017-18.

3.16 Employee Cost

- 3.16.1 The Petitioner submits that based on the actual expense incurred in the last six months (April' 2017 Oct' 2017), the employee cost has been revised for FY 2017-18.
- 3.16.2 The Petitioner also submits that it has to bear Rs 5.50 Cr during FY 2017-18 on account of salary revision by the Pay Commission.
- 3.16.3 The Petitioner also submits that it has taken management approval for recruitment of new staff for operating BTPS. The expected expenditure for new manpower is Rs 6 Cr.
- 3.16.4 Further, the Petitioner has reduced the cost of employee expenditure pertaining to the Extension project to the extent of 50%.
- 3.16.5 Following table summarizes the revised Employee Cost that is proposed for FY 2017-18:

Table 33: Computation of Revised Employee Expenses for FY 2017-18 (Rs Cr)

C		Due is at a d for	Approved in	Actual for	D.F. for EV
Sr. No.	Particular	Projected for FY 2017-18	T.O. for 2017-18	Apr-17 to Sep-17	R.E. for FY 2017-18
1	Employee cost	30.23	34.46	19.75	39.51
2	Add: Inflationary Increase	-	0.89	-	-
	Add: Impact of Pay				
3	Commission	12.96	0	-	5.50
	Add: New Manpower cost				
4	with inflation	5.13	5.13	-	6.00
5	sub-total Cost	48.32	40.48	19.75	51.01
	Less: Manpower cost for				
	extension project {50% of				
6	'5' for present APR}	12.96	12.14	9.88	25.50



Sr. No.	Particular	Projected for FY 2017-18	Approved in T.O. for 2017-18	Actual for Apr-17 to Sep-17	R.E. for FY 2017-18
	Less: Employee cost				
7	capitalized	-	-	-	-
8	Total Employee Cost	35.36	28.34	9.88	25.50

3.16.6 The Petitioner requests Hon'ble Commission to approve the revised employee expenses for FY 2017-18 as proposed above.

3.17 Repairs and Maintenance Expenses

- 3.17.1 The actual R&M expense till Sep 2017 has been doubled to determine the total R&M expense for the year. Since, the Extension project is not yet commissioned, no R&M expense has been earmarked for the same.
- 3.17.2 The following table summarizes computation of revised R&M Cost for FY 2017-18:

Table 34: Computation of Revised R&M Expenses for FY 2017-18

			Approved	Actual for	
		Projected for	in T.O. for	Apr-17 to	R.E. for FY
Sr. No.	Particulars	FY 2017-18	2017-18	Sep-17	2017-18
1	Total R&M Cost	20.00	20.00	5.68	11.36

3.17.3 The Petitioner requests the Hon'ble Commission to approve the revised R&M expenses as projected in this petition for FY 2017-18.

3.18 Administration & General Expenses

- 3.18.1 The Petitioner submits that based on the actual expense incurred in the last six months (April' 2017 Sep' 2017), the A&G expenses is proposed to be revised for FY 2017-18. The actual expenses for the first 6 months have been doubled to determine the expenses for the whole year, except for CISF where the annual expenses have projected separately.
- 3.18.2 Further, the Petitioner has reduced the cost of A&G expenditure and payment to CISF pertaining to the Extension project to the tune of 50%.
- 3.18.3 The following table summarizes the revised A&G Expense that is proposed for FY 2017-18:

Table 35: Computation of Revised A&G Expenses for FY 2017-18

Sr. No.	Particular	Projected for FY 2017- 18		Actual for Apr-17 to Sep-17	R.E. for FY 2017-18
1	A&G Expenses (excl CISF)	3.96	3.60	3.22	6.44
2	Add: Indexation	-	0.09	-	-
3	Sub total (1+2)	3.96	3.69	3.22	6.44



Sr. No.	Particular	Projected for FY 2017- 18	Approved in T.O. for 2017-18	Actual for Apr-17 to Sep-17	R.E. for FY 2017-18
	Less: A&G cost for				
	extension project (50%				
4	for current petition)	1.19	1.11	1.61	3.22
5	Net A&G Expenses	2.77	2.58	1.61	3.22
	Add: Payment to CISF				
6	@50% of actual	9.00	9.00	3.79	7.29
	Less: A&G Expenses				
7	Capitalized	-	-	-	-
8	Total A&G Expenses	11.77	11.58	5.40	10.51

3.18.4 The Petitioner requests the Hon'ble Commission to approve the A&G expenses as projected in this petition for FY 2017-18.

3.19 Allocation of Holding Company Cost

- 3.19.1 The Petitioner submits that the actual expense incurred in the last six months (April' 2017 Sep' 2017) towards the expenses of the Holding Company were Rs 4.14 Cr for BTPS as a whole.
- 3.19.2 The expenses for the whole year of FY 2017-18 have been considered to be Rs 9.00 Cr for BTPS as a whole.
- 3.19.3 The Petitioner submits that post completion of the reorganization process, Bihar State Power (Holding) Company Limited has decided to allocate Net expenses on the basis of Equity Deployed Ratio among the four companies. Accordingly, following table summarizes the revised allocation of the Holding Company Expenses that is proposed for FY 2017-18:

Table 36: Revised Allocation of Expenses of Holding Company for FY 2017-18

Holding Company expenses are allocated on the basis of Equity Deployed Ratio					
	BSPHCL	BSPGCL	BSPTCL	NBPDCL	SBPDCL
Equity Deployed Ratio	100.00%	18.32%	26.11%	28.47%	27.10%

3.19.4 The Hon'ble Commission is requested to approve the revised allocation of Rs. 4.50 Cr. (50% of the total expense) towards Existing Project for Holding Company Expenses as part of overall O&M expenditure for FY 2017-18.

3.20 Summary of O&M Expenses

3.20.1 The summary of the Revised O&M expenses is tabulated below for reference:



Table 37: Summary of Revised O&M Expenses for FY 2017-18

Sr. No.	Particular	Projected for FY 2017-18	Approved in T.O. for 2017-18	Actual for Apr-17 to Sep-17	R.E. for FY 2017-18
1	Employee cost	35.36	28.34	9.88	25.50
2	A&G Expenses	11.77	11.58	5.40	10.51
3	R&M expenses	20.00	20.00	5.68	11.36
4	Holding Company Expenses allocated	6.32	6.32	2.07	4.50
5	Total 0& M cost	73.46	66.24	23.03	51.86
6	Less: Expenses capitalised	-	-	-	-
7	Net O&M expenses	73.46	66.24	23.03	51.86

3.20.2 The Petitioner requests the Hon'ble Commission to approve the revised O&M expenses as projected in this petition for FY 2017-18.

3.21 Interest on working Capital

3.21.1 Following table summarizes the computation of revised Interest on Working Capital for FY 2017-18 on prorated average operational period for the Units:

Table 38: Revised Working Capital Cost for FY 2017-18

		Approved for FY	Revised
		2017-18 in T.O.	Estimate for
Sr. No.	Particulars	9th March 2017	FY 2017-18
	Cost of Coal & Secondary fuel oil for 2		
1	months	47.96	15.72
2	O&M Expense (1 month)	5.52	4.32
	Maintenance spares @1% of GFA with		
3	6% escalation	8.72	6.15
4	Receivables - 2 months (from ARR)	71.01	29.58
5	Total working capital	133.21	55.76
6	Rate of interest	14.05%	13.75%
7	Interest on working capital	18.72	2.25

- 3.21.2 It is also submitted that the SBI Prime Lending rate was 13.75% as on 1 April 2017 and the Interest on Working Capital has been calculated on this rate.
- 3.21.3 Therefore, the Petitioner requests Hon'ble Commission to approve the revised Interest on Working capital and the interest charges thereon for FY 2017-18.

3.22 Non-Tariff Income

3.22.1 In the ARR order dated 9th March 2017 for FY 2017-18, the Hon'ble Commission had approved 0.50 Cr. non-tariff income for FY 2017-18 based on Petitioner's submission.



3.22.2 The actual non-tariff income for the period of April – Sept 2017 is Rs 0.33 Crores. Therefore, Petitioner has considered at Rs 0.66 Cr for calculation of APR for FY 2017-18.

3.23 Total Fixed Charges

3.23.1 Based on the above computations, the Petitioner would like to summarize the revised Annual fixed charges recoverable from the distribution licensees for the FY 2017-18.

Table 39: Summary of Revised Annual Fixed Charges for FY 2017-18

		Approved for FY 2017-18 in T.O.	Revised Estimate for FY
Sr. No.	Particulars	9th March 2017	2017-18
1	0&M expenses (Gross)	66.24	51.86
2	Interest and finance charges	15.59	11.28
3	Interest on working capital	18.72	2.25
4	Depreciation	15.59	6.47
5	Return on Equity	22.71	11.96
6	Less: Expenses Capitalized	-	-
7	Total Fixed cost	138.85	83.82
8	Less: Non-tariff income	0.50	0.66
9	Net Fixed cost	138.35	83.16

3.23.2 The Petitioner requests the Hon'ble Commission to approve the revised Annual Fixed Charges for FY 2017-18.

3.24 Energy Charges

- 3.24.1 The Petitioner submits that since generation is expected to take place for a duration lesser that that approved by the Hon'ble Commission, fuel costs being claimed for FY 2017-18 through this petition are based on detailed calculation of coal and secondary fuel requirement as dealt in previous sub-sections of this APR petition.
- 3.24.2 The Petitioner requests Hon'ble Commission to approve the revised Energy Charges of Rs 94.29 Cr for FY 2017-18.

3.25 Annual Performance Review (APR)

3.25.1 Based on the above analysis, the Petitioner requests Hon'ble Commission to approve the revised APR as follows:

Table 40: Summary of Revised APR for FY 2017-18

Sr. No.	Particulars	Approved for FY 2017-18 in T.O. 9 th March 2017	Revised Estimate for FY 2017-18
1	Fuel cost	287.74	94.29
2	0&M expenses	66.24	51.86
3	Interest and finance charges	15.59	11.28
4	Interest on working capital	18.72	2.25
5	Depreciation	15.59	6.47



Sr. No.	Particulars	Approved for FY 2017-18 in T.O. 9 th March 2017	Revised Estimate for FY 2017-18
6	Return on Equity	22.71	11.96
7	Less: O&M Expenses Capitalised	-	•
8	Total Cost	426.59	178.12
9	Less: Non-tariff income	0.50	0.66
10	Net ARR	426.09	177.45

3.26 Generation Tariff (APR)

3.26.1 Based on the above analysis, the Petitioner submits the revised tentative generation tariff for the Extension Project as per the following table:

Table 41: Summary of Revised Generation Cost for FY 2017-18

Sr. No.	Particulars	Unit	Approved for FY 2017-18 in T.O. 9 th March 2017	Revised Estimate for FY 2017-18
1	Gross Generation	MU	1180.87	395.47
2	Net Generation	MU	1039.17	348.02
3	Energy Charges	Rs. crore	287.74	94.29
4	Annual Fixed Charges	Rs. crore	138.35	83.16
5	Revenue Recoverable	Rs. crore	426.09	177.45
6	Net Energy Charges	Rs / kWh	2.77	2.71
7	Net Fixed Charges	Rs / kWh	1.33	2.39
8	Net Generation Cost	Rs / kWh	4.10	5.10

3.26.2 The Petitioner also requests the Hon'ble Commission to approve the revised Generation Cost for FY 2017-18.



CHAPTER 4 AGGREGATE REVENUE REQUIREMENT FOR FY 2018-19

This Chapter deals with the projected performance of BSPGCL for the year 2018-19 and covers the details of revised Capital Investment Plan, Capitalisation, Depreciation, Interest, Return on Equity, Fuel Costs and O&M Expenses of BSPGCL for Existing Units 6 & 7 and Extension Units 8 & 9 separately. It has been assumed that the capitalization for BTPS extension Project has been achieved in FY 2017-18 in accordance with the separate petition filed by BSPGCL for approval of provisional tariff for the Project.

4.1. Approach of Aggregate Revenue Requirement for FY 2017-18

- 4.1.1. The Hon'ble Commission in the Order dated 9th March 2017 determined the Aggregate Revenue Requirement (ARR) for FY 2017-18 based on the estimates as proposed by the Petitioner after due consideration and analysis.
- 4.1.2. The Petitioner now seeks Hon'ble Commission's approval for the ARR of FY 2018-19 based on the true-up of FY 2016-17 and review of FY 2017-18.
- 4.1.3. It is also submitted that the GFA for FY 2018-19 has been projected separately for the two projects i.e. Existing Project and the Extension Project and accordingly all associated expenses for the Existing and the Extension Projects have been projected and claimed separately.
- 4.1.4. It is also submitted that installation of FGD at an approximate cost of Rs 350 Cr is also proposed for the Extension Project, however, this cost is not considered as part of this petition due to ongoing tendering process for procurement of FGD system on EPC basis.

4.2. Plant Availability and Plant Load Factor

4.2.1. As per the operational plan, all the four units shall be available for whole financial year of FY 2018-19.

Table 42: BTPS Existing and Extension Project Operation Schedule

BTPS Unit	Operation Duration	
Unit - 06	Full Year	
Unit – 07	Full Year	
Unit – 08	Unit – 08 Full Year	
Unit - 09	Full Year	

4.2.2. The Petitioner requests the Hon'ble Commission to approve the Plant Availability Factor for Unit 6 and 7 in line with the last year's approved PAF and for Units 8 and 9 as follows:



Table 43: Projected Availability Factor for FY 2018-19

Unit	Projected PAF
6	70%
7	70%
8	80%
9	80%

4.2.3. Based on the above PAF and considering the Commissioning Schedule for each unit, the Petitioner requests the Hon'ble Commission to approve the Plant Load Factor as follows:

Table 44: Projected Plant Load Factor for FY 2018-19

Unit	Projected Operational Days	Projected PLF
6	365	70%
7	365	70%
8	365	80%
9	365	80%

4.2.4. BSPGCL requests the Hon'ble Commission to approve the Availability and Plant Load Factor for above units as proposed in the table considering the ground realities of the project.

4.3. Auxiliary Consumption

4.3.1. The Hon'ble Commission is requested to approve the Auxiliary Consumption as per the table below:

Table 45: Projected Auxiliary Consumption for FY 2018-19

Unit	As approved in TO for FY 2017-18	Projected for FY 2018-19
6	12%	12%
7	12%	12%
8	N.A.	9%
9	N.A.	9%

4.4. Gross/ Net Generation of BTPS

4.4.1. Based on aforesaid assumptions, the unit wise projected Gross & Net generation (MU) from BTPS Unit-6 & 7 are summarized below:

Table 46: Unit wise Projected Gross and Net Generation for FY 2018-19

Particulars	Unit No	Projected Estimated Generation in MU
Gross Generation	6	675



Particulars	Unit No	Projected Estimated Generation in MU
Gross Generation	7	675
Gross Generation	8	1752
Gross Generation	9	1752
Total Gross Generation	Unit 6 and 7	1349
Total Gross Generation	Unit 8 and 9	3504
Total Gross Generation	All Units	4853
Auxiliary consumption	Unit 6 and 7	162
Auxiliary consumption	Unit 8 and 9	315
Gross Auxiliary consumption	All Units	477
Net generation	Unit 6 and 7	1187
Net generation	Unit 8 and 9	3189
Net generation	All Units	4376

4.4.2. The Petitioner humbly prays to Hon'ble Commission to approve the Gross generation and Net generation for the Existing Units 6 & 7 and Extension Units 8 & 9 as mentioned above and also allow the generation to be adjusted at the end of year during Annual Performance Review based on actual generation.

4.5. Station Heat Rate (SHR)

- 4.5.1. The Petitioner has considered the SHR of 3000 kcal/kWh for determination of tariff for the period of FY 2018-19 as approved by the Hon'ble Commission for FY 2017-18 for the existing project.
- 4.5.2. SHR of 2500 kcal/kWh has been considered for the Extension project in accordance with BERC Regulations 2007.

4.6. Specific Oil Consumption

- 4.6.1. The Hon'ble Commission in its T.O. dated 9th March 2017 has approved the Specific Oil Consumption of 3.0 ml/kWh for the existing project with the direction that the same shall reviewed after study of performance of Unit 6 & 7 post R&M. The same has been considered for projection purpose for FY 2018-19.
- 4.6.2. Specific Oil Consumption of 3 ml/kWh has been considered for the Extension project for FY 2018-19 in accordance with BERC Tariff Regulations 2007, considering stabilisation period for the Extension Units 8 & 9.

4.7. Transit Loss of Coal

4.7.1. The Transit loss of 0.80% is considered for FY 2018-19 as approved for FY 2017-18.



4.8. Cost of Oil

- 4.8.1. The Petitioner has considered the proposed price of Oil for FY 2017-18 as the base price and added inflation cost @2.97% which turns out to Rs 1230.10/ KL to determine the effective Landed price of Oil for FY 2018-19.
- 4.8.2. The Petitioner humbly prays the Hon'ble Commission for the approval of the Cost of Secondary Fuel i.e. Oil inclusive of possible impact of inflation for FY 2018-19.
- 4.8.3. It is submitted that the variation in price of oil, tax rates, etc shall be subject to FPPCA from Distribution Licensees on actual basis.
- 4.8.4. The Hon'ble Commission is also requested to frame a suitable formula for determination of FPPCA for adjustment of variable cost with the Distribution licensees.

4.9. Cost of Coal

- 4.9.1. The Petitioner has also considered Inflation cost @2.97% i.e. 130.83/ MT in the price of coal as proposed for FY 2017-18 to determine the effective weighted average landed price of coal for FY 2018-19.
- 4.9.2. The Petitioner humbly prays before the Hon'ble Commission to approve the GCV as 5844.74 kcal/ kg for FY 2018-19 which is same as proposed for FY 2017-18.
- 4.9.3. It is also submitted before the Hon'ble Commission that the present Coal Handling Plant (CHP) and Wagon tippler is not ready to handle the coal requirement for the Extension Units of BTPS. A contingency arrangement has been made wherein the crushed coal from the existing CHP of 2*110 MW units has to be transported by Tipper to the Emergency Reclaim Hopper (ERH) of 2*250 MW Extension Units. It is expected that a cost of Rs 114.15 per Tonne coal would be borne towards transportation of coal from the existing CHP to the Extension Units.
- 4.9.4. This expenditure for contingency arrangement for coal transportation was unforeseen in the petition filed for determination of provisional tariff for Extension project for FY 2017-18. However, the same has been considered now for determination of landed cost of coal for Extension Units for ensuing FY 2018-19.
- 4.9.5. Further, the Petitioner submits that any variation in the effective landed cost of coal shall be subject to FPPCA from Distribution Licensees on actual basis.
- 4.9.6. The Petitioner again reiterates its request to the Hon'ble Commission to frame a suitable formula for determination of FPPCA for adjustment of variable cost with the Distribution licensees.



4.10. Variable Cost

4.10.1. Based on the analysis and revision of cost parameters in the earlier paragraphs, the performance and cost parameters proposed by the Petitioner for arriving of the fuel cost for FY 2018-19 for existing BTPS units is as given in the Table below:

Table 47: Projected Performance and Cost Parameters for the FY 2018-19 for Unit 6 & 7

PLF (%)	Auxiliary Consumption (%)	SHR (Kcal/Kw h)	Specific Oil Consumpti on (Ml/Kwh)	Transit Loss of Coal (%)	Wt. Avg GCV of Coal (Kcal/ kg)	Wt. Avg GCV of Oil (Kcal/ L)	Price of Coal (Rs./ MT)	Price of Oil (Rs/ KL)
70%	12%	3,000	3.00	0.80%	5,844.74	10,153	4,543.23	42,717

Table 48: Projected Performance and Cost Parameters for the FY 2018-19 for Unit 8 & 9

PLF	Auxiliary	SHR	Specific Oil	Transit	Wt. Avg	Wt.	Price of	Price
(%)	Consumption	(Kcal/Kw	Consumpti	Loss of	GCV of	Avg	Coal	of Oil
	(%)	h)	on	Coal (%)	Coal	GCV of	(Rs./	(Rs/
			(Ml/Kwh)		(Kcal/	Oil	MT)	KL)
					kg)	(Kcal/		
						L)		
80%	9%	2,500	3.00	0.80%	5,844.74	10,153	4,657.38	42,717

4.10.2. Based on the above projected parameters, the computation of variable cost for FY 2018-19 is determined as follows:

Table 49: Variable Cost for FY 2018-19 for Units 6 & 7

Sl. No.	Item	Derivation	Unit	Projections
1	Gross Generation	A	MU	1,349.04
2	Station Heat Rate	В	KCal/KWH	3,000
3	Sp. Oil Consumption	С	ml/kWh	3.00
4	Calorific value of Oil	D	kcal/l	10,153
5	Gross Calorific Value of coal	Е	kcal/kg	5,845
6	Overall Heat	F= A*B	G Cal	4,047,120
7	Heat from Oil	G=(A*C*D)/1000	G Cal	41,090
8	Heat from Coal	H = (F-G)	G Cal	4,006,030
9	Actual Oil Consumption	I=A*C	kl	4,047.12
10	Actual Coal Consumption	J=(H*1000)/E	MT	685,408
11	Coal Consumption including Transit Loss	J1=J/(1-0.008)	MT	690,936
12	Cost of Oil per KL	K	Rs/kl	42,717
13	Cost of Coal per MT	L	Rs/MT	4,543
14	Cost of Oil	M=I*K/100000	Rs Lakh	1,729
15	Cost of Coal	N=J1*L/100000	Rs Lakh	31,391
16	Total Fuel Cost	O= M+N	Rs Lakh	33,120
17	Other Fuel related cost	P	Rs Lakh	-
18	Total Fuel Cost	Q= O+P	Rs Lakh	33,120
19	Fuel Cost/Unit Gross	Q/(A*10)	Rs/kWh	2.46
20	Auxiliary Consumption	R	%	12%
21	Auxiliary Consumption	S=A*R	MUs	162



Sl. N	0.	Item	Derivation	Unit	Projections
22		Net Generation	T=A-S	MUs	1,187.16
23		Fuel Cost/Unit Net	Q/(T*10)	Rs/kWh	2.79

Table 50: Variable Cost for FY 2018-19 for Units 8 & 9

Table 50: Variable Cost for F1 2010-19 for Office 6 & 9						
Sl. No.	Item	Derivation	Unit	Projections		
1	Gross Generation	A	MU	3,504.00		
2	Station Heat Rate	В	KCal/KWH	2,500		
3	Sp. Oil Consumption	С	ml/kWh	3.00		
4	Calorific value of Oil	D	kcal/l	10,153		
5	Gross Calorific Value of coal	Е	kcal/kg	5,844.74		
6	Overall Heat	F= A*B	G Cal	8,760,000		
7	Heat from Oil	G=(A*C*D)/1000	G Cal	106,728		
8	Heat from Coal	H = (F-G)	G Cal	8,653,272		
9	Actual Oil Consumption	I=A*C	kl	10,512.00		
10	Actual Coal Consumption	J=(H*1000)/E	MT	1,480,524		
11	Coal Consumption including Transit Loss	J1=J/(1-0.008)	МТ	1,492,463		
12	Cost of Oil per KL	K	Rs/kl	42,717		
13	Cost of Coal per MT	L	Rs/MT	4,657.38		
14	Cost of Oil	M=I*K/100000	Rs Lakh	4,490		
15	Cost of Coal	N=J1*L/100000	Rs Lakh	69,510		
16	Total Fuel Cost	O= M+N	Rs Lakh	74,000		
17	Other Fuel related cost	P	Rs Lakh	-		
18	Total Fuel Cost	Q= O+P	Rs Lakh	74,000		
19	Fuel Cost/Unit Gross	Q/(A*10)	Rs/kWh	2.11		
20	Auxiliary Consumption	R	%	9.00%		
21	Auxiliary Consumption	S=A*R	MUs	315		
22	Net Generation	T=A-S	MUs	3,188.64		
23	Fuel Cost/Unit Net	Q/(T*10)	Rs/kWh	2.32		

4.11. Capital Investment Plan & Capitalisation Schedule

4.11.1. Considering the capex plan for FY 2017-18 and FY 2018-19 the following table summarises the investment incurred on the R&M of the plant along with other schemes:

Table 51: Investment in FY 2018-19 (Rs Cr)

Sl. No.	Cost Component	Total project cost	Till FY 2016- 17	Till Sep 17 (For FY 2017-18)	Projected in remaining half FY 2017-18	Projected for FY 2018-19
1	Cost associated with R&M of BTPS units	581.20	539.63	5.00	36.57	1
2	Cost allocated to Ganga Water Scheme for Existing Project	52.86	31.71	1	5.78	15.37
3	Cost allocated to Ganga Water Scheme for Extension Project	120.14				120.14



Sl. No.	Cost Component	Total project cost	Till FY 2016- 17	Till Sep 17 (For FY 2017-18)	Projected in remaining half FY 2017-18	Projected for FY 2018-19
4	Cost allocated to BTPS Railway Siding	25.64	22.02	-	-	-
5	Grand Total	779.84	593.36	5.00	42.35	135.51

- 4.11.2. It is submitted that the project cost of Ganga Water Scheme has been segregated for the Existing and the Extension Project in accordance with the Hon'ble Commission's approach in ARR Order dated 12th March 2015.
- 4.11.3. The Petitioner is also required to install Flue Gas Desulphurisation (FGD) System for the Extension Units at an estimated cost of Rs 350 Cr. The Petitioner has already notified the tender document for appointment of an EPC agency for the same. It is submitted that the FGD system would take approx. 3 years for commissioning. No expenditure has been projected for installation of FGD system during FY 2018-19.
- 4.11.4. The Petitioner has considered the opening CWIP for FY 2018-19 same as closing CWIP for FY 2017-18 for the Extension project.
- 4.11.5. The Opening CWIP for the Extension Project has been estimated as "NIL" taking into account the fact that capitalisation of Extension project would happen in FY 2017-18 in accordance with the petition filed before the Hon'ble Commission for approval of provisional tariff for the Extension Project.
- 4.11.6. The projected Capital Work in Progress for FY 2018-19 is provided in the table below:

Projected for Projected for Sr. No. **Particular Units 8 & 9 Units 6 & 7 Opening CWIP** 5.78 2 Less: CWIP Portion of Extension Project 3 Net Opening CWIP (1-2) 5.78 4 Add: New Investment 15.37 120.14 5 **Total Investment (3+4)** 21.15 120.14 Less: Capitalisation from CWIP 5.78 6 Less: Capitalisation from New Investments 15.37 120.14 8 **Total Capitalisation (6+7)** 21.15 120.14 9 Net Closing CWIP (5-8)

Table 52: CWIP for FY 2018-19 (Rs Cr)

- 4.11.7. The explanation to the above computations is as under:
 - a) Opening CWIP amount has been taken from Closing CWIP estimated in the APR for FY 2017-18 for Existing Units;
 - b) The addition to CWIP for the Existing and the Extension Project is equal to the sum of project outlay for Ganga Water Scheme for the two projects;



- c) All ongoing schemes are expected to get completed within FY 2018-19, hence the entire CWIP has been capitalized.
- 4.11.8. The Petitioner requests the Hon'ble Commission to approve the Capital Expenditure and Capitalisation schedule as proposed in this ARR for FY 2018-19.
- 4.11.9. Hon'ble Commission would be apprised about the progress made in FY 2018-19 in the APR petition for FY 2018-19.

4.12. Funding of Capital Investments

- 4.12.1. The Petitioner would like to submit that the entire funding of the Ganga Water Scheme, proposed for capitalisation during FY 2018-19, is by way of Equity infusion in BSPGCL from Govt. of Bihar and the same has been duly acknowledged by the Commission in the Tariff Order dated 9th March 2017 for FY 2017-18.
- 4.12.2. Further, in accordance with BERC Tariff Regulations 2007 regarding debt equity ratio, the Petitioner has considered that 30% of the capitalisation in FY 2018-19 shall be funded through Equity and balance 70% through normative loan during FY 2018-19.
- 4.12.3. The actual segregation of the grants and equity between the Existing and the Extension Project would be submitted to the Hon'ble Commission after the finalisation of Annual Accounts for FY 2018-19.

4.13. Gross Fixed Assets & Depreciation

- 4.13.1. The Petitioner has considered the proposed closing GFA in the APR for FY 2017-18 as the opening GFA for FY 2018-19 for the Existing Project.
- 4.13.2. Further, considering that the BTPS Extension project has been capitalised in FY 2017-18 in accordance with the separate petition filed before the Hon'ble Commission, the opening GFA for FY 2018-19 for the Extension Project is equal to the project cost for Extension Project.

Table 53: GFA for FY 2018-19 (Rs Cr)

Sr. No.	Particular	Projected for Units 6 & 7	Projected for Units 8 & 9
1	Opening GFA	1,454.96	6,302.78
2	Less: Assets Revalued	-	-
3	Original Value of GFA	1,454.96	6,302.78
4	Less: Asset Retirements	-	-
5	Original Value of GFA	1,454.96	6,302.78
6	Additions during the year	21.15	120.14
7	Closing GFA (Depreciable Assets)	1,476.11	6,422.92

6.00%

34.87

50.47

6.00%

373.84



- 4.13.3. It is submitted that all schemes during FY 2018-19 are expected to get completed within the same year.
- 4.13.4. The Petitioner submits that based on commissioning schedule, estimated GFA and grants for FY 2018-19, the depreciation amount has been determined in the table below:

Projected for Projected for Sr. No. **Particular Units 6 & 7 Units 8 & 9 Opening GFA** 1,454.96 6,302.78 1 Less: Value of Land 132.16 2 43.25 3 Net Opening GFA (1-2) 1,411.71 6,170.62 Additions during the year 21.15 120.14 4 5 6.290.75 Closing GFA (3+4) 1.432.86 6 Average GFA {(3+5)/2} 1,422.28 6,230.68 Weighted average rate of depreciation 6.00% 6.00% 7 Gross Depreciation (6*7) 85.34 373.84 8 9 **Opening Grants** 581.20 10 Add: Grants during the year 11 Closing Grants (9+10) 581.20 _ 12 Average Grants {(9+11)/2} 581.20

Table 54: GFA and Depreciation for FY 2018-19 (Rs Cr)

4.13.5. The explanation to the above computations is as under:

Weighted average rate of depreciation

Depreciation for GFA on Grants (12*13)

Depreciation for GFA on loans (8-14)

- a) The Opening GFA value has been taken from revised estimate of GFA in the APR Petition of FY 2017-18 (closing balance) for the Existing Project;
- b) A weighted average depreciation rate has been assumed as per Tariff Order for FY 2017-18 for calculating depreciation for Existing Project. The same weightage has been applied for Extension Project also.
- c) The amount of land for the Extension Project is the sum of land cost as submitted in the provisional Tariff for FY 2017-18 and the amount of land allocated from the Existing Project to the Extension Project.
- 4.13.6. The Petitioner further submits that actual depreciation shall be claimed in the trueup process based on Actual additions to GFA and value of grants during FY 2018-19.
- 4.13.7. The Petitioner requests the Hon'ble Commission to approve the Depreciation amount as projected in this filing for FY 2018-19.

4.14. Interest & Finance Charges

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4.14.1. In the Tariff Order issued for FY 2017-18, the Hon'ble Commission had determined a normative interest expense for FY 2017-18. The Petitioner submits that interest



- and finance charges for FY 2018-19 are claimed for the BTPS Existing and Extension Units separately.
- 4.14.2. In light of the debt: equity ratio as per BERC Tariff Regulations 2007 and also as per the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 under section 9 (Capital Cost) and Section 19 "(Debt-Equity Ratio) (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;"
- 4.14.3. It is stated that funding of the capex for R&M of Unit 6 & 7 during FY 2018-19 is done through equity infusion. In accordance with BERC Tariff Regulations, 70% of the capitalisation is considered to be funded through normative loan and balance 30% through equity.
- 4.14.4. In the case of the Extension project, 70% of the GFA has been funded through long term loan from Financial Institutions.
- 4.14.5. BSPGCL has claimed interest on normative loan at 11.20% for FY 2017-18 for both the Existing and the Extension Project. The interest rate has been kept same as the weighted average rate of interest in the petition for provisional tariff for Extension project.

		Projected for	Projected for
Sr. No.	Particular	Units 6 & 7	Units 8 & 9
1	Opening Loan balance	641.57	4,411.95
2	Less: Loan assumed in CWIP Ratio for extension project		
3	Net opening loan balance	641.57	4,411.95
4	Add: Loans during the year	14.81	84.10
5	Less: Repayments	50.47	373.84
6	Net Closing Loan Balance	605.91	4,122.20
7	Average of Net Loan Balance	623.74	4,267.07
8	Interest rate	11.20%	11.20%
9	Interest Expenses on Loan	69.86	477.91

Table 55: Interest on Loan for FY 2018-19 (Rs Cr)

- 4.14.6. The Opening loan balance for Existing project has been considered equal to the closing loan balance as per APR for FY 2017-18. The Opening loan balance for Extension Project has been has been calculated as 70% of the GFA for Extension Project. Petitioner requests the Hon'ble Commission to approve the normative loan and interest cost for FY 2018-19 as determined in the table above.
- 4.14.7. It is submitted that the actual amount of interest on loan shall be submitted to the Hon'ble Commission during True Up for FY 2018-19.



4.15. Return on Equity

- 4.15.1. In the Tariff Order issued for FY 2017-18, the Hon'ble Commission had computed the RoE considering a rate of 14%.
- 4.15.2. The Petitioner submits that the entire investment for the R&M of the existing units have been funded through Govt. grants and equity infusion in BSPGCL, which have been treated as Equity of BGPGCL.
- 4.15.3. In accordance with BERC Regulations 2007 on Debt Equity ratio, 30% of the opening GFA and 30% of the capitalisation for the year has been considered towards Equity for FY 2018-19.
- 4.15.4. The Petitioner further submits BTPS is the only operational power plant of the Petitioner from which the revenue generation and the cash flow generation for the entire company will take place.
- 4.15.5. In order to achieve self-sufficiency in development of the new projects in the State and to encourage further participation from the potential investors, the Petitioner humbly requests the Hon'ble Commission to revise the RoE rate of Generation projects from the present 14% to 15.5% as already approved for the Transmission projects to be established in the State. The Commission is also requested to allow the Petitioner to claim RoE at 15.5% and applicable tax liability, if any in the true up for FY 2018-19 and other ARR of forth coming years.
- 4.15.6. Although for the purpose of ARR for FY 2018-19, the Petitioner has considered rate of return on Equity for Existing Project @14% in accordance with the BERC Regulations 2007.
- 4.15.7. Based on the above submission, the Petitioner has computed the RoE as per the following table for FY 2018-19:

Table 56: Computation of Return on Equity for FY 2018-19 (Rs Cr)

Sr. No.	Particular	Projected for Units 6 & 7	Projected for Units 8 & 9
1	Opening Equity Balance	436.49	1,890.83
2	Add: Equity During the year	6.35	36.04
3	Closing equity balance (1+2)	442.83	1,926.88
4	Average Equity Balance {(1+3)/2}	439.66	1,908.85
5	Rate of Return per annum %	14%	14%
6	Return on equity claimed (4*5)	61.55	267.24

4.15.8. The Petitioner requests the Hon'ble Commission to approve the RoE amount for FY 2018-19 as determined in the table above.



4.16. Operation & Maintenance Expenses

- 4.16.1. In the Tariff petition filed for ARR for FY 2017-18, a weighted average methodology of WPI: CPI in the ratio of 45:55 was proposed by the Petitioner for computation of the O&M expenses.
- 4.16.2. The Hon'ble Commission had approved the methodology and accordingly computed the Employee Expenses as well as A&G Expenses after considering the inflation rates calculated based on said methodology.
- 4.16.3. The Petitioner would like to adopt the same methodology for computation of inflation index for R&M and Allocation of Holding Company Expenses also.
- 4.16.4. The calculation of Indexation factor is as following:

INDXn = 0.55*CPIn + 0.45*WPIn

Where,

WPI - Wholesale Price Index as provided by the Office of Economic Advisor, Ministry of Commerce and Industry, Govt. of India

CPI - Consumer Price Index as provided by the Labour Bureau, Govt. of India

S.No	Particulars	WPI	CPI	Total
1	Weightage %	45.00%	55.00%	100.00%
2	Index points for FY 2016-17 (Mar 2017)	113.20	275.00	
3	Indexation n-1 (index point * weightage)	50.94	151.25	202.19
4	Index points for FY 2017-18 (Sep 2017)	114.30	285.00	
5	Indexation n (index point * weightage)	51.44	156.75	208.19
	Combined inflation {(5-3) / 3)			2.97%

Table 57: Computation of Inflation Index

4.17. Employee Cost

4.17.1. The Petitioner would like to submit that in the absence of any operational project, about 25% employees have been temporarily transferred to the other subsidiary companies of BSPHCL. It is further submitted that as the generation projects will approach commissioning, the employees would be rolled back into the Petitioner's company. Following table summarizes the present as well as deputed staff of the Petitioner as on date:

Table 58: Manpower Details of BSPGCL

Sl. No.	Description	Officers	Workers	Total
1	Head Quarters	52	37	89
2	BTPS	141	211	252
3	Deputation	0	49	49
		193	297	390



- 4.17.2. Further, with retirement of old employees, new O&M staff may be required to be recruited for smooth operation of the project after completion of R&M. BSPGCL has already considered the cost towards new employees in APR for FY 2018-19.
- 4.17.3. Following table summarizes the Employee Cost proposed for FY 2018-19:

Table 59: Computation of Employee Expenses for FY 2018-19 (Rs Cr)

Sr. No.	Particulars	Projected for Units 6 & 7	Projected for Units 8 & 9
1	Employee cost for FY 2017-18	25.50	57.96
2	Add: Inflationary Increase	0.76	1.72
3	Less: Employee cost capitalized	-	
4	Total Employee Cost	26.26	59.68

- 4.17.4. The expense for Extension Project has been calculated on proportional basis on the expense for Existing Project.
- 4.17.5. The Petitioner requests Hon'ble Commission to approve the employee expenses for FY 2018-19 as proposed above.

4.18. Repairs and Maintenance Expenses

- 4.18.1. R&M expense for Existing Project has been calculated on the basis of proposed R&M expense for FY 2017-18.
- 4.18.2. The R&M expense for Extension Project has been calculated on proportional basis on the expense for Existing Project.
- 4.18.3. The following table illustrates the calculation of R&M expenses:

Table 60: Computation of Revised R&M Expenses for FY 2018-19 (Rs Cr)

Sr. No.	Particular	Projected for Units 6& 7	Projected for Units 8 & 9
1	R&M Cost for FY 2017-18	11.36	25.81
2	Add: Inflationary increase	0.34	0.77
3	Less: R&M expense capitalised	-	
4	Net R&M Expense	11.69	26.57
	Contingency Water Arrangement for		
5	Extension Project	-	0.41
6	Total R&M Cost	11.69	26.98

4.18.4. It is also submitted that a contingency arrangement has been made for pumping of 15 cusec Ganga water for Extension Project wherein the water is pumped from the river and fed in the main water storage system of the Plant. The cost for this arrangement is estimated to be Rs 0.6168 Cr for a duration of 18 months. The proportionate cost for 12 months i.e. 0.41 Cr has been claimed as a part of R&M Expense of the Extension Project



4.18.5. The Petitioner requests the Hon'ble Commission to approve the R&M expenses as projected in this petition for FY 2018-19.

4.19. Administration & General Expenses

- 4.19.1. A&G expenses for FY 2018-19 are computed considering base year of FY 2017-18 and applying inflation factor as per the methodology approved by the Hon'ble Commission.
- 4.19.2. The A&G expense for Extension Project has been calculated on proportional basis on the expense for Existing Project.
- 4.19.3. Following table summarizes the A&G Expense projected for FY 2018-19:

Table 61: Computation of A&G Expenses for FY 2018-19 (Rs Cr)

Sr. No.	Particular	Projected for Units 6 & 7	Projected for Units 8 & 9
1	A&G Expenses for FY 2017-18 (excl CISF)	3.22	7.32
2	Add: Inflationary Increase	0.10	0.22
3	Net: A&G for Existing Project	3.32	7.54
4	Add: Payment to CISF for FY 2017-18	7.29	16.56
5	Add: Inflationary Increase	0.22	0.49
6	Net: Payment to CISF	7.50	17.05
7	Less: A&G expense capitalised	-	-
8	Total A&G expenses	10.82	24.59

4.19.4. The Petitioner requests the Hon'ble Commission to approve the A&G expenses as projected in this petition for FY 2018-19.

4.20. Allocation of Holding Company Cost

4.20.1. Accordingly, following table summarizes the revised allocation of the Holding Company Expenses that is proposed for FY 2018-19:

Table 62: Revised Allocation of Expenses of Holding Company for FY 2018-19

Holding Company expenses are allocated on the basis of Equity Deployed Ratio										
Rs Cr	BSPGCL	BSPTCL	NBPDCL	SBPDCL						
Equity Deployed Ratio	100.00%	18.32%	26.11%	28.47%	27.10%					

- 4.20.2. The proposed annual expense towards Holding Company Cost for FY 2017-18 has been increased by the "Inflation factor" to determine the gross Holding Company Expense for FY 2018-19 for the Existing Project.
- 4.20.3. The Hon'ble Commission is requested to approve the allocation of Rs. 4.63 Cr. for Existing Units as part of overall O&M expenditure for FY 2018-19.
- 4.20.4. Proportionately, Rs 10.63 has been proposed as Holding Company Cost for the Extension Project for FY 2018-19.



4.21. Summary of O&M Expenses

4.21.1. The summary of the Revised O&M expenses is tabulated below for reference:

Table 63: Summary of Revised O&M Expenses for FY 2017-18 (Rs Cr)

Sr. No.	Particular	Projected for Units 6 & 7	Projected for Units 8 & 9
1	Employee cost	26.26	59.68
2	A&G Expenses	10.82	24.59
3	R&M expenses	11.69	26.98
4	Holding Company Expenses (incl Inflation)	4.63	10.53
5	Total 0& M cost	53.40	121.78
6	Expenses capitalised	-	1
7	Net O&M expenses	53.40	121.78

4.21.2. The Petitioner requests the Hon'ble Commission to approve the O&M expenses as projected in this petition for FY 2018-19.

4.22. Interest on working Capital

- 4.22.1. The Petitioner submits that following the same methodology as approved by the Hon'ble Commission in the Tariff Order, the Interest on working capital has been projected for FY 2018-19.
- 4.22.2. The rate of Interest of SBI was 13.70% p.a. w.e.f. 01.10.2017.
- 4.22.3. Following table summarizes the computation of Interest on Working Capital for FY 2018-19:

Table 64: Interest on Working Capital Cost for FY 2018-19 (Rs Cr)

Sr. No.	Particular	Projected for	Projected for
		Units 6 & 7	Units 8 & 9
1	Cost of coal & secondary fuel Oil for 2 months	55.20	123.33
2	O&M exp. (1 month)	4.45	10.15
3	Maintenance spares @1% of Closing GFA	14.76	64.23
4	Receivables -2 months (from ARR)	98.67	342.38
5	Total working capital	173.08	540.09
6	Rate of interest	13.70%	13.70%
7	Interest on working capital	23.71	73.99

4.22.4. The Petitioner requests Hon'ble Commission to approve the Interest on Working capital as projected in this petition for FY 2018-19.

4.23. Non-Tariff Income

4.23.1. The Petitioner submits that a nominal value of Rs. 50 Lakhs has been estimated as non-tariff income for FY 2018-19 each for the Existing and the Extension Project, which is close to the projected amount for FY 2017-18.



4.24. Total Fixed Charges

4.24.1. Based on the above computations, the Petitioner would like to summarise the Annual Fixed Charges recoverable from the distribution licensees for the FY 2018-19.

Table 65: Summary of Annual Fixed Charges for FY 2018-19 (Rs Cr)

Sr.	Particular	Projected for	Projected for
No.	raiticulai	Units 6 & 7	Units 8 & 9
1	0&M expenses (Gross)	53.40	121.78
2	Normative Interest and finance charges	69.86	477.91
3	Interest on working capital	23.71	73.99
4	Depreciation	50.47	373.84
5	Return on Equity	61.55	267.24
6	Less: Expenses Capitalized	1	-
7	Total Fixed cost	258.99	1,314.76
8	Less: Non-tariff income	0.50	0.50
9	Net Fixed cost	258.49	1,314.26

4.24.2. The Petitioner requests Hon'ble Commission to approve the Annual Fixed Charges for FY 2017-18 as calculated in the table above.

4.25. Aggregate Revenue Requirement (ARR)

- 4.25.1. The Petitioner submits that it has carried forward the revenue deficit for FY 2016-17 and levied 2 years of holding cost @ Interest rate on working capital, for recovery in the ARR of FY 2018-19.
- 4.25.2. Based on the analysis done in the previous paragraphs of this Section, the Petitioner requests Hon'ble Commission to approve the ARR and Generation Cost determined as below:

Table 66: Summary of ARR for FY 2018-19 (Rs Cr)

Sr.	Particular	Projected for	Projected for
No.		Units 6 & 7	Units 8 & 9
1	Fuel cost	331.20	740.00
2	0&M expenses	53.40	121.78
3	Interest and finance charges	69.86	477.91
4	Interest on working capital	23.71	73.99
5	Depreciation	50.47	373.84
6	Return on Equity	61.55	267.24
7	Less: 0&M Expenses Capitalised	-	-
8	Total cost	590.19	2,054.77
9	Less: Non-tariff income	0.50	0.50
10	Add: Deficit for FY 2016-17 carried forward	1.82	-
11	Add: Holding cost for 2 years for deficit	0.53	-
12	Net ARR	592.04	2,054.27



4.26. Generation Tariff

4.26.1. On the basis of calculation of various components of ARR for FY 2018-19, the generation tariff is calculated in the table given below:

Table 67: Summary of Generation Cost for FY 2018-19

Sr. No.	Particular	Unit	Projected for Units 6 & 7	Projected for Units 8 & 9
1	Gross Generation	MU	1,349	3,504
2	Net Generation	MU	1,187	3,189
3	Energy Charges	Rs. Crore	331.20	740.00
4	Annual Fixed Charges	Rs. Crore	260.85	1,314.26
5	Revenue Recoverable	Rs. Crore	592.04	2,054.27
6	Average Energy Charges	Rs / kWh	2.790	2.321
7	Net Fixed Charges	Rs / kWh	2.197	4.122
8	Net Generation Cost	Rs / kWh	4.987	6.442

4.26.2. The Petitioner requests the Hon'ble Commission to approve the projected Generation Tariff for FY 2018-19 as determined in the table above.



CHAPTER 5 Compliance of Directive

SL No.	Directive	Direction given by BERC				Co	ompliance by	y BSPGCL		
1.	7.2.1	Use of Modern Technology for security at comparable cost may be explored for cost reduction.	for Fu BT by	 BSPGCL would like to submit that CCTC has been installed at main gate (entry point) for better surveillance. Use of other modern technologies is also being explored. Further, it is to submit that the Gupta Bandh which separates the two campuses of BTPS (Old plant & Extension Project) is in the process of being handed over to BTPS by the WRD, Government of Bihar. Once it is effected, both campus may be unified and then CISF deployment may be reviewed for reduction. 						
2	7.2.2	The commission directs BSPGCL to intimate the dates of commercial operation of Unit no. 6 & 7 after they are differently announced.	 It is to humbly submit in this regard that the unit no. 7 was deemed to have achieved COD on 04.11.2016. Unit no. 6 is expected to be brought on COD in January, 2018. After achieving COD of Unit No. 6, formal announcement will be made by BSPGCL HQ for both units. 							
3.	7.2.3	Unit No. 7 is already in operation w.e.f. 04.11.2016. The commission directs BSPGCL to expedite commissioning of energy meters to assess the auxiliary consumption. Similar action may be taken for Unit no. 6 which is expected to come in to operation by July 2017. The compliance and the monthly auxiliary consumption of Unit 6 & 7 may be provided in the tariff petition.	 ➤ In this regard, it is to submit that Energy meter has been installed in unit Auxiliary Transformer (UAT) and Station Transformer (ST) of Unit No. 7 for recording Auxiliary Consumption of unit no. 7. ➤ Further, installation of meters in UAT and ST of Unit no. 6 is under progress and it is expected to be completed before start of commercial operation from Unit No. 6. 							
4	7.2.4	The commission directs BSPGCL to submit the operational performance like PLF, SHR, SFC and Auxiliary consumption of Unit no. 7 for the period November 2016 to March 2017	SL No.	M/Y	PLF (%)	SHR (Kcal/K wh)	Secondar y fuel consumpt ion (LDO) (KL)	SFC Specific Fuel Consumpti on (coal) (Kg/Kwh)	Specific Fuel Consumptio n (LDO) (Ml/Kwh)	Auxiliary Consumption (MU)
			1	Nov 2016	21.798	4767.85	523.31	0.8	30.31	2.07168
			2	Dec 2016	40.516	4516.28	796	0.77	24	3.97896



SL No.	Directive	Direction given by BERC				С	omp	oliance by BSPGC	L	
1101			3	Jan 2017	55.71	4195.39	40	0.75	8.9	5.4714
			4	Feb 2016	20.933	3 4068.12 5	67	0.75	4.33	1.85688
			5	Mar 2017	24.347		31	9.48 0.75	16.033	2.39112
5	7.2.5	The commission directs BSPGCL to submit the following milestone.	Mil	estone dat	o for		nit l	No. 8	Unit	No. 9
		Completion dates for unit 8 and unit 9 as			e ior			1		,
		per following format by 31st May 2017	Con	npletion		As properties of the second se	per	Actual	As per contract	Actual
			Cor	ndenser erec	tion	11.09.2012		05.09.2016	11.12.2012	25.02.2017
				ler hydro ainable)	test	22.04.2013		21.08.2014	22.07.2013	21.09.2014
			Tur	bine Boxup		11.08.2013		19.06.2017	11.11.2013	To be achieved
			Boi	ler Light Up	(BLU)	21.10.2013		18.06.2017	21.01.2014	29.08.2017
			TG	Oil Flushing		26.10.2013		30.05.2016	26.01.2014	To be achieved
			Ste	am Blowing		15.12.2013		03.09.2017	15.03.2014	To be achieved
			Dat Syn	e of ichronization	Unit 1	11.01.2014		To be achieved	11.03.2014	To be achieved
				l Load		10.03.2014		To be achieved	10.06.2014	To be achieved
6	7.2.6	The Commission directs BSPGCL to submit the Business Plan for the remaining year (FY 2017-18 & FY 2018-	➤ BSPGCL have already requested Hon'ble Commission that once the plant is in operating condition, business plan shall be submitted based on the actual operating conditions.							



SL No.	Directive	Direction given by BERC	Compliance by BSPGCL ➤ Above reply of BSPGCL has been noted by the Hon'ble Commission.						
		19) of the second control period FY 2016-17 to FY 2018-19 by September, 2016.							
7	7.3.1	The commission directs BSPGCL to furnish month wise details from November, 2016 to March 2017 of number of hours the unit 7 has generated	SL No.			Maximum Power	Total Generation		
		power during FY 2016-17 and month			No. of Days	No. of Hours	(MW)	(MU)	
		wise details of Maximum power (MW) and energy generated (MU) by Unit 7	1	November 2016	15	198:35	106	17.264	
		during FY 2016-17.	2	December 2016	23	395:36	102.88	33.158	
			3	January 2017	28	615:54	90.33	45.595	
			4	February 2017	12	231:15	77.81	15.474	
			5	March 2017	11	209:17	110	19.926	
9	7.3.2	The commission directs the BSPGCL to maintain asset/ property register showing details of nature of equipment, value of equipment, detail of land, extent of land, buildings (Office, Generation Plant, residential etc) and other civil works etc and shall submit the details alongwith tariff petition to be filed energy year from FY 2018-19 The commission directs BSPGCL to ensure that different grades of coal shall be used in optional ratio, so that maximum heat can be generate at less cost of coal.	 March 2017 ≥ BSPGCL would like to submit that one consultant (PFC) was engaged by the then BSEB for developing software for preparation and maintenance of Asset/ Property register of all companies which were to be formed after restructuring of BSEB. However, this work could not be completed by PFC due to some reasons. > Further, it is to submit that efforts are being made for hiring of one expert agency for the work of maintaining asset/property register. BSPGCL would like to submit that the directive is noted for future action and after the units will commence operation, the same will be implemented. 						



Annexure I

BERC Tariff Formats for FY 2018-19

INDEX OF REGULATORY COMPLIANCE FORMATS FOR ARR & TARIFF FILING BY BSPGCL FOR FY 2016-17, FY 2017-18 & FY 2018-19 BEFORE HON'BLE BERC

Form No.	Title of Tariff Filing Forms
<u>FORM- 1</u>	Summary of Tariff Proposal
FORM- 1a	Return on Equity
FORM-2	Plant Characteristics
FORM-3	Normative parameters to be considered for tariff computations
FORM-3a	Calculation of Variable cost
FORM- 4	Details of Foreign loans
FORM-5	Abstract of Admitted Capital Cost for the existing Project
FORM-5A	Abstract of Capital Cost Estimates and Schedule dates of Commissioning for the New projects
FORM-5B	Break-up of Capital Cost for Coal/Lignite based projects
FORM-5D	Break-up of Construction/Supply/Service packages
FORM- 6	Financial Package upto COD
FORM- 7	Details of Project Specific Loans
FORM-8	Details of Allocation of corporate loans to various projects
FORM-9	Statement of Additional Capitalisation after COD
FORM - 10	Financing of Additional Capitalisation
FORM- 11	Statement of Depreciation
FORM- 12	Calculation of Depreciation Rate
FORM- 13	Calculation of Interest on Loans
FORM- 14	Calculation of Advance Against Depreciation (AAD)
FORM- 15	Calculation of Interest on Working Capital
FORM- 16	Draw Down Schedule for Calculation of IDC & Financing Charges
FORM 17	Information to be submitted in respect of Fuel for Computation of Energy Charges

FORM- 1 Summary of Tariff Proposal

(in Rs Crores)

S.No.	Particulars		FY 2016-17 (Approved in MYT Order)	FY 2016-17 (R.E. Approved)	As per Audited Accounts FY 2016-17	FY 2017-18 (Approved in MYT Order)	FY 2017-18 (RE)	FY 2018-19 (Projection) Units 6 & 7	FY 2018-19 (Projection) Units 8 & 9
1. Computa	tion of Energy Charge								
1.1	Fuel Cost	FORM- 3a	299.19	63.67	51.01	287.74	94.29	331.20	740.00
2. Computa	tion of Fixed Charge								
2.1	Interest on Loan	FORM- 13	-	3.28	-	15.59	11.28	69.86	477.91
2.2	Depreciation	FORM- 11	-	-	9.58	15.59	6.47	50.47	373.84
2.3	Interest on Working Capital	FORM- 15	18.25	5.59	5.70	18.72	2.25	23.71	73.99
2.4	O & M Expenses	FORM- 18	51.29	47.19	62.73	66.24	51.86	53.40	121.78
2.5	Return on Equity	FORM- 1 a	44.41	7.19	8.53	22.71	11.96	61.55	267.24
2.6	Less: Non-Tariff Income		0.20	0.50	13.36	0.50	0.66	0.50	0.50
2.7	Less: O&M Expenses Capitalized		-	-	-	-	-	-	-
2.8	Carry Forward		-	-	-	-	-	2.35	-
	Sub-total		113.74	62.75	73.18	138.35	83.16	260.85	1,314.26
	Total		412.93	126.42	124.19	426.09	177.45	592.04	2,054.27
3.Calculation of Rate of Energy Charge(Rs./kWh)		Vh)							
3.1	Rate of Variable Charge		2.880	2.650	4.201	2.770	2.709	2.790	2.32
3.2	Rate of Fixed Charge		1.095	2.607	6.027	1.331	2.389	2.197	4.12

FORM- 1 a Return on Equity (ROE)

(in Rs Crores)

S.No.	Particulars	FY 2016-17 (Approved in MYT Order)	FY 2016-17 (R.E. Approved)	As per Audited Accounts FY 2016-17	FY 2017-18 (Approved in MYT Order)	FY 2017-18 (RE)	FY 2018-19 (Projection) Units 6 & 7	FY 2018-19 (Projection) Units 8 & 9
1	Opening Equity	20.78	87.04	118.54	159.50	146.29	436.49	1,890.83
2	Addition in Equity	296.40	72.47	55.47	5.45	290.20	6.35	36.04
3	Closing Equity	317.18	159.51	174.01	164.95	436.49	442.83	1,926.88
4	Average Equity	-	123.27	146.27	162.23	291.39	439.66	1,908.85
5	Base Rate on Equity (%)	14.00%	14.00%	14.00%	14.00%	14.00%	14.00%	14.00%
6	RoE Amount	44.41	7.19	8.53	22.71	11.96	61.55	267.24

Name of the Utility / Company: Bihar State Power Generating Company

Name of the Thermal Power Station: Barauni Thermal Power Station

Basic characteristics of the plant: Barauni Thermal Power Station (BTPS) is the only power station under state sector.

The Barauni Thermal Power Plant was constructed in three stages:

- (a) Stage I: 2 x 15 MW (Unit # 1, 2 &3) Retired
- (b) Stage II: 2 x 50 MW (Unit # 4 & 5) Retired
- (c) Stage III: 2 x 110 MW (Units # 6 & 7) Uni7: Shut down due to CPCB order. Unit 6 under R&M
- (d) Stage IV: 2 x 250 MW (Units # 8 & 9) Under Construction

Special Features of the Plant

Site Specific Features

The site is loacated at Latitude 25° 23' 36" N and Longititude 86° 1' 36" E about 8 KM from Barauni Town. It lies on the east of Barauni- Mokama Section of National Highway (NH- 31). BTPS site is well connected by means of dedicated broad gauge railway siding on Barauni - Mokama Line of EC railways.

Fuel Details	Primary Fuel	Auxiliary Fuel
	Coal	Light Diesel Oil

Details

Module number or Unit number

	1	2	3	4	5	6	7	8	9
Installed Capacity (IC)	15 MW	15 MW	15 MW	50 MW	50 MW	110 MW	110 MW	250 MW	250 MW
Date of Commercial Operation (COD)	26.01.66	16.01.63	20.10.63	09.11.69	01.12.71	01.05.83	31.03.85	15.11.2017	24.02.2018

FORM-3	Normative parameters to be considered for tariff computations
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FY 2016-17

(R.E.

Approved)

4

Particulars	Unit	FY 2016-17 (Approved in MYT Order)
1	2	3
Installed Capacity	MW	
De-rated Capacity	MW	
Plant Load Factor	%	
Aux. Consumption	%	
Sp. Coal Consumption	kg/kWh	
Sp. Oil Consumption	mL/kWh	
Station Heat Rate	kcal/kWh	
Calorific Value of Coal	kCal/kg	
Calorific Value of FO/LDO	kCal/L	
Coal Transit Loss	%	
O&M Cost	Rs. Cr.	
Cost of Fuel for WC	in Months	
Primary Fuel Stock for WC	in Months	
Secondary Fuel Stock for WC	in Months	
Spare Stock as % of Plant & Equipment Cost for WC	%	
Receivables for WC	in Months	
Prime lending Rate of SBI as on 1st April	%	

N/A

FY 2017-18

(Approved in MYT

Order)

6

FY 2017-18

(RE)

7

FY 2018-19

(Projection

) Units 8 &

9

9

FY 2018-19

(Projection)

Units 6 & 7

8

As per

Audited

Accounts FY

2016-17

5

FORM- 3 a	Calculation of Variable cost	

Sl. No.	Item	Derivation	Unit	FY 2016-17 (Approved in MYT Order)	FY 2016-17 (R.E. Approved)	As per Audited Accounts FY 2016-17	FY 2017-18 (Approved in MYT Order)	FY 2017-18 (RE)	FY 2018-19 (Projection) Units 6 & 7	FY 2018-19 (Projection) Units 8 & 9
1	Gross Generation	A	MUs	1,180	274	137	1,181	395	1,349	3,504
2	Station Heat Rate	В	KCal/KWH	3,000	3,000		3,000	3,000	3,000	2,500
3	Sp. Oil Consumption	С	ml/kWh	3	3		3	3	3	3
4	Calorific value of Oil	D	kcal/l	10,153	10,153		10,153	10,153	10,153	10,153
5	Gross Calorific Value of coal	Е	kcal/kg	5,650	5,672		5,672	5,845	5,845	5,845
6	Overall Heat	F= A*B	G Cal	3,541,230	8,20,512		35,42,616	1,186,416	4,047,120	8,760,000
7	Heat from Oil	G=(A*C*D)/1000	G Cal	35,954	8,331		35,968	12,046	41,090	106,728
8	Heat from Coal	H = (F-G)	G Cal	3,505,276	8,12,181		35,06,648	1,174,370	4,006,030	8,653,272
9	Actual Oil Consumption	I=A*C	kl	3,541	821		3,543	1,186	4,047	10,512
10	Actual Coal Consumption	J=(H*1000)/E	MT	620,403	1,43,191		6,18,238	200,928	685,408	1,480,524
11	Coal Consumption including Transit Loss	J1=J/(1-0.008)	MT	625,406	1,44,346		6,23,224	202,548	690,936	1,492,463
12	Cost of Oil per KL	K	Rs/kl	44,761	52,171		52,171	41,487	42,717	42,717
13	Cost of Coal per MT	L	Rs/MT	4,531	4,115		4,320	4,412	4,543	4,657
14	Cost of Oil	M=I*K/100000	Rs Lakh	1,585	428		1,848	492	1,729	4,490
15	Cost of Coal	N=J1*L/100000	Rs Lakh	28,334	5,939		26,926	8,937	31,391	69,510
16	Total Fuel Cost	O= M+N	Rs Lakh	29,919	6,367		28,774	9,429	33,120	74,000
17	Other Fuel related cost	P	Rs Lakh	-	-		0	0	0	0
18	Total Fuel Cost	Q= O+P	Rs Lakh	29,919	6,367	5,101	28,774	9,429	33,120	74,000
19	Fuel Cost/Unit Gross	Q/(A*10)	Rs/kWh	2.53	2.33		2.44	2.38	2.46	2.11
20	Auxiliary Consumption	R	%	12%	12%	11.50%	12%	12%	12%	9%
21	Auxiliary Consumption	S=A*R	MUs	142	33	16	142	47	162	315
22	Net Generation	T=A-S	MUs	1,039	241	121	1,039	348	1,187	3,189
23	Fuel Cost/Unit Net	Q/(T*10)	Rs/kWh	2.88	2.65	4.20	2.77	2.71	2.79	2.32

FORM- 4	Details of Foreign loans
---------	--------------------------

Financial Year (Starting from COD)	Year 1					Year 2				Year 3 and so on			
1	2	3	4	5	6	7	8	9	10	11	12	13	
	Date	Amount (Foreign Currency)	Exchange Rate	Amount (Rs.)	Date	Amount (Foreign Currency)	Exchange Rate	Amount (Rs.)	Date	Amount (Foreign Currency)	Exchange Rate	Amount (Rs.)	
Currency1 ¹					•		•			•	•		
At the date of Drawl ²													
Scheduled repayment date of principal													
Scheduled payment date of interest													
At the end of Financial year													
Currency2 ¹ At the date of Drawl ² Scheduled repayment date of principal Scheduled payment date of interest At the end of Financial year Currency3 ¹ & so on At the date of Drawl ² Scheduled repayment date of principal	Not Applicable												
Scheduled payment date of interest													
At the end of Financial year													

NO FOREIGN LOANS

 $^{^1}$ Name of the currency to be mentioned e.g. US \\$, DM, etc. etc. 2 In case of more than one drawl during the year, Exchange rate a

FORM-5 Abstract of Admitted Capital Cost for the existing Project

Capital cost as admitted by BERC as on date: Not available

(Give reference to the relevant BERC Order with Petition No. & Date)

Foreign Component, if any (In Million US \$ or the relevant Currency)

Domestic Component (Rs. Cr.)

Foreign Exchange rate considered for the admitted Capital cost

Total Capital cost to be admitted (Rs. Cr)

FORM-5A

Abstract of Capital Cost Estimates and Schedule dates of Commissioning for the New projects

Name of the Authority approving the project cost estimates:

Date of approval of the Capital cost									
estimates:									
	Estimated Cost						ted Cost		
Price level of approved estimates	As of End ofQtr. Of the	e year	As or	n Sche	duled COD	of the Station			
Foreign Exchange rate considered for	1								
theCapital cost estimates	4								
Cit-1 Ctdti IDC 6 FC	_								
Capital Cost excluding IDC & FC	4								
Foreign Component, if any (In Million US \$	=								
or the relevant Currency)	1								
of the relevant currency)	-								
Domestic Component (Rs. Cr.)	1								
	=								
Total Capital cost excluding IDC & FC	:]								
(Rs. Cr)									
]								
IDC & FC									
Foreign Component, if any (In Million US \$	i								
or the relevant Currency)	_								
D	_								
Domestic Component (Rs. Cr.)	-								
Total IDC & FC (Rs.Cr.)	-								
Total IDC & PC (RS.CI.)	-				1 -	1. 1 .			
Rate of taxes & duties considered	†		NO	ot A	pplic	cable			
rate of taxes a dates considered	†								
Capital cost Including IDC & FC									
	1								
Foreign Component, if any (In Million US \$	3								
or the relevant Currency)									
Domestic Component (Rs. Cr.)									
	4								
Capital cost Including IDC & FC (Rs. Cr)									
Schedule date of Commissioning	4								
Schedule date of Commissioning	†								
COD of Unit-I/Block-I	†								
	1								
COD of Unit-II/Block-II									
, , , , , , , , , , , , , , , , , , , ,									
]								
COD of last Unit/Block									
Nete	 								
Note: 1. Copy of approval letter should be enclose	od								
Copy of approval letter should be enclosed. Details of Capital cost are to be furnished.		nnlicable	l						
3. Details of IDC & Financing Charges are to									
and the second s		*						Applicant	
Ī.								-rricum	

- Note:

 1. Copy of approval letter should be enclosed.

 2. Details of capital cost are to be furnished as per FORM-5B or 5C as applicable.

 3. Details of IDC & Financing Charges are to be furnished as per FORM-1

FORM-	Break-up of Capital Cost for Coal/Lignite based
5B	projects

Cost in Rs. Crores

						Cost in Rs. Crore
Sl.No.	Break Down	As per original Estimates	As on COD	Variation (Rs. Cr.)	Reasons for Variation	Admitted Cost (Rs. Cr.)
1	Cost of Land & Site Development					
	Land					
	Rehabilitation & Resettlement (R&R)					
	Preliminary Investigation & Site development					
	Total Land & Site Development					
2	Plant & Equipment					
	q. p					
2.1	Steam Generator Island					
	Turbine Generator Island					
	BOP Mechanical					
2.3.1	External water supply system					
2.3.2	CW system					
2.3.3	DM water Plant					
2.3.4	Clarification plant					
2.3.5	Chlorination Plant					
2.3.6	Fuel Handiling & Storage system					
2.3.7	Ash Handling System	┪				
2.3.8	Coal Handling Plant	1				
2.3.9	Rolling Stock and Locomotives	1				
2.3.10	MGR	1				
2.3.11	Air Compressor System	-				
2.3.11	Air Compressor System Air Condition & Ventilation System	-				
	Fire fighting System	-				
2.3.13		=				
2.3.14	HP/LP Piping Total BOP Mechanical	=				
2.4		=				
	BOP Electrical					
2.4.1	Switch Yard Package					
2.4.2	Transformers Package					
2.4.3	Switch gear Package	_				
2.4.4	Cables , Cable facilities & grounding	_				
2.4.5	Lighting	_				
2.4.6	Emergency D.G. set					
	Total BOP Electrical	_				
		_				
2.5	C & I Package					
	Total Plant & Equipment excluding taxes & Duties					
	Taxes and Duties					
2.6.1	Custom Duty	4				
2.6.2	Other Taxes & Duties	4				
	Total Taxes & Duties	4	No	t Applica	hle	
	Total Plant & Equipment	4	110	, crippiica	DIC	
	Initial spares	_				
	Civil Works	_				
	Main plant/Adm. Building					
	CW system	_				
	Cooling Towers					
	DM water Plant					
4.5	Clarification plant					
4.6	chlorination plant					
	Fuel Handiling & Storage system					
4.8	Coal Handling Plant					
4.9	MGR & Marshalling Yard					
	Ash Handling System					
	Ash disposal area development	7				
	Fire fighting System	7				
	Township & Colony	7				
4.14	Temp. construction & enabling works	7				
	Road & Drainage	7				

FORM-	Break-up of Capital Cost for Coal/Lignite based
5B	projects

Cost in Rs. Crores

Sl.No.	Break Down	As per original Estimates	As on COD	Variation (Rs. Cr.)	Reasons for Variation	Admitted Cost (Rs. Cr.)
				,		(2.5. 52.)
5	Construction & Pre- Commissioning Expences					
5.1	Erection Testing and commissioning					
5.2	Site supervision					
5.3	Operator's Training					
5.4	Construction Insurance					
5.5	Tools & Plant					
5.6	Start up fuel					
	Total Construction & Pre- Commissioning Expences					
6	Overheads					
6.1	Establishment					
6.2	Design & Engineering					
6.3	Audit & Accounts					
6.4	Contingency					
	Total Overheads					
7	Capital cost excluding IDC & FC					
7.1	Interest During Construction (IDC)					
7.2	Financing Charges (FC)					
8	Capital cost including IDC & FC					

Note:

^{1.} In case of time and cost over-run of the project, a detailed note giving reasons of such time and cost over run should be submitted, duly bringing out the agency responsible and whether such time and cost over run was beyond the control of the generating company.

FORM- 5D	Break-up of Construction/Supply/Service packages
-------------	--

Sl.No.	Name/No. of Construction / Supply / Service Package	Scope of works1 (in line with cost break-ups as applicable under various heads)	through	No. of bids received	Date of Award	Date of Start of work	Date of Completion of Work			Actual expenditure till the completion or up to COD whichever is earlier(Rs.Cr.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Not Applicable									

1 The scope of work in any package should be indicated in conformity with Capital cost break-up for the coal/lignite based plants in the FORM-5B to the extent possible. In case of Gas/Liquid fuel based projects, break down in the similar manner in the relevent heads as per FORM-5C.

2 If there is any package, which need to be shown in Indian Rupee and foreign currency(ies), the same should be shown separatly alongwith the currency, the exchange e.g. Rs.80 Cr+US\$50m=Rs.280Cr at US\$=Rs40 as on ______.

FORM- 6 Financial Package upto COD	FORM- 6	Financial Package upto COD
--------------------------------------	---------	----------------------------

	Financial Package Fas Approved a		Financial as on COI	_	As Admitted on COD		
	Currency and Amount ³		Currency and Amount ³		Currency and Amount ³		
Loan-I	US \$						
Loan-II							
Loan-III							
and so on			Not A	Appli	cable		
Equity-]					
Foreign							
Domestic							
Total Equity							
Debt : Equity Rati	.0						

 $^{^1}$ Say US \$ 200m + Rs.400 Cr or Rs.1200 Cr including US \$200m at an exchange rate of 1US \$=Rs.40/-

 $^{^{\}rm 2}$ Date of Commercial Operation means date of Commercial Operation of the last unit

³ For example : US \$, 200M etc.etc

Particulars	Package1	Package2	Package3	Package4	Package5	Package6
Source of Loan ¹						
Currency ²						
Amount of Loan sanctioned						
Amount of Gross Loan drawn upto 31.03/COD ^{3,4,5,13,15}						
Interest Type ⁶						
Fixed Interest Rate, if applicab	le					

Details of Project Specific Loans

Are there any Caps/Floor⁹

If above is yes, specify caps/floor

Moratorium Period¹⁰

Yes/No

FORM- 7

Details of Project Specific Loan

Base Rate, if Floating Interest7

Margin, if Floating Interest⁸

Moratorium effective from Repayment Period¹¹ Repayment effective from Repayment Frequency¹²

Repayment Instalment 13,14

Base Exchange Rate 16

¹ Source of loan means the agency from whom the loan has been taken such as WB, ADB, WMB, PNB, SBI, ICICI, IFC, PFC etc.

² Currency refers to currency of loan such as US\$, DM, Yen,Indian Rupee etc.

³ Details are to be submitted as on 31.03.__ for existing assets and as on COD for the remaining assets.

⁴ Where the loan has been refinanced, details in the Form are to be given for the loan refinaced. However, the details of the original loan are to

⁵ If the Tariff in the petition is claimed seperately for various units, details in the Form are to be given seperately for all the units in the same fo

 $^{^{\}rm 6}$ Interest type means whether the interest is fixed or floating.

⁷ Base rate means the base as PLR etc. over which the margin is to be added. Applicable base rate on different dates from the date of drawl may

 $^{^{\}rm 8}\,{\rm Margin}$ means the points over and above the floating rate.

⁹ At times caps/floor are put at which the floating rates are frozen. If such a condition exists, specify the limits.

 $^{^{10}}$ Moratorium period refers to the period during which loan servicing liability is not required.

¹¹ Repayment period means the repayment of loan such as 7 years, 10 years, 25 years etc.

¹² Repayment frequency means the interval at which the debt servicing is to be done such as monthly, quarterly, half yearly, annual, etc.

¹³ Where there is more than one drawal/repayment for a loan, the date & amount of each drawal/repayement may also be given seperately

¹⁴ If the repayment instalment amount and repayment date can not be worked out from the data furnished above, the repayment schedule to

 $^{^{15}}$ In case of Foreign loan,date of each drawal & repayment along with exchange rate as on that date may be given.

 $^{^{16}}$ Base exchange rate means the exchange rate prevailing as on 31.03.___ for existing assets and as on COD for the remaining assets.

	Details of Allocation of corporate loans to various
101111111111111111111111111111111111111	projects

Particulars	Package1	Package2	Package3	Package4	Package5	Remarks			
Source of Loan ¹									
Currency ²									
Amount of Loan sanctioned									
Amount of Gross Loan drawn upto 31.03/COD ^{3,4,5,13,15}									
Interest Type ⁶									
Fixed Interest Rate, if applicable									
Base Rate, if Floating Interest ⁷									
Margin, if Floating Interest ⁸	Not Applicable								
Are there any Caps/Floor ⁹		111	Jt Mp	piicai	JIC				
If above is yes, specify caps/floor									
Moratorium Period ¹⁰									
Moratorium effective from									
Repayment Period ¹¹									
Repayment effective from									
Repayment Frequency ¹²									
Repayment Instalment 13,14									
Base Exchange Rate ¹⁶									
	Distribution	n of loan pac	kages to var	ious projects	3				
Name of the Projects						Total			
Project 1									
Project 2									
Project 3 and so on		l			l				

 $^{^{1}}$ Source of loan means the agency from whom the loan has been taken such as WB, ADB, WMB, PNB, SBI, ICICI, IFC, PFC etc.

² Currency refers to currency of loan such as US\$, DM, Yen,Indian Rupee etc.

³ Details are to be submitted as on 31.03.___ for existing assets and as on COD for the remaining assets.

⁴ Where the loan has been refinanced, details in the Form are to be given for the loan refinaced. However, the details of the original loan are to be given seperately in the same form.

 $^{^{5}}$ If the Tariff in the petition is claimed seperately for various units, details in the Form are to be given seperately for all the units in the same form.

⁶ Interest type means whether the interest is fixed or floating.

⁷ Base rate means the base as PLR etc. over which the margin is to be added. Applicable base rate on different dates from the date of drawl may also be enclosed.

 $^{^{\}rm 8}\,{\rm Margin}$ means the points over and above the floating rate.

 $^{^{9}}$ At times caps/floor are put at which the floating rates are frozen. If such a condition exists, specify the limits.

 $^{^{\}rm 10}$ Moratorium period refers to the period during which loan servicing liability is not required.

¹¹ Repayment period means the repayment of loan such as 7 years, 10 years, 25 years etc.

¹² Repayment frequency means the interval at which the debt servicing is to be done such as monthly, quarterly, half yearly, annual, etc.

quarterly, half yearly, annual, etc.

13 Where there is more than one drawal/repayment for a loan, the date & amount of each drawal/repayement and its allocation may also be given seperately

¹⁴ If the repayment instalment amount and repayment date can not be worked out from the data furnished above, the repayment schedule to be furnished seperately.

 $^{^{15}}$ In case of Foreign loan,date of each drawal & repayment along with exchange rate as on that date may be given.

 $^{^{16}}$ Base exchange rate means the exchange rate prevailing as on 31.03.___ for existing assets and as on COD for the remaining assets.

FORM-9 Statement of Additional Capitalisation after COD

Sl.No.	Year	Work/Equipment added after COD up to Cut off Date / Beyond Cut off Date ¹	Amount Capitalised / Proposed to be capitalised	Justification	Admitted Cost ²
(1)	(2)	(3)	(4)	(5)	(6)
		Not A	pplicable		
	Total				

FURM - 10 Financing of Additional Capitalisation	FORM - 10 Fi	inancing of Additional Capitalisation
--	--------------	---------------------------------------

Financial Year (Starting from COD)	Year1 ¹	Year2	Year3	Year4	Year 5
Amount capitalised in Work/Equipment					
Financing Details					
Loan-1 (Central Bank of India)					
Loan-2 (Canara Bank)					
Loan-3 (HUDCO)					
PFC Loans					
Total Loan ²		N/A			
		•			
Equity					
Internal Resources					
Others					
Total					

¹Year 1 refers to Financial Year of COD and Year 2, Year 3 etc. are the subsequent financial years respectively.

Statement of Depreciation

(in Rs Crores)

Financial Year	FY 2016-17 (Approved in MYT Order)	FY 2016-17 (R.E. Approved)	As per Audited Accounts FY 2016-17	FY 2017-18 (Approved in MYT Order)	FY 2017-18 (RE)	FY 2018-19 (Projection) Units 6 & 7	FY 2018-19 (Projection) Units 8 & 9
Gross Depreciation on Capital Cost (1)	-	-	9.58	15.59	6.47	50.47	373.84
Depreciation on Additional Capitalisation							
Amount of Additional Capitalisation							
Depreciation Amount (2)							
Detail of FERV							
Amount of FERV on which depreciation charged							
Depreciation amount (3)							
Depreciation recovered during the Year (= 1+2+3)	-	-	9.58	15.59	6.47	50.47	373.84
Net Depreciation claimed during the year (exlcuding depreciation on grants)							
Cumulative Depreciation upto the year							

FORM- 12

Calculation of Depreciation

(in Rs Croi	es
-------------	----

(iii K3 crores)											
			GROS	S BLOCK			DEPRECIA	TION		NET	BLOCK
		As on 01.04.16	Additions during the year/Transfer	Sales/Transfer	TOTAL	UPTO 01.04.16	During the year	Adjustmnet on Sale		As on 31.03.17	As on 31.03.16
FIXED ASSETS	Rate										
Land and land rights	-										
Buildings	3%										
Hydraulic Works	6%										
Others Civil Works	3%										
Plant and Machinery	5%		As per Annual Accounts FY 2016-17								
Lines and Cable Network	5%				As per Amilian A	iccounts F1 2010	-1/				
Vehicles	6%										
Furniture and Fixtures	6%										
Office Equipment	6%										
TOTAL:	-										

FORM- 13	Calculation of Interest on Loans
	(in Rs Crores)

							(III Its di di co)	
Sl. no.	Particulars	FY 2016-17 (Approved in MYT Order)	FY 2016-17 (R.E. Approved)	As per Audited Accounts FY 2016-17	FY 2017-18 (Approved in MYT Order)	FY 2017-18 (RE)	FY 2018-19 (Projection) Units 6 & 7	FY 2018-19 (Projection) Units 8 & 9
1	2	5	3	4	5	6	7	8
							-	
a	Gross Normative loan - Opening							
b	Cumulative repayment of Normative Loan upto previous year							
С	Net Normative loan - Opening	-	-	-	169.09	-	641.57	4,411.95
d	Add: Loans during the Year	-	169.09	-	12.72	648.04	14.81	84.10
e	Repayments of Normative Loan during the year	-	ı	-	15.59	6.47	50.47	373.84
f	Net Normative loan - Closing	-	169.09	-	166.22	641.57	605.91	4,122.20
g	Average Normative Loan	-	84.55	-	167.66	320.79	623.74	4,267.07
h	Weighted average Rate of Interest on Loans	-	9.30%	-	9.30%	12%	11.20%	11.20%
i	Interest on Normative loan (New + Past)	-	3.28	-	15.59	11.28	69.86	477.91

FORM- 14	Calculation of Advance Against Depreciation (AAD)

(in Rs Crores)

Particulars	FY 2016-17 (Approved in MYT Order)	FY 2016-17 (R.E. Approved)	As per Audited Accounts FY 2016-17	FY 2017-18 (Approved in MYT Order)	FY 2017-18 (RE)	FY 2018-19 (Projection) Units 6 & 7	FY 2018-19 (Projection) Units 8 & 9
1/10th of the Loan(s)							
Repayment of the Loan(s) as considered for working out Interest on Loan							
Minimum of the Above							
Less:Depreciation during the year							
(A^1)			Not	t Applic	ahla		
Cumulative Repayment of the Loan(s) as			NU	t Applic	abie		
considered for working out Interest on							
Loan							
Less: Cumulative Depreciation							
(B^1)							
Advance Against Depreciation (Minimum of A & B)							

Sl. No.	Particulars	FY 2016-17 (Approved in MYT Order)	FY 2016-17 (R.E. Approved)	As per Audited Accounts FY 2016-17	FY 2017-18 (Approved in MYT Order)	FY 2017-18 (RE)	FY 2018-19 (Projection) Units 6 & 7	FY 2018-19 (Projection) Units 8 & 9
1	Cost of 2 month primary & secondary fuel	49.87	10.61	8.50	47.96	15.72	55.20	123.33
2	Cost of 1 month O&M	4.27	3.93	5.23	5.52	4.32	4.45	10.15
3	Maintenance Spares	0.73	4.19	4.19	8.72	6.15	14.76	64.23
4	Cost of 2 months Receivables	68.82	21.07	20.70	71.01	29.58	98.67	342.38
5	Total Working Capital	123.70	39.80	38.62	133.21	55.76	173.08	540.09
6	Rate of Interest	14.75%	14.05%	14.75%	14.05%	13.75%	13.70%	13.70%
7	Interest on Working Capital	18.25	5.59	5.70	18.72	2.25	23.71	73.99

	Draw Down		Quarter 1			Quarter 2		0	uarter (CO	D)
			Exchange			Exchange		`	Exchange	
Sl. No.		Quantum	Rate on	Amount	Quantum	Rate on	Amount	Quantum	Rate on	Amount
SI. NO.	Particulars	in Foreign	draw	in Indian	in Foreign		in Indian	in Foreign	draw	in Indian
		currency	down	Rupee	currency	down	Rupee	currency	down	Rupee
		currency	date	Rupec	currency	date	Rupec	currency	date	Rupec
1	Loans		uuto			uuto			unco	
1.1	Foreign Loans									
1.1.1	Foreign Loan 1									
	Draw down Amount									
	IDC									
	Financing charges									
1.1.2	Foreign Loan 2									
	Draw down Amount IDC									
	Financing charges									
	rillalicing charges									
1.1.3	Foreign Loan 3									
	Draw down Amount									
	IDC									
	Financing charges									
1.1.4										
1.1	m . ln ' r									
1.1	Total Foreign Loans									
	Draw down Amount IDC									
	Financing charges									
	i manerng charges									
1.2	Indian Loans									
1.2.1	Indian Loan 1					N/A				
	Draw down Amount					IN/A				
	IDC									
	Financing charges									
4.0.0	, 1, 1, 0									
1.2.2	Indian Loan 2 Draw down Amount									
	IDC									
	Financing charges									
	i manerng charges									
1.2.3	Indian Loan 3									
-	Draw down Amount									
	IDC									
	Financing charges									
1.2.4										
10	Total India: I									
1.2	Total Indian Loans Draw down Amount									
	IDC									
	Financing charges									
	i maneing charges									
1	Total of Loans drawn									
	IDC									
	Financing charges									
	J									
2	Equity									
2.1	Foreign equity drawn									
2.2	Indian equity drawn									
	T-t-1									
	Total equity deployed			<u> </u>	1			1		L

FORM 17 Information to be submitted in respect of Fuel for Computation of Energy Charges

Sl. No.	Month	Unit		ceeding 3rd Ionth	For preceeding 2nd Month	For preceeding 1st Month
1	Quantity of Coal/Lignite supplied by Coal/Lignite Company	(MMT	r)			
2	Adjustment (+/-) in quantity supplied made by Coal/Lignite Company	(MMT	r)			
3	Coal supplied by Coal/Lignite Company (1+2)	(MMT	r)			
4	Normative Transit & Handling Losses (For coal/Lignit based Projects)	(MMT	r)			
5	Net coal / Lignite Supplied (3-4)	(MMT	Γ)			
6	Amount charged by the Coal /Lignite Company	(Rs.))			
7	Adjustment (+/-) in amount charged made by Coal/Lignite Company	(Rs.))		NI / A	
8	Total amount Charged (6+7)	(Rs.)			N/A	
9	Transportation charges by rail/ship/road transport	(Rs.)				
10	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.))			
11	Demurrage Charges, if any	(Rs.))			
12	Cost of diesel in transporting coal through MGR system, if applicable	(Rs.))			
13	Total Transportation Charges (9+/-10-11+12)	(Rs.))			
14	Total amount Charged for coal/lignite supplied including Transportation (8+13)	(Rs.))			
15	Weighted average GCV of coal/ Lignite as fired	(kCal/K	ζ g)			
	Note:		n16 16 22	am	1 6 1 4 6	10: 1 1.1
	¹ Similar details to be furnished for	natural gas,	/liquid fuel for CC	i'l' station and s	secondary fuel oil for co	al/lignite based thermal

FORM 18 Details of operation and maintenance expenses		
	FORM 18	Details of operation and maintenance expenses

	ITEMS	FY 2016-17 (Approved in MYT Order)	FY 2016-17 (R.E. Approved)	Audited	FY 2017-18 (Approved in MYT Order)	FY 2017-18 Upto Sep 2017	FY 2017-18 (RE)	FY 2018-19 (Projection) Units 6 & 7	FY 2018-19 (Projection) Units 8 & 9
Α	Employee Cost	26.30	24.12	20.73	28.34	9.88	25.50	26.26	59.68
В	Administration and General Expenses	8.83	11.02	16.58	11.58	5.40	10.51	10.82	24.59
С	Repairs and Maintenance	7.00	6.00	18.07	20.00	5.68	11.36	11.69	26.98
D	Allocation of Holding Company Expenses	9.16	6.05	7.35	6.32	2.07	4.50	4.63	10.53
E	Total O&M Expenses	51.29	47.19	62.73	66.24	23.03	51.86	53.40	121.78



Annexure II

1. Annual Accounts for FY 2016-17

BIHAR STATE POWER GENERATION COMPANY LIMITED

FINANCIAL STATEMENT

FOR THE F.Y. 2016-17



2017



Bihar State Power Generation Company Ltd

ALANCE SHEET as on 31.03.2017 articulars	Note No.	As at 31 March 2017	As at 31st March 2016	As at 31st March 2015
ASSETS Non-current assets		37555,39,361	20021,56,499	19990,85,298
Property, Plant & Equipment Capital Work in Progress	6	653147,08,542	573124,69,338	456851,21,372
Other Non Current Assets Investment in Joint Ventures	7	175249,61,125	118327,61,125	86791,56,985
		865952,09,028	711473,86,962	563633,63,655
Current assets Inventories Financial Assets	8	5042,25,631	1344,80,710	1003,77,867
- Trade receivables			36393,93,698	41399,31,326
- Cash and Cash Equivalents	9	66845,21,009 9436,57,697	9444,73,282	8961,30,800
Loans	10	1789,31,005	932,21,246	520,61,684
Other Current Assets	11	83113,35,342	48115,68,935	51885,01,677
Total Asse		949065,44,369	759589,55,898	615518,65,332
and the second s	1		S SELVERY	
EQUITY AND LIABILITIES			210512 22 050	34400,00,00
Equity Share Capital	2	210542,23,950	210542,23,950	34400,00,00
Other Equity	3	178406,89,662	90105,02,858	268459,24,77
- Reserves & Surplus - Share Application Money Pending Allotm		46843,00,009	32102,56,009	
- Share Application Money Fertaling	4 (1-6	388949,13,612	300647,26,808	302859,24,77
11-11141		300343/13/012	A STATE OF THE STA	Lan T
Liabilities Non-Current Liabilities	42.50	A state of any		100
Financial Liabilities		362812,93,429	322301,39,716	63478,21,28
- Borrowings	4	302012,93,429	-	
Other Non Current Liabilities		362812,93,429	322301,39,716	63478,21,28
Current Liabilities				
Financial Liabilities			-	
- Borrowings		-	-	240404 40 20
- Trade Payables Other Current Liabilities	5	150460,37,319	104538,33,365	249181,19,28
No. of the second secon	- South	150460,37,319	104538,33,365	249181,19,28
Total Equity & Lial		949065,44,369		615518,65,33

Significant accounting policies

16

Notes to the financial statements

The accompanying notes are an integral part of the financial statements

As per our report of even date attached

For Jha & Associates **Chartered Accountants**

Firm Registration Number: 01195C

For and on behalf of the Company

[CA. Rajeev Kumar Jha] Partner

Membership Number: 079294

Place:- Patna Date:-

(Pradip Kumar) General Manager (F&A) (R. Lakshmanan) Managing Director

DIN: 06908182

(Pratyaya Amrit)

Chairman DIN: 01192117

Bihar State Power Generation Company Ltd

Statement of Profit & Loss for the year ended 31 March 2017

	Particulars	Note No.	For the year ended 31 March 2017	For the period ended 31 March 2016
I.	Revenue	12	5136,18,591	
(a)	Revenue from operations	12	5150,10,551	-
	Less:- Electricity Duty	THE PARTY OF	5136,18,591	-
(b)	Other income	13	1336,12,645	
(c)	Revenue Subsidies and Grants			•
(0)	Total Revenue		6472,31,236	
II.	Expenses:		F100 03 0F7	1844
(a)	Cost of Fuel	14	5100,92,057 247,29,311	
(b)	Employee benefits expense	14	247,29,311	
(c)	Finance costs Depreciation & Amortization expenses	6	957,53,897	
(d)	Other expenses	15	348,68,506	-
(e) (f)	Prior period items (net)			.m. 900mm *
(1)	Total Expenses		6654,43,771	•
III.	Profit/(Loss) before exceptional and extraordinary items and tax (I-II)		(182,12,536)	•
IV.	Exceptional items			
٧.	Profit/(Loss) before extraordinary items and		(182,12,536)	-
	tax (III-IV)		The same of the same	
VI.	Extraordinary items		(182,12,536)	THE RELEASE OF
VII.	Profit/(loss) before tax (V-VI)	1	(182,12,330)	
VIII.	Tax expense Current Tax	1 - 2 0	restance resident	-
(a)	Deferred Tax	y in	- 1 (1/44 uth <u>4</u> 13	-
(b)	Profit/(loss) for the year (VII-VIII)	4	(182,12,536)	-
X.	Basic and Diluted Earnings per equity share (Face value of Rs. 10/- each):	THE COL		
(1)	Basic	II , CO	(0.01)	
(2)	Diluted		(0.01)	
	Significant accounting policies	1		
	Notes to the financial statements	16		

The accompanying notes are an integral part of the financial statements

As per our report of even date attached

For Jha & Associates Chartered Accountants

Firm Registration Number: 01195C

For and on behalf of the Company

[CA. Rajeev Kumar Jha] Partner (Pradip Kumar) General Manager (F&A) (R. Lakshmanan)
Managing Director
DIN: 06908182

(Pratyaya Amrit) Chairman DIN: 01192117

Membership Number: 079294

Place:- Patna

Date:-

Notes to the Financial Statements For the year ended March 31, 2017

Company Information and Significant Accounting Policies

Reporting entity Bihar State Power Generation Company Limited is a subsidiary of Bihar State Power (Holding) Company registered under the Companies Act, 1956, created under Bihar State Electricity Reforms Transfer Scheme, 2012 vide notification no. 17 dated 30.10.2012.

Statement of Compliance

These separate financial statements are prepared ongoing concern basis, under historical cost convention and on accrual basis of accounting and comply in all material aspects with the Indian Accounting Standards (Ind AS) notified under the Companies (Indian Accounting Standards) Rules, 2015 and subsequent amendments thereto, the Companies Act, 2013 (to the extent notified and applicable), applicable provisions of the Companies Act, 1956, and the provisions of the Electricity Act, 2003 to the extent applicable. These are the Company's first Ind AS compliant financial statements and Ind AS 101 'First Time Adoption of Indian Accounting Standards' has been applied.

For all the periods upto and including 31 March 2016, the Company prepared its financial statements in accordance with Generally Accepted Accounting Principles (GAAP) in India, accounting standards specified under Section 133 of the Companies Act, 2013, the Companies Act, 2013 (to the extent notified and applicable), applicable provisions of the Companies Act, 1956, and the provisions of the Electricity Act, 2003 to the extent applicable. The Company followed the provisions of Ind AS 101 in preparing its opening Ind AS Balance Sheet as of the date of transition, viz. 1 April 2015. Some of the Company's Ind AS accounting policies used in the opening Balance Sheet are different from its previous GAAP policies applied as at 31 March 2015, and accordingly the adjustments were made to restate the opening balances as per Ind AS. The resulting adjustments arose from events and transactions before the date of transition to Ind AS. Therefore, as required by Ind AS 101, those adjustments were recognized directly through retained earnings as at 1 April 2015. This is the effect of the general rule of Ind AS 101 which is to apply Ind AS retrospectively.

These financial statements were authorized for issue by Board of Directors on 22nd September'2017.

Basis of measurement

The financial statements have been prepared on the historical cost basis.

Functional and presentation currency 2.

These financial statements are presented in Indian Rupees (INR), which is the Company's functional currency. All financial information presented in INR has been rounded to the nearest rupees except as stated otherwise.

Current and non-current classification

The Company presents assets and liabilities in the balance sheet based on current/non-current classification.

An asset is current when it is:

- Expected to be realized or intended to be sold or consumed in normal operating cycle;
- Held primarily for the purpose of trading;
- Expected to be realized within twelve months after the reporting period; or
- Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period.

All other assets are classified as non-current.

A liability is current when:

- It is expected to be settled in normal operating cycle;
- It is held primarily for the purpose of trading;
- It is due to be settled within twelve months after the reporting period; or
- There is no unconditional right to defer settlement of the liability for at least twelve months after the reporting period.

All other liabilities are classified as non-current.

Deferred tax assets/liabilities are classified as non-current.

Significant accounting policies C.

A summary of the significant accounting policies applied in the preparation of the financial statements are as given below. These accounting policies have been applied consistently to all periods presented in the financial statements.

The Company has elected to utilize the option under Ind AS 101 by not applying the provisions of Ind AS 16 & Ind AS 38 retrospectively and continue to use the previous GAAP carrying amount as a deemed cost under Ind AS at the date of transition to Ind AS. Therefore, the carrying amount of property, plant and equipment and intangible assets as per the previous GAAP as at 1 April 2015, i.e.; the Company's date of transition to Ind AS, were maintained on transition to Ind AS.

Property, plant and equipment 1.

1.1. Initial recognition and measurement

Items of property, plant and equipment are measured at cost less accumulated depreciation/ amortization and accumulated impairment losses. Cost includes expenditure that is directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management.

Deposits, payments/liabilities made provisionally towards compensation, rehabilitation and other expenses relatable to land in possession are treated as cost of land.

In the case of assets ready to use, where final settlement of bills with contractors is yet to be effected, capitalization is done on provisional basis subject to necessary adjustment in the year of final settlement.

Generation system assets are considered 'Ready for intended use', for the purpose of capitalization, after test charging/ successful commissioning of the systems/ assets and on completion of stabilization period wherever technically required.

The cost of land includes provisional deposits, payments/ liabilities towards compensation, rehabilitation and other expenses wherever possession of land is taken. Expenditure on leveling, clearing and grading of land is capitalized as part of cost of the related buildings.

1.2. Subsequent costs

Subsequent expenditure is recognized as an increase in the carrying amount of the asset when it is probable that future economic benefits deriving from the cost incurred will flow to the enterprise and the cost of the item can be measured reliably.

The cost of replacing part of an item of property, plant and equipment is recognized in the carrying amount of the item if it is probable that the future economic benefits embodied within the part will flow to the Company and its cost can be measured reliably. The costs of the day-to-day servicing of property, plant and equipment are recognized in profit or loss as incurred.

1.3. Derecognition

Property, plant and equipment are derecognized when no future economic benefits are expected from their use or upon their disposal. Gains and losses on disposal of an item of property, plant and equipment are determined by comparing the proceeds from disposal with the carrying amount of property, plant and equipment, and are recognized in the statement of profit and loss.

1.4. Depreciation/amortization

Depreciation is recognized in statement of profit and loss on a straight-line basis over the estimated useful lives of each part of an item of property, plant and equipment. Leased assets are depreciated over the shorter of the lease term and their useful lives unless it is reasonably certain that the Company will obtain ownership by the end of the lease term.

Depreciation on the assets of the generation of electricity business is charged on straight line method following the rates and methodology notified by the CERC up to 90% of the original cost of assets referred below:

Asset Group	Rate
Buildings	3.34%
Hydraulic Works	5.28%
Others Civil Works	3.34%
Plant and Machinery	5.28%
Lines and Cable Network	5.28%
Vehicles	6.33%
Furniture and Fixtures	6.33%
Office Equipment	6.33%

Depreciation on additions to/deductions from property, plant & equipment during the year is charged on prorata basis from/up to the month in which the asset is available for use/disposed.

Capital work-in-progress

The cost of self-constructed assets includes the cost of materials & direct labour, any other costs directly attributable to bringing the assets to the location and condition necessary for it to be capable of operating in the manner intended by management and borrowing costs.

Expenses directly attributable to construction of property, plant and equipment incurred till they are ready for their intended use are identified and allocated on a systematic basis on the cost of related assets.

Capital works-in-progress includes advances against turnkey project, the cost incurred on fixed assets that are not yet ready for the intended use and is capitalized up to the date these assets are ready to use. All expenditures of construction division are allocated to the projects on pro-rata basis to the additions made to respective project.

Claims for price variation are accounted for on their acceptance.

Intangible assets and intangible assets under development

3.1. Initial recognition and measurement

Intangible assets that are acquired by the Company, which have finite useful lives, are measured at cost less accumulated amortization and accumulated impairment losses. Cost includes any directly attributable incidental expenses necessary to make the assets ready for its intended use.

Expenditure incurred which are eligible for capitalizations under intangible assets are carried as intangible assets under development till they are ready for their intended use.

3.2. Derecognition

An intangible asset is derecognized when no future economic benefits are expected from their use or upon their disposal. Gains and losses on disposal of an item of intangible assets are determined by comparing the proceeds from disposal with the carrying amount of intangible assets and are recognized in the statement of profit and loss.

3.3. Amortization

Cost of software recognized as intangible asset, is amortized on straight line method over a period of legal right to use or 3 years, whichever is less. Other intangible assets are amortized on straight line method over the period of legal right to use or life of the related plant, whichever is less.

Borrowing costs

Borrowing costs that are directly attributable to the acquisition, construction/exploration/ development or erection of qualifying assets are capitalized as part of cost of such asset until such time the assets are substantially ready for their intended use. Qualifying assets are assets which take a substantial period of time to get ready for their intended use or sale.

When the Company borrows funds specifically for the purpose of obtaining a qualifying asset, the borrowing costs incurred are capitalized. When Company borrows funds generally and uses them for the purpose of obtaining a qualifying asset, the capitalization of the borrowing costs is computed based on the weighted average cost of general borrowing that are outstanding during the period and used for the acquisition, construction/exploration or erection of the qualifying asset.

Capitalization of borrowing costs ceases when substantially all the activities necessary to prepare the qualifying assets for their intended uses are complete. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds. Income earned on temporary investment of the borrowings pending their expenditure on the qualifying assets is deducted from the borrowing costs eligible for capitalization. Borrowing costs include exchange differences arising from foreign currency borrowings to the extent that they are regarded as an adjustment to interest costs.

Other borrowing costs are recognized as an expense in the year in which they are incurred.

Inventories 5.

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Inventories have been valued as under:

- Consumable stores and spares, construction stores, mandatory spares of consumable nature on weighted average method.
- (ii) Scrap on Book value or Net Realizable Value (NRV) whichever is lower.

Cash and cash equivalents

Cash and cash equivalents in the balance sheet comprise cash at banks including sweep in balance and on hand and short-term deposits with an original maturity of three months or less, which are subject to an insignificant risk of changes in value.

Government grants

Government grants received are recognized initially as income when there is reasonable assurance that Company will comply with the conditions associated with the grant.

Grants and Subsidies received for the specific assets are disclosed as Other Non Current Liabilities until assets is created. Grants and Subsidies against which assets is created including Consumer contributions are disclosed as Capital reserve and amortized in proportion of depreciation every year for depreciable assets acquired. On acquisition of Non-depreciable assets, the cost of asset acquired is transferred from Grant account to Capital Reserve and kept intact.

Grants that compensate the Company for the cost of an asset are recognized in profit or loss on a systematic basis over the useful life of the related asset. Grants that compensate the Company for expenses incurred are recognized over the period in which the related costs are incurred and deducted from the related expenses.

8. Provisions and contingent liabilities

A provision is recognized if, as a result of a past event, the Company has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation, in respect of which a reliable estimate can be made based on technical valuation and past experience. If the effect of the time value of money is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. When discounting is used, the increase in the provision due to the passage of time is recognized as a finance cost.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at reporting date, taking into account the risks and uncertainties surrounding the obligation.

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, the receivable is recognized as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably. The expense relating to a provision is presented in the statement of profit and loss net of any reimbursement.

Contingent liabilities are possible obligations that arise from past events and whose existence will only be confirmed by the occurrence or non-occurrence of one or more future events not wholly within the control of the Company. Where it is not probable that an outflow of economic benefits will be required, or the amount cannot be estimated reliably, the obligation is disclosed as a contingent liability, unless the probability of outflow of economic benefits is remote. Contingent liabilities are disclosed on the basis of judgment of the management/independent experts. These are reviewed at each balance sheet date and are adjusted to reflect the current management estimate.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at reporting date, taking into account the risks and uncertainties surrounding the obligation.

Use of Estimates:-9.

The preparation of financial statements requires the management to make estimates and assumptions that affect the reported amounts of assets and liabilities (including contingent liabilities) as of the date of financial statements and the reported income and expenses during the reporting period. The management believes that the estimates used in preparation of the financial statements are prudent and reasonable. Difference between the actual result and estimates are recognized in the period in which the results are known/ materialized.

Foreign currency transactions

Transactions in foreign currencies are initially recorded at the functional currency spot rates at the date the transaction first qualifies for recognition.

11. Revenue

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Company's revenues arise from sale of power and other income. Revenue from sale of power is mostly regulated and governed by the applicable BERC Tariff Regulations under Electricity Act, 2003. Revenue from other income comprises interest from banks, employees, contractors etc., surcharge received from customers for delayed payments, sale of scrap, other miscellaneous income, etc.

11.1. Revenue from sale of power

The Company's operations are regulated under the Electricity Act, 2003. Accordingly, the BERC determines the tariff for the Company's based on the norms prescribed in the tariff regulations as applicable from time to time. Tariff is based on cost incurred that includes Fuel cost, Employee benefits expense, depreciation, return on equity, interest on working capital, repair & maintenance expenses, administration and general expenses and interest on loan.

Revenue from the sale of power is measured at the fair value of the consideration received or receivable. Revenue is recognized when the significant risks and rewards of ownership have been transferred to the buyer, recovery of the consideration is probable, the associated costs can be estimated reliably, there is no continuing management involvement, and the amount of revenue can be measured reliably.

Revenue from sale of power is accounted for based on tariff rates approved by the honorable Bihar Electricity Regulatory Commission (BERC). Revenue from sale of power is recognized once the electricity has been delivered to the customer. Customers are billed on a periodic and regular basis. As at each reporting date, revenue from sale of power includes an accrual for sales delivered to customers but not yet billed i.e. unbilled revenue.

Rebates allowed to beneficiaries as early payment incentives and Power factor are deducted from the amount of revenue.

11.2 Other income

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- Income from sale of scrap and insurance claims are accounted for on the basis of actual realization.
- Rental Income is recognized on time proportionate basis over the period of the rent.
- c) Interest is recognized on a time proportion basis taking into account the amount outstanding and the applicable interest rate.
- d) Other income except mentioned above is recognized on accrual basis except when ultimate realization of such income is uncertain.
- e) Amount in respect of unclaimed security deposit, earnest money deposit and misc. deposit of suppliers and contractors, stale cheques etc. which is pending for more than three years and which are not payable, is considered as income.

12. Employee benefits

12.1. Defined contribution plans

A defined contribution plan is a post-employment benefit plan under which an entity pays fixed contributions into separate entities and will have no legal or constructive obligation to pay further amounts. Obligations for contributions to defined contribution plans are recognized as an employee benefits expense in profit or loss in the period during which services are rendered by employees. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in future payments is available. Contributions to a defined contribution plan that are due after more than 12 months after the end of the period in which the employees render the service are discounted to their present value.

The Company pays fixed contribution to Provident Fund, Gratuity and Leave encashment at predetermined rates to BSPHCL Master Trust Employees A/c a separate trust maintained with Bihar State Power (Holding) Co. Ltd. which invests the funds in permitted securities. The contributions to the fund for the year are recognized as expense and are charged to the profit or loss. The obligation of the Company is to make such fixed contributions.

The Company also pays fixed contribution to Contributory Pension Scheme at predetermined percentage of salary of employees govern by new pension scheme to BSPHCL Master Trust Employees A/c a separate trust maintained with Bihar State Power (Holding) Co. Ltd. which inter alia pays to NSDL for investment of funds in permitted securities. The contributions to the fund for the year are recognized as expense and are charged to the profit or loss. The obligation of the Company is to make such fixed contributions.

The Company does not contribute to Group Saving Schemes but Deductions on accounts GSS from eligible employees at predetermined rate is made are also remitted to BSPHCL Master Trust Employees A/c a separate trust maintained with Bihar State Power (Holding) Co. Ltd. The obligation of the Company is to make such remittance.

12.2. Short-term benefits

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided.

Income tax 13.

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Income tax expense comprises current and deferred tax. Current tax expense is recognized in profit or loss except to the extent that it relates to items recognized directly in other comprehensive income or equity, in which case it is recognized in OCI or equity.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted and as applicable at the reporting date, and any adjustment to tax payable in respect of previous years. Current income taxes are recognized under 'Income tax payable' net of payments on account, or under 'Income tax receivables' where there is a debit balance.

Deferred tax is recognized using the balance sheet method, providing for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by the reporting date. Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to income taxes levied by the same tax authority on the same taxable entity, but they intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realized simultaneously.

Deferred tax is recognized in profit or loss except to the extent that it relates to items recognized directly in OCI or equity, in which case it is recognized in OCI or equity.

A deferred tax asset is recognized to the extent that it is probable that future taxable profits will be available against which the temporary difference can be utilized. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized.

Additional income taxes that arise from the distribution of dividends are recognized at the same time that the liability to pay the related dividend is recognized.

Provision for Bad and Doubtful Debts

As per practice in the previous year, a provision for bad and doubtful debts is made against amount of arrears, i.e. Sundry Debtors excluding the arrears with the Govt. Departments/ Undertakings and also four months average assessment in case of other consumers.

Impairment of non-financial assets

The carrying amounts of the Company's non-financial assets are reviewed at each reporting date to determine whether there is any indication of impairment considering the provisions of Ind AS 36 'Impairment of Assets'. If any such indication exists, then the asset's recoverable amount is estimated.

The recoverable amount of an asset or cash-generating unit is the higher of its fair value less costs to disposal and its value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For the purpose of impairment testing, assets that cannot be tested individually are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or groups of assets (the "cash-generating unit", or "CGU").

An impairment loss is recognized if the carrying amount of an asset or its CGU exceeds its estimated recoverable amount. Impairment losses are recognized in profit or loss. Impairment losses recognized in respect of CGUs are reduced from the carrying amounts of the assets of the CGU.

Impairment losses recognized in prior periods are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

Operating segments

In accordance with Ind AS 108, the operating segments used to present segment information are identified on the basis of internal reports used by the Company's Management to allocate resources to the segments and assess their performance. The Board of Directors is collectively the Company's 'Chief Operating Decision Maker' or 'CODM' within the meaning of Ind AS 108. The indicators used for internal reporting purposes may evolve in connection with performance assessment measures put in place.

The Group has separate activity for each company based on the dominant source, nature of risks and returns and the internal organization and management structure and the company does not have material earnings outside Bihar or outside India. Accordingly, the reporting under Ind AS 108 is not applicable.

17. Dividends

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Dividends and interim dividends payable to a Company's shareholders are recognized as changes in equity in the period in which they are approved by the shareholders' meeting and the Board of Directors respectively.

Material prior period errors

Material prior period errors are corrected retrospectively by restating the comparative amounts for the prior periods presented in which the error occurred. If the error occurred before the earliest period presented, the opening balances of assets, liabilities and equity for the earliest period presented, are restated.

Earnings per share

Basic earnings per equity share are computed by dividing the net profit or loss attributable to equity shareholders of the Company by the weighted average number of equity shares outstanding during the financial year.

Diluted earnings per equity share is computed by dividing the net profit or loss attributable to equity shareholders of the Company by the weighted average number of equity shares considered for deriving basic earnings per equity share and also the weighted average number of equity shares that could have been issued upon conversion of all dilutive potential equity shares.

Cash flow statement 20.

Cash flow statement is prepared in accordance with the indirect method prescribed in Ind AS 7 'Statement of Cash Flows'.

Financial instruments 21.

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

21.1. Financial assets

Initial recognition and measurement

All financial assets are recognized initially at fair value plus, in the case of financial assets not recorded at fair value through profit or loss, transaction costs that are attributable to the acquisition or issue of the financial asset.

Subsequent measurement

Debt instruments at amortized cost

A 'debt instrument' is measured at the amortized cost if both the following conditions are met:

- (a) The asset is held within a business model whose objective is to hold assets for collecting contractual cash flows, and
- (b) Contractual terms of the asset give rise on specified dates to cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding.

After initial measurement, such financial assets are subsequently measured at amortized cost using the EIR method. Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortization is included in finance income in the profit or loss. The losses arising from impairment are recognized in the profit or loss. This category generally applies to trade and other receivables.

Debt instrument at FVTOCI (Fair Value through OCI)

A 'debt instrument' is classified as at the FVTOCI if both of the following criteria are met:

- (a) The objective of the business model is achieved both by collecting contractual cash flows and selling the financial assets, and
- (b) The asset's contractual cash flows represent SPPI

Debt instruments included within the FVTOCI category are measured initially as well as at each reporting date at fair value. Fair value movements are recognized in the OCI. However, the Company recognizes interest income, impairment losses & reversals and foreign exchange gain or loss in the profit and loss. On derecognition of the asset, cumulative gain or loss previously recognized in OCI is reclassified from the equity to profit and loss. Interest earned whilst holding FVTOCI debt instrument is reported as interest income using the EIR method.

Debt instrument at FVTPL (Fair value through profit or loss)

FVTPL is a residual category for debt instruments. Any debt instrument, which does not meet the criteria for categorization as at amortized cost or as FVTOCI, is classified as at FVTPL.

In addition, the Company may elect to classify a debt instrument, which otherwise meets amortized cost or FVTOCI criteria, as at FVTPL. However, such election is allowed only if doing so reduces or eliminates a measurement or recognition inconsistency (referred to as 'accounting mismatch'). Debt instruments included within the FVTPL category are measured at fair value with all changes recognized in the profit and loss.

Equity investments

All equity investments in entities other than subsidiaries and joint ventures are measured at fair value. Equity instruments which are held for trading are classified as at FVTPL. For all other equity instruments, the Company decides to classify the same either as at FVTOCI or FVTPL. The Company makes such election on an instrument by instrument basis. The classification is made on initial recognition and is irrevocable.

If the Company decides to classify an equity instrument as at FVTOCI, then all fair value changes on the instrument, excluding dividends, are recognized in the OCI. There is no recycling of the amounts from OCI to P&L. even on sale of investment. However, the Company may transfer the cumulative gain or loss within equity.

Equity instruments included within the FVTPL category are measured at fair value with all changes recognized in the profit and loss.

Equity investments in subsidiaries and joint ventures are measured at cost, as cost represents the appropriate estimate of fair value in case of these investments.

Derecognition

A financial asset (or, where applicable, a part of a financial asset or part of a Company of similar financial assets) is primarily derecognized (i.e. removed from the Company's balance sheet) when:

- . The rights to receive cash flows from the asset have expired, or
- . The Company has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement; and either (a) the Company has transferred substantially all the risks and rewards of the asset, or (b) the Company has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

Impairment of financial assets

In accordance with Ind AS 109, the Company applies expected credit loss (ECL) model for measurement and recognition of impairment loss on the following financial assets and credit risk exposure:

- (a) Financial assets that are debt instruments, and are measured at amortized cost e.g., loans, debt securities, deposits, trade receivables and bank balance.
- (b) Financial assets that are debt instruments and are measured as at FVTOCI.
- (c) Lease receivables under Ind AS 17.
- (d) Trade receivables under Ind AS 18.
- (e) Loan commitments which are not measured as at FVTPL.
- (f) Financial guarantee contracts which are not measured as at FVTPL.

For recognition of impairment loss on other financial assets and risk exposure, the Company determines that whether there has been a significant increase in the credit risk since initial recognition. If credit risk has not increased significantly, 12-month ECL is used to provide for impairment loss. However, if credit risk has increased significantly, lifetime ECL is used. If, in a subsequent period, credit quality of the instrument improves such that there is no longer a significant increase in credit risk since initial recognition, then the entity reverts to recognizing impairment loss allowance based on 12-month ECL.

21.2. Financial liabilities

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Initial recognition and measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate. All financial liabilities are recognized initially at fair value and, in the case of borrowings and payables, net of directly attributable transaction costs. The Company's financial liabilities include trade and other payables, borrowings including bank overdrafts, financial guarantee contracts and derivative financial instruments.

Subsequent measurement

The measurement of financial liabilities depends on their classification, as described below:

Financial liabilities at amortized cost

After initial measurement, such financial liabilities are subsequently measured at amortized cost using the EIR method. Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortization is included in finance costs in the profit or loss. This category generally applies to trade payables and other contractual liabilities.

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss. Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Company that are not designated as hedging instruments in hedge relationships as defined by Ind-AS 109. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments.

Gains or losses on liabilities held for trading are recognized in the profit or loss.

Financial liabilities designated upon initial recognition at fair value through profit or loss are designated at the initial date of recognition, and only if the criteria in Ind AS 109 are satisfied. For liabilities designated as FVTPL, fair value gains/losses attributable to changes in own credit risks are recognized in OCI. These gains/losses are not subsequently transferred to profit and loss. However, the Company may transfer the cumulative gain or loss within equity. All other changes in fair value of such liability are recognized in the statement of profit or loss. The Company has not designated any financial liability as at fair value through profit and loss.

Borrowings

After initial recognition, borrowings are subsequently measured at amortized cost using the EIR method. Gains and losses are recognized in profit or loss when the liabilities are derecognized as well as through the EIR amortization process. Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortization is included as finance costs in the statement of profit and loss.

Derecognition

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognized in the statement of profit or loss.

Derivative financial instruments

Initial recognition and subsequent measurement

The Company uses derivative financial instruments, such as forward currency contracts and interest rate swaps to hedge its foreign currency risks and interest rate risks of foreign currency loans. Such derivative financial instruments are initially recognized at fair value on the date on which a derivative contract is entered into and are subsequently re-measured at fair value. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative. Any gains or losses arising from changes in the fair value of derivatives are taken to statement of profit and loss.

Use of estimates and management judgments

The preparation of financial statements requires management to make judgments, estimates and assumptions that may impact the application of accounting policies and the reported value of assets, liabilities, income, expenses and related disclosures concerning the items involved as well as contingent assets and liabilities at the balance sheet date. The estimates and management's judgments are based on previous experience and other factors considered reasonable and prudent in the circumstances. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

In order to enhance understanding of the financial statements, information about significant areas of estimation, uncertainty and critical judgments in applying accounting policies that have the most significant effect on the amounts recognized in the financial statements is as under:

Useful life of property, plant and equipment

The estimated useful life of property, plant and equipment is based on a number of factors including the effects of obsolescence, demand, competition and other economic factors (such as the stability of the industry and known technological advances) and the level of maintenance expenditures required to obtain the expected future cash flows from the asset.

Useful life of the assets of the generation of electricity business is determined by the CERC.

The Company reviews at the end of each reporting date the useful life of property, plant and equipment, other than the assets of generation of electricity business which are governed by CERC and are adjusted prospectively, if appropriate.

Revenues

The Company records revenue from sale of power based on tariff rates approved by the BERC, as per principles enunciated under Ind AS 18.

Provisions and contingencies 3.

The assessments undertaken in recognizing provisions and contingencies have been made in accordance with Ind AS 37, 'Provisions, Contingent Liabilities and Contingent Assets'. The evaluation of the likelihood of the contingent events has required best judgment by management regarding the probability of exposure to potential loss. Should circumstances change following unforeseeable developments.

BIHAR STATE POWER GENERATION COMPANY LIMITED NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31st MARCH 2017

Note 2 Share Capital

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Particulars	31st Mar	ch 2017	31st Mar	ch 2016	31st Mar	rch 2015
(a) Authorized	No. of shares	Amount	No. of shares	Amount	No. of shares	Amount
(a) Authorized	30000,00,000	300000,00,000	3000,00,000	30000,00,000	5000,00,000	50000,00,000
(b) Issued, subscribed and					1, 1, 1, 1,	
fully paid up	21054,22,395	210542,23,950	21054,22,395	210542,23,950	3440,00,000	34400,00,000
Total	21054,22,395	210542,23,950	21054,22,395	210542,23,950	3440,00,000	34400,00,000

2.2 Reconciliation of the number of shares outstanding: -

Particulars	As at 31 M	arch 2017	As at 31 M	arch 2016	As at 31 M	arch 2015
Particulars	No. of shares	Amount	No. of shares	Amount	No. of shares	Amount
Equity Shares at the beginning of year	21054,22,395	210542,23,950	3440,00,000	34400,00,000	21,00,000	210,00,000
Add:- Shares issued during the year	-		17614,22,395	176142,23,950	3419,00,000	34190,00,000
Equity Shares at the end of the year	21054,22,395	210542,23,950	21054,22,395	210542,23,950	3440,00,000	34400,00,000

2.4 Details of the shares held by each shareholder holding more than 5% shares:-

Particulars	31st Marc	h 2017	31st Marc	ch 2016	31st Marc	ch 2015
	No. of shares	% held	No. of shares	Amount	No. of shares	Amount
Bihar State Power (Holding) Company Limited	21054,22,395	100.00%	21054,22,395	100.00%	3440,00,000	100.00%

2.5 Share application money pending allotment represents application money under the transfer scheme for which share are to be allotted after completion of the transfer scheme.

Bihar State Power Generation Company Ltd

statement of changes in equity for the period ended 31 March 2017

Equity share capital:

Equity shares of Rs.10/- each issued, subscribed and fully paid :	No. of Shares	Amount in Rs.
	3440,00,000	34400,00,000
At 01st April, 2015	17614,22,395	176142,23,950
Changes in equity share capital	21054,22,395	210542,23,950
# 31st March, 2016	21054,22,393	210342,23,330
Changes in equity share capital	24054 22 205	210542,23,950
At 31st March, 2017	21054,22,395	210342,23,930

Other Equity:

		Opening Balance as at 1 April 2016	Total comprehensiv e income for the year	Transfer to/from retained earnings	Any other change (to be specified)	Closing Balance as at 31 March 2017
Share Appli	cation money pending for allotment	32102,56,009			14740,44,000	46843,00,009
Equity com;	ponent of compound financial instruments Capital Reserve	90105,02,858			88483,99,340	178589,02,198
Reserves &		2000/10/100				
Surplus	Retained Earning		-182,12,536	KT -	-	-182,12,536
Other reser	rves	×.				
Total resen		122207,58,867	-182,12,536		103224,43,340	225249,89,671

		Opening Balance as at 1 April 2015	Total comprehensiv e income for the year	Transfer to retained earnings	Any other change (to be specified)	Closing Balance as at 31 March 2016
Share Appli	cation money pending for allotment		unantunt.	V5_#	32102,56,009	32102,56,009
Equity comp	ponent of compound financial instruments					
	Capital Reserve	268459,24,771	a mally affined		-178354,21,913	90105,02,858
Reserves & Surplus					L. TILL	
	Retained Earning	2	1-	-		*
Other reser	rves	-			-	
Total reserv	ves	268459,24,771		-	-146251,65,904	122207,58,867

As per our report of even date attached For Jha & Associates Chartered Accountants Firm Registration Number: 01195C

For and on behalf of the Company

ICA. Raieev Kumar Jhal

Membership Number: 079294

Place: - Patna Date:-

(Pradip Kumar) General Manager (F&A) (R. Lakshmanan) Managing Director DIN: 06908182 (Pratvava Amrit) Chairman DIN: 01192117

BIHAR STATE POWER GENERATION COMPANY LIMITED NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31st MARCH 2017

Note 3 Reserves & Surplus

Patrilana		31st March 2017	31st March 2016	31st March 2015
Capital Reserves (Grant for Capital Assets) Opening Balance Add: Addition during the Year Add: Fund From State Govt. Less: Utilized for allotment of share Closing Balance Surplus in Statement of Profit & Loss Opening Balance Add:- Profit/(Loss) during the year as per Statement of Profit & Loss	Total (A)	90105,02,858 88483,99,340 - 178589,02,198 - (182,12,536) (182,12,536)	268459,24,771 29890,58,046 - (208244,79,959) 90105,02,858	35500,97,473 207992,27,298 24966,00,000
Less:- Appropriations during the year Closing Balance	Total (B)	-182,12,536		
	Total (A+B)	178406,89,662	90105,02,858	268459,24,771

Note 4 Long Term Borrowings

Particulars		31st March 2017	31st March 2016	31st March 2015
I. Secured Loan from Central Bank of India Loan from Canara Bank Loan from HUDCO		20000,00,000 30000,00,000 55233,48,901	20000,00,000 30000,00,000 42769,21,752	30000,00,000 5332,89,130
	Total (A)	105233,48,901	92769,21,752	35332,89,130
Unsecured PFC Loans		257579,44,528	229532,17,964	28145,32,151
	Total (B)	257579,44,528	229532,17,964	28145,32,151
	Total (A+B)	362812,93,429	322301,39,716	63478,21,281

BIHAR STATE POWER GENERATION COMPANY LIMITED NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31st MARCH 2017

Note 5 Other Current Liabilities

Particulars	31st March 2017	31st March 2016	31st March 2015
raidculais			
Liability to Railways for Coal Receipts	879,75,005	879,75,005	724,99,065
	1681,18,920	1681,18,920	1681,18,920
Idvance against Sale of Scrap		-	37,93,150
iability for BTPS Ext. Project	-	-	•
Liability for GRWS Project Liability for Lakhisarai & pirpainti Project		_	*
Liability Capital Supplies/Works	2390,50,909	1618,53,559	1738,14,557
Lability for Oil Supplier Works	1472,87,822	-	- 15 222
Liabilities for 0 & M Supplies/Works	-	54,678	2,45,393
Interest Accrued & Due on Long Term Borrowings	7435,20,890		4043,51,214
On PFC Loan On Loan from Other Financial		2571,36,272	3100,00,000
Deposits and Retentions from Suppliers	7621 07 069	5526,07,181	4235,17,320
and Contractors	7631,97,068	900,48,201	897,18,250
Other Liabilities and Provisions.	747,58,385	199,99,572	227,62,423
Staff related liabilities & provisions	221,46,809	89,948	89,948
Other Deposit & Reserve	43,64,183		257,49,961
Liability for Expenses	853,81,153	240,69,692	
Inter Company Accounts (Note 5A)	90986,16,175	82295,36,336	232234,59,079
In Deposit Account with PLA - 273	36116,20,000	8623,44,000	•
Total	150460,37,319	104538,33,364	249181,19,279

Note 5 A Inter Company Accounts

		31st March 2017	31st March 2016	31st March 2015
Particulars		915,17,862	915,17,862	915,17,862
NBPDCL		84730,76,389		228467,23,062
Inter Unit Account		5340,21,924	5582,05,628	2852,18,156
BSPHCL				232234,59,079
	Total	90986,16,175	02250/00/00	

Bihar State Power Generation Company Ltd SCHEDULE OF PROPERTY, PLANT & EQUIPMENT AS AT 31 Mar 2017

FIXED ASSETS			4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	100			DEPRECIATION	ATION		NEI BLUCK	JCR.
FIAED ASSELS	Rate		GROSS BLOCK	OCK				Adiustonopt	Total As on		Ar on 31 03 16
		As on 01.04.16	Additions during the	Sales/Transfer	TOTAL	UPTO 01.04.16	During the year	on Sale	31.03.17	As on 31.03.17	AS OIL ST. CO.T.C
Land and land rights Buildings Hydraulic Works Others Civil Works Plant and Machinery Lines and Cable Network Vehicles Furniture and Fixtures	3.44% 6.33% 3.44% 5.28% 6.33% 6.33%	13566.44,600 3088.19,549 946,23,576 924,43.204 19609.06.479 928,90,750 220,63,859 115,77,334	110,87,331 23,36,746 18348,99,851 5,30,084 2,050 2,80,697		13566,44,600 3199,06,880 946,23,576 947,79,950 37958,06,330 934,20,834 2,20,384 115,79,384 44,91,868	2203,68,738 822,90,351 629,15,485 14675,72,592 835,01,675 261,57,473 42,99,998	44,92,369 24,45,099 32,23,681 818,14,706 20,13,590 7,51,018 7,32,908 2,80,526		2248,61,107 847,35,450 661,39,166 15493,87,298 856,15,265 269,08,491 50,32,906 20,98,237	13566,44,600 950,45,773 98,81,126 286,40,784 22464,19,032 78,05,569 21,55,368 65,46,478 23,93,631	13566.44.600 884,50,811 123,33,225 295,27,719 4933,33,887 92,89,075 29,06,386 72,77,336 23,93,460
Ollice Equipment							200 00		20447.77.920	37555,39,361	20021,56,499
TOTAL:		39511,80,522	18491,36,759		58003,17,281	19490,24,023	957,53,897				
Capital Work In Progress:										0.00	415556 01 310
Capital WIP (Extention Project)		415656,01,219	32200,60,641		447856,61,860					447856,61,860	413030,01,119
Capital WIP (Existing Project)		76050,57,220		14618,77,521	61431,79,699					61431,79,699	75030,37,420
Capital WIP (Development Expenses)	(ses)	66320,83,275	55084,37,208		121405,20,483					121405,20,483	00250707000
(Annexure WIP) Capital WIP (Office Building)		61,52,959			61,52,959				7.0	61,52,959	61.52,959
Constitution (Otherway)		15035 74.666	7356.18.876		22391,93,542				-7M	22391,93,542	15035,74,666
Capital WP (Others)					CA3 00 CA +C32				7	653147,08,542	573124,69,338
TOTAL:		573124,69,339	94641,16,724	14618,//,521	022147,00,042				000 00 000	50070 47 003	593146.25.837
COAND TOTAL		612636,49,861	113132,53,483	14618,77,521	711150,25,823	19490,24,023	957,53,897		20447,77,920	2001/14/20/060	

BIHAR STATE POWER GENERATION COMPANY LIMITED NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31st MARCH 2017

Note 7 Investment in Joint Ventures

Particulars		31st March 2017	31st March 2016	31st March 2015
Investment in Joint Ventures		175249,61,125	118327,61,125	86791,56,985
Control of the Contro	Total	175249,61,125	118327,61,125	86791,56,985

Note 8 Inventories

Particulars	31st March 2017	31st March 2016	31st March 2015
Coal Oil Stock of Material at Other Stores Material in Transit Electric fittings & Others	1834,50,103 2655,17,622 69,89,046 7,12,580 475,56,280	354,27,619 654,90,509 69,89,046 7,12,580 258,60,956	354,27,619 288,90,679 69,89,046 7,12,580 283,57,943
Total	5042,25,631	1344,80,710	1003,77,867

Note 9 Cash & Cash Equivalents

Particulars	31st March 2017	31st March 2016	31st March 2015
The state of the s	1-12	7.002	
Cash in Hand	66,658	83,862	59,586
Cash Imprests with Staff	16,79,060	16,51,076	16,55,374
Balance with Banks			
(i) In Savings Accounts	6537,42,751	7441,49,206	32044,14,766
(ii) In Deposit Accounts	16956,61,384	15941,30,793	8970,65,415
(iii) In Current Account	7217,47,031	4315,60,622	312,62,046
Balance with Administrator CPF	4,125	54,74,139	54,74,139
Balance in PLA - 273	36116,20,000	8623,44,000	±.
Total	66845,21,009	36393,93,698	41399,31,326

BIHAR STATE POWER GENERATION COMPANY LIMITED NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31st MARCH 2017

Note 10 Loans

Particulars	31st March 2017	31st March 2016	31st March 2015
Unsecured, considered good Advances for O & M Supplies/Works	7276,08,412	7583,38,897	6903,93,700
Loans and Advances to Staff Advance for Lakhisarai & Pirpainti	70,95,359 890,63,884	59,10,644 890,63,884	58,74,976 862,72,519
Inter Company Accounts BSPTCL Master Trust	252,91,847 945,98,195	252,91,847 658,68,010	252,91,847 882,97,758
Total	9436,57,697	9444,73,282	8961,30,800

Note 11 Other current assets

Particulars	31st March 2017	31st March 2016	31st March 2015
Other Claims and Receivables	798,94,819	102,81,346	(51,94,594)
Security Deposit	118,06,040	118,03,840	118,03,840
Advance Income Tax / TDS	781,34,221	620,40,135	377,38,236
Income Tax deposited under Dispute	13,81,723	13,81,723	
Advance VAT	8,85,856	8,85,856	8,85,856
Central Sales tax	7,428	7,428	7,428
Other Fuel Related Receivables			-
Amount recoverable from Employees/Ex- Employees	68,20,918	68,20,918	68,20,918
Income accrued but not due	-		
Preliminary Expenses	-	-	
Total	1789,31,005	932,21,246	520,61,684

V

Particulars		31st March 2017	31st March 2016
Interest Income		838,47,550	-
Other Income		497,65,095	-
	Total	1336,12,645	

BIHAR STATE POWER GENERATION COMPANY LIMITED NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31st MARCH 2017

Note 14 Employee Benefit Expenses

Particulars	31st March 2017	31st March 2016
Salaries	96,47,564	
Over Time	12,060	-
Dearness Allowance	116,26,343	dimin
Other Allowance	5,54,820	-
Medical Expenses Re-imbursement	1,61,734	-
Leave Salary Contribution	10,97,729	-
Free Electricity	24,136	-
Payment under Workmen Compensation Act	7,829	-
Staff Welfare Expenses	3,165	
Terminal Benefits	15,93,931	a((6) -
	10 20 20	plicity and
Total	247,29,311	

Note 15 Other expenses

Particulars	31st March 2017	31st March 2016
Repairs and Maintenance of Assets Administration and General Expenses	1807,02,987 2368,83,910	
Total	4175,86,897	_

Bihar State Power Generation Company Ltd STATEMENT OF DEVELOPMENT EXPENDITURE FOR THE YEAR ENDED 31st MARCH 2017

Pa	rticulars	A COMMENT NOT THE TAX	For the year ended 31st March 2017
1	Income: Other income	Total (A)	-
2	Expenses: Employee benefits expense Finance costs Other expenses		2714,30,105 46816,68,634 5553,38,468
	Transferred to Capital Work in Progress	Total (B) Total (B-A)	55084,37,208 55084,37,208

Note: 16 Notes to Financial Statement

- 1. Corporate Information: Bihar State Power Generation Company Limited is a subsidiary of Bihar State Power (Holding) Company registered under the Companies Act, 1956, created under Bihar State Electricity Reforms Transfer Scheme, 2012 vide notification no. 17 dated 30.10.2012.
- 2. The Annual Accounts of the Company for the year 2016-17 has been prepared as per the format prescribed under the revised Schedule III of the Companies Act 2013.
- 3. The State Govt. vide notification no. 17 dated 30-10-2012 has notified opening balance sheet on provisional basis, based on balance sheet of erstwhile BSEB as on 31st March 2011, stating that the amount under various heads are subject to validation, verification, up-dation and truing up and these shall be completed during the provisional period i.e. a period of one year from the effective date i.e. 01-11-2012. M/s PFC Consulting Ltd., New Delhi which was appointed as consultant for restructuring of the erstwhile BSEB, was also assigned the work related to hand holding phase of the successor companies including BSPGCL. As the provisional balance sheet notified by the State Government was related to 31st March 2011 and the effective date for operation of the BSPGCL was 1st November, 2012, M/s PFC Consulting Ltd. New Delhi revised the opening balance sheet of BSPGCL based on Annual Accounts of the erstwhile BSEB as on 31st October, 2012.
- 4. BSPGCL started commercial operations with effect from 03rd November'2016 through one of the renovated unit namely Unit - 7 and expenses incurred subsequent to the date of commercial operations has been proportionately apportioned considering the period of generation to revenue expenses to the extent of 20% of the expenses incurred. The proportionate expense for the period of operation comes to 8.33% of the expenses incurred. The balance Net Operating Expenses namely Administrative & General Expenses, Legal & Consultancy Fees etc incurred by BSPGCL have been taken under the Capital Work in Progress (Note No. 6, Forming part of Financial Statements) as other Generating units of BSPGCL are either in Renovation & Modernization or in Construction Stage.
- 5. The balances of Receivables, Payables, Loans & advances including Inter Company transactions are in confirmation with the books of accounts and are subject to confirmation and reconciliation, if any.
- 6. In accordance with the provisions contained in AS 13 issued by ICAI, New Delhi amounts as appearing under investment in Subsidiary has been re-classified and shown as "Advances for Projects" in the financial statements together with expenses incurred under Work in Progress in the said Projects.
- 7. In terms of the transfer scheme dated 30.10.2012 all the employees of the Board were transferred to the respective successor companies on as is where is basis. The staff related liabilities including terminal benefits upto the effective date of transfer i.e. 31st October 2012 are to be borne by the Govt. of Bihar and to be paid through the Employees Master Trust administered by the Holding Company. The liabilities after the effective date are to be borne by the respective successor companies. The liabilities relating to

PF, gratuity, leave encashment etc. has been provided on the basis of allocation given by the holding company based on the actuarial valuation and the same has been paid/payable to the master trust.

8. Related party disclosures:

Particulars	31st March 2017	31st March 2016
NBPDCL	91,517,862	91,517,862
BSPTCL	(25,291,847)	(25,291,847)
Inter Unit Account	8,473,076,389	7,579,812,846
Master Trust	(94,598,195)	(65,868,010)
BSPHCL	534,021,924	558,205,628
	8,978,726,133	8,138,376,479

- 9. Amounts stated in the financial statements are in Indian Rupees and have been rounded off to the nearest rupee.
- Previous year's figures have been regrouped/ reclassified, wherever necessary to correspond with the 10. current year's classification.
- 11. Applying the principle laid down under accounting standard 22 on taxes on income, deferred tax asset has emerged due to timing difference, however in the absence of reasonable and virtual certainty of future taxable profits and the same has not been recognized in the accounts.

As per our report of even date attached

For Jha & Associates Chartered Accountants

Firm Registration Number: 01195C

[CA. Rajeev Kumar Jha] Partner

Membership Number: 079294

For and on behalf of the Company

(Pradip Kumar) General Manager (F&A) (R. Lakshmanan) Managing Director DIN: 06908182

(Pratyaya Amrit) Chairman DIN: 01192117

Place: - Patna

Date:-

Bihar State Power Generation Company Ltd

Statement of Cash Flow for the year ended 31.3.2017

		For the year ended 31.3.2017
A)	Cash flow from operating activities:	
-)		(182,12,536)
	Net Profit before tax as per Profit & Loss Account	(102/12/000)
	Adjusted for:	957,53,897
	Depreciation	
	Interest & Other income	
	Capitalization of Interest	
	Capitalization of Revoked BG	
	Finance Charge	775,41,361
	Operating Profit before Working Capital Changes	
	Adjusted for: Change in Working Capital	41375,64,859
	Cash Generated from operations	42151,06,221
	Appropriation of Profit	
	Deferred Income	
	Deletted into the	
		42151,06,221
	Net Cash from Operating Activities	
	a Later from Towesting Activities	
(B)	Cash Flow from Investing Activities	
	Purchase of Fixed Assets	(113132,53,483
	Increase in Capital WIP	/50000 00 000
	Increase in Investments	(56922,00,000
	Other Income	
		(170054,53,483
	Net Cash used in Investing Activities	(2,000)
	Cash flow from Financing Activities	
(C	Proceeds from Equity Capital	
	Capital Grants from Government	88483,99,340
	Proceeds from Long Term Borrowings with Others	40511,53,713
	Interest Paid	
- 5		128995,53,053
	Net Cash from Financing Activities	120335/55/55
		1092,05,791
	Total Cash generated/(lost) (A+B+C)	36393,93,698
	Add: Opening Balance as on 01.04.2016	66845,21,009
	Closing Balance as on 31.3.2017	



Annexure III

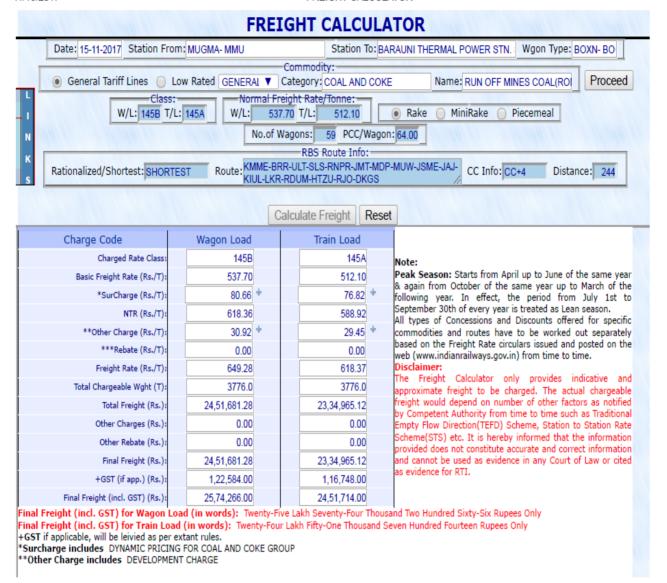
- 1. Railway's freight calculator for coal
- 2. Landed Price calculator for Coal
- 3. M/s Eastern Coalfields Limited (ECL) invoices
- 4. M/s Indian Oil Corporation Ltd (IOCL)and Hindustan Petroleum Corporation Limited (HPCL) invoices



1. Railways Freight Calculator

11/15/2017

FREIGHT CALCULATOR





2. Coal Landed Cost Calculator

Sl. No.	Doubiculous	Datas	Grade G5	Grade G7
51. NO.	Particulars	Rates	(5950 GCV)	(5350 GCV)
1	ROM Price		2750	1600
2	Wagon Loading Charge		0	0
3	Weighment/ Sizing Charges	87	87	87
4	Surface Transportation Charges	57	57	57
5	RE Cess: 20% on Basic ROM notified price	0	0	0
6	PE Cess: 5% of Basic ROM notified price	0	0	0
7	Bazaar Fee: (Only Mugma area)	1%	27.5	16
8	Royalty	14%	385	224
9	NMET:	2%	7.7	4.48
10	DMFT:	30%	115.5	67.2
11	Silo Loading charges			
12	AMBH Cess (For Bengal Field)	1.00	-	-
13	PWD Road (For Bengal Field)	1.00	ı	1
14	Total Value of goods:		3429.70	2055.68
15	Discount (if any):			
16	SGST		0	0
17	CGST		0	0
18	IGST	5%	171.49	102.78
19	Compensation cess	400.00	400.00	400.00
20	Total value of Goods with Tax:		4001.19	2558.46
21	Less: Under loading charges	618.37	0	0
22	TCS	0	0	0
23	Net Payable Amt		4001.19	2558.46
24	Railway Freight	649.28	649.28	649.28
	Coal Sampling Fee/ MT (Rs 4.25 at loading			
25	+ Rs 8.50 at unloading)	12.75	12.75	12.75
26	Service Tax on Sampling Fee	18%	2.30	2.30
27	Gross Landed Price of Coal for Units 6 & 7		4665.51	3222.79
	Contingency arrangement for Coal			
28	Transportation for Unit 8 & 9	114.15	114.15	114.15
29	Gross Landed Price of Coal for Units 8 & 9		4779.66	3336.94



3. ECL Bills

EASTERN COALFIELDS LIMITED

(A SUBSIDIARY OF COAL INDIA LIMITED.)

Tax Invoice (GST INV -1)(Rule 7)

Sale of Raw Coal (Credit Sale)

CIN - U10101WB1975G01030295

Original for Recipient Duplicate for Transporter Triplicate for supplier

20AAACE7590E3ZX Eastern Coalfields Ltd

ress: . Area: MUGMA
Colliery: GOPINATHPUR COLLIERY
PO: JHARKHAND
Detail of Receiver [Billed to]

Pin:

Invoice No: 081018C512300460 Date: 09/11/2017

Detail of Consignee [Shipped to]

Consignee Name: BARAUNI THERMAL POWER STN(BSEB) Address: RSO, CIL 23/8 SRIKRISHNAPURI 30

Consignee Name: BARAUNI THERMAL POWER STN(BSEB)
Address: RSD, CIL 23/8 SRIKRISHNAPURI 300001

Unique ID: GSTIN: State Code:

820815

10AAFCB239261Z4

State Name: Unique ID: GSTIN: State Code: B20815 10AAFCB2392G1Z4 10

Place of Supply with name of state(in case of inter state Trade or commerce BIHAR IPlace of Delivery (where the same is different from the supply)

Descrip tion	HSN Code	Particulars	Quantity	Unit of Measurement (IN TONNE)	Rate	Amount (Rs)
- Coal	27011990	Basic Rate:	1056	***************************************	2750	2904000.00
	80	Wagon Loading Charge: Weighment/Sizing Charges: Surface Trnsportation Char RE Cess:20% on Basic ROM N	ges: Notified Price	1056	57. 00	91872.00 60192.00 0.00
		PE Cess:5% on Basic ROM No Bazar Fees:(Only Mugma are Royalty: NMET: DMFT: Silo Loading Charges: AMBH Cess: (For Bengal Fie PWO Road:(For Bengal Fie)	eld)		1% 14% 2% 30% ers. 1/ht ers. 1/ht	0.00 29040.00 406560.00 8131.20 121968.00
		Total Value of Goods: Discount (if any): SGST: CGST: IGST: Compensation cess:			5% 400	0.00 3621763.20 0.00 0.00 181088.16 422400.00
		Total Value of Goods Wit	h Tax :			4225251.36
		Less: Under Loading Total Payable Amt: TCS: Net Payable Amt: Net Payable Amt in Wor R	upees Forty-Tw	o Lakh Twenty-f	618.37 0.00 ive Thousand To And Pa	0.00 4225251.36 0.00

Size of Coal:RDM(-100) D	oad Date: Despatch Date : D Note No : No Of Box :	06/11/2017 96502 16	RR No : RR Date : Weighment : Distance :	162003056 07/11/2017	Lifted Qty : UnderLoading Qty Siding : Sector :	1056 : 0.00 CPS Mode: Rail
--------------------------	--	---------------------------	---	-------------------------	--	-------------------------------------

Wheather the Tax is payble on Reverse Charge:

Prepared Bu

Trepared By Aproved By Checked By Authority Signatory (Designation)

I/we certify that my/our registration certificate under the CGST/SGST/IGSI/(A) (CGMC+GGST+G2017 is in force on of supply covered by this tax invoice has been effected by me/us and it shuardown the country of supply makes the counted for in the turnover of supply while filing of return and the tax, if any, payable on the supply has been paid or shall be





EASTERN COALFIELDS LIMITED

(A SUBSIDIARY OF COAL INDIA LIMITED.)

Tax Invoice (GST INV -1)(Rule 7)

Sale of Raw Coal (Credit Sale)

CIN - U10101WB1975G01030295

Original for Recipient
Duplicate for Transporter
Triplicate for supplier

20AAACE7590E3ZX Eastern Coalfields Ltd

Colliery: RAJPURA O. C. P. PO: JAARKHAND Detail of Receiver [Billed to]

Pin:

Invoice No: 080218C512300461 Date: 09/11/2017

Detail of Consignee [Shipped to]

Consignee Name: BARAUNI THERMAL POWER STN(BSEB) Address: RSO,CIL 23/8 SRIKRISHNAPURI 300001

Address:

Consignee Name: BARAUNI THERMAL POWER STN(BSEB)
Address: 800, CIL 23/8 SRIKRISHNAPURI 300001

State Name:

BIHAR

State Name:

Unique ID: GSTIN:

820815 10AAFCB2392G1Z4

820815 10

10AAFCB2392B1Z4

State Code:

10

Unique ID: GSTIN: State Code:

Place of Supply with mame of state(in case of inter state Trade or commerce)

, BIHAR

IPlace of Delivery (where the same is different from the supply)

Descrip tion	HSN Code	Particulars	Quantity	Measurement (IN TONNE)	Rate	Amount (Rs)
Coal	27011990	Basic Rate:	660	SAL.	1600	1056000.00
7	LIVILIN	Wagon Loading Charge: Weighment/Sizing Charges: Surface Trnsportation Charges: RE Cess:20% on Basic ROM Notif	ied Price	660	87 57. 00	57420.00 37620.00 0.00
	50 8	PE Cess:5% on Basic ROM Notifi Bazar Fees:(Only Mugma area) Royalty: NMET: DMFT:	ed Price		1% 14% 2% 30%	0.00 10560.00 147840.00 2956.80 44352.00
		Silo Loading Charges: AMBH Cess: (For Bengal Field) PWD Road:(For Bengal Field)			@Rs. 1/MT @Rs. 1/MT	0.00 0.00
		Total Value of Goods : Discount (if any): SGST: CGST:				13567 4 8.80 0.00 0.00
		IGST: Compensation cess:			5% 400	67837.44 264000.00
		Total Value of Goods With Tax				1688586. 24
		Less: Under Loading Total Payable Amt: TCS: Net Payable Amt; Net Payable Amt in Wo Rupees S:	xteen La	kh Eighty-Eight	618.37 0.00 Thousand Five And Pais	0.00 1688586.24 0.00 1688586.24 Hundred Eighty-Six se Twenty-Four Only

Grade: 5350 Size of Coal:ROM(-100) AshX:	Despatch Date :	06/11/2017 7194	RR Date :	162003057 07/11/2017	Lifted Qty : UnderLoading Qty :	
Seam : KALIMATI (B		0 74	Weighment : Distance :		Siding : Sector :	CPS Mode: Rail

Wheather the Tax is payble on Reverse Charge: Declaration.....

Aproved Bu

Checked Bu

Authority Stay

No

I/we certify that my/our registration certificate under the CGST/SGST/1050/CSaccess, 2017 is in force on the date on which the supply of goods specified in this tax invoice to the date of supply covered by this tax invoice has been effected by me/us and the transaction turnover of supply while filing of return and the tax, if any, payable on the supply has been paid or shall be



EASTERN COALFIELDS LIMITED (A SUBSIDIARY OF COAL INDIA LIMITED.) Tax Invoice (GST INV -1)(Rule 7)
Sale of Raw Coal (Credit Sale)
CIN - U10101WB1975G01030295

Original for Recipient Duplicate for Transporter Triplicate for supplier

20AAACE7590E3ZX Eastern Coalfields Ltd

255: Area: MUGMA
Colliery: KAPASARA COLLIERY
PO: JHARKHAND
Detail of Receiver [Billed to]

Pin:

Invoice No: 081218C512300462

09/11/2017 Date:

Detail of Consignee [Shipped to]

Consignee Name: BARAUNI THERMAL POWER STN(BSEB)
Address: RSD, CIL 23/8 SRIKRISHNAPURI 300001

Consignee Name: BARAUNI THERMAL POWER STN(BSEB)
Address: RSO,CIL 23/B SRIKRISHNAPURI 300001

State Name:

BIHAR 820815

State Name:

B20815 10AAFCB239201Z4

Unique ID: GSTIN:

10AAFCB2392G174

Unique ID:

10

State Code:

10

State Code:

Place of Supply with name of state(in case of inter state Trade or commerce)

, BIHAR

IPlace of Delivery (where the same is different from the supply)

Descrip tion	HSN Code	Particulars 0	wantity	Unit of Measurement (IN TONNE)	Rate	Amount (Rs)
Coal	27011990	Basic Rate:	858		2750	2359500.00
4001	27011770	Wagon Loading Charge: Weighaent/Sizing Charges: Surface Trnsportation Charges: RE Cess:20% on Basic ROM Notifi	ed Price	858	87 57. 00	74646.00 48906.00 0.00
		PE Cess:5% on Basic ROM Notifie Bazar Fees:(Only Mugma area) Royalty: NMET: DMFT: Silo Loading Charges: AMBH Cess: (For Bengal Field) PWD Road:(For Bengal Field)	d Price		1% 14% 2% 30% PRS. 1/MT PRS. 1/MT	0.00 23575.00 330330.00 6606.60 99099.00 0.00
		Total Value of Goods : Discount (if any): SGST: CGST: IGST: Compensation cess:			5% 400	2942682.60 0.00 0.00 147134.13 343200.00
		Total Value of Goods With Tax :				3433016. 73
		Less: Under Loading Total Payable Amt: TCS: Net Payable Amt: Net Payable Amt in Word Rupees	Thirty-Fo	our Lakh Thirt	618.37 0.00 J-Three Thousa	0.00 3433016.73 0.00 3433016.73 and Sixteen And Paise Seventy-Three Only

162003058 Lifted Qty : 07/11/2017 UnderLoading Qty : 5950 Load Date: 06/11/2017 RR No : Grade: 858 Size of Coal: ROM(-100) Despatch Date : RR Date 0.00 Weighment : Distance : D Note No : Siding CPS Ash% Seam : BEINDABANPUR (B -No Of Box 13 Sector Mode: Rail

Wheather the Tax is payble on Reverse Charge: Declaration.....

Prepared Bu

Aproved By

Checked Bu

Authority (Sales)
Authority (Designation)

I/we certify that my/our registration certificate under the CBST/SGST/ICMAQMIAPeep.cess,2017 is in force on the date on which the supply of goods specified in this tax invoice is made by me/us and that the transaction of supply covered by this tax invoice has been effected by me/us and it shall be accounted for in the turnover of supply while filing of return and the tax, if any, payable on the supply has been paid or shall be



EASTERN COALFIELDS LIMITED

(A SUBSIDIARY OF COAL INDIA LIMITED.)

Tax Invoice (GST INV -1)(Rule 7)

Sale of Raw Coal (Credit Sale)

CIN - U10101WB1975G01030295

Original for Recipient
Duplicate for Transporter
Triplicate for supplier

∠OAAACE7590E3ZX Eastern Coalfields Ltd

Colliery: KUMARDHUBI COLLIERY PO: JHARKHAND Detail of Receiver [Billed to]

Pin:

Invoice No: 080418C512300463 Date: 09/11/2017

Detail of Consignee [Shipped to]

Consignee Name: BARAUNI THERMAL POWER STN(BSEB) Address: RSD, CIL 23/8 SRIKRISHNAPURI 30

Cossignee Name: BARAUNI THERMAL POWER STH(BSEB)
Address: RSO, CIL 23/B SRIKRISHNAPURI 300001

State Name:

BIHAR

State Name:

BIHAR

Unique ID: GSTIN:

820815

Unique ID: GSTIN; State Code 820815 10AAFCB23726174 10

State Code

10AAFCB239261Z4 10

Place of Supply with mame of state(in case of inter state Trade or commerce)

. BIHAR

iPlace of Delivery (where the same is different from the supply)

Descrip .tion	HSN Code	Particulars	Quantity	Unit of Measurement (IN TONNE)	Rate	Amount (Rs)
Coal	27011990	Basic Rate:	660	***********	2750	1815000.00
	2.011770	Wagon Loading Charge: Weighment/Sizing Charges: Surface Trasportation Charges: RE Cess:20% on Basic ROM Notic	Pied Price	660	116. 00	57420.00 76560.00 0.00
		PE Cess:5% on Basic ROM Notifi Bazar Fees:(Only Mugma area) Royalty: NMET: DMFT: Silo Loading Charges:	ed Price		12 142 22 302	0,00 18150,00 254100,00 5082,00 76230,00
		AMBH Cess: (For Bengal Field) PWD Road:(For Bengal Field)			ers. 1/mT ers. 1/mT	0.00
		Total Value of Goods : Discount (if any): SGST: CGST: IGST: Compensation cess:			5% 400	2302542.00 0.00 0.00 115127.10 264000.00
		Total Value of Goods With Tax :				2681669.10
		Less: Under Loading Total Payable Amt: TCS: Net Payable Amt: Net Payable Amt in Wo Rupees Tw	enty-Six L	akh Eighty-One	618.37 0.00 Thousand 5	0.00 2681669.10 0.00 2681669.1 Six Humdred Sixty-Him And Paise Ten Only

162003059 Lifted Qty : 07/11/2017 UnderLoading Qty : Grade: 5950 Load Date: 06/11/2017 RR No : 660 Size of Coal: ROM(-100) Despatch Date : RR Date 0.00 CPS Siding Ash% D Note No Weighment : Seam : BRINDABANPUR (B -No Of Box 10 Distance Sector Mode: Rail

Wheather the Tax is payble on Reverse Charge: Declaration.....

Prepared By Aproved By Checked By Author Teach Control State (Catholic Control State (Catholic Catholic Catholi







(A SUBSIDIARY OF COAL INDIA LIMITED.)
Tax Invoice (GST INV -1)(Rule 7)
Sale of Raw Coal (Credit Sale)
CIN - U10101WB1975G01030295

Original for Recipient Duplicate for Transporter Triplicate for supplier

COAAACE7590E3ZX

Area: MUGMA

SHAMPUR 'B' COLLIERY

PO: JHARKHAND

petail of Receiver [Billed to]

Pin:

Invoice No: 080518C512300464 Date: 09/11/2017

Detail of Consignee [Shipped to]

Consignee Name: BARAUNI THERMAL POWER STN(BSEB) Address: RSO, CIL 23/8 SRIKRISHNAPURI 30 300001

Consignee Name: BARAUNI THERMAL POWER STN(BSEB)
Address: RSO,CIL 23/8 SRIKRISHNAPURI 300001

BIHAR

State Name: Unique ID: GSTIN: State Code:

820815

Unique ID:

820815 10AAFCB2392G1Z4

10AAFCB2392G174

GSTIN:

10

State Code:

10 Place of Supply with name of state(in case of inter state Trade or commerce)

IPlace of Delivery (where the same is different from the supply)

, BIHAR

,	Descrip tion	HSN Code	Particulars	Quantity	Unit of Measurement (IN TONNE)	Rate	Amount (Rs)
	Coal	27011990	Basic Rate:	. 528	***************	2750	1452000.00
			Wagon Loading Charge Weighment/Sizing Char Surface Trnsportation RE Cess:20% on Basic	rags.	528	57. 00	45936.00 30096.00 0.00
			PE Cess:5% on Basic Bazar Fees:(Only Hug Royalty: NMET: DMFT: Silo Loading Charges	ma area)		14 14 2 2 30 30	0.00 14520.00 203280.00 4065.60 60984.00
			Silo Loading Charges AMBH Cess: (For Beng PWD Road:(For Bengal	al Field) Field)		ers. 1/MT	0: 00 0: 00
	ī	ş:	Total Value of Goods Discount (if any):	:			1810881.60
			SGST: CGST: IGST: Compensation cess:			. 5% 400	0.00 0.00 90544.08 211200.00
			Total Value of Goods	With Tax :) in the second		2112625. 68
			Less: Under Loading Total Payable Amt: TCS: Net Payable Amt: Net Payable Amt in We	ords Rupees Twenty-(One Lakh Twelve	618.37 0.00 Thousand Six	0.00 2112625.68 0.00 2112625.68 Hundred Twenty-Five se Sixty-Eight Only

Grade' 5950 Load Date: RR No : RR Date 162003060 Lifted Qty : 07/11/2017 UnderLoading Qty : 06/11/2017 Size of Coal:ROM(-100) Ash%: Despatch Date : 0.00 CPS D Note Mo Weighment : Distance : Siding Sector Seam : GOPINATHPUR (B -No Of Box Mode: Rail

Wheather the Tax is payble on Reverse Charge: Declaration.....

Prepared Bu

Checked By

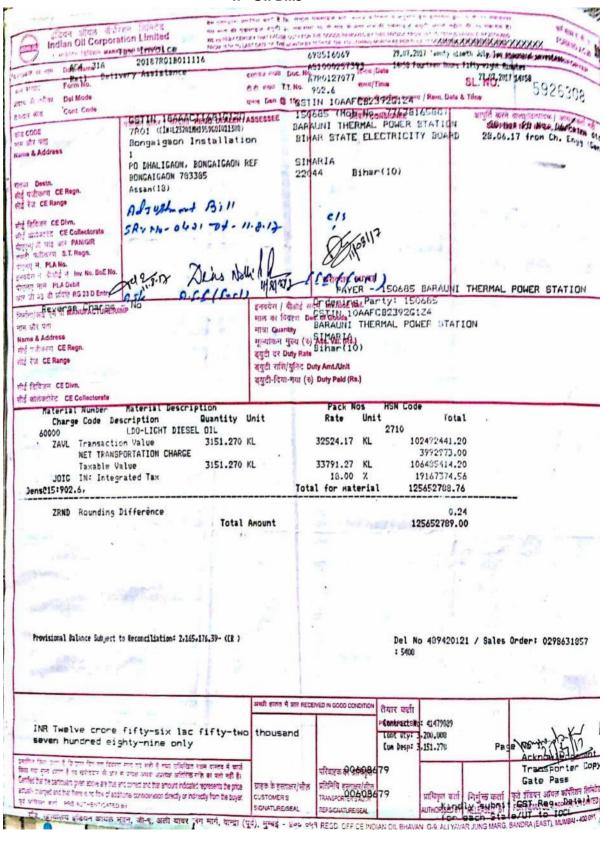
No

I/we certify that my/our registration certificate under the COST/SUST/ICCO to Many cess, 2017 is in force on the date on which the supply of goods specified in this tax invoice is mostly in the sand that the transaction of supply covered by this tax invoice has been effected by me/us and it shall be accounted for in the turnover of supply while filing of return and the tax, if any, payable on the supply has been paid or shall be





4. Oil Bills







ORIGINAL (BUYER)

HINDUSTAN PETROLEUM CORPORATION LTD हिन्दुस्तान पेट्रोलियम कॉर्पोरेशन लिमिटेड

Gi

23708 - MEDT-BONDED TARKS-PSD Mindustan Petroleum Corporation itd Mew Black Dil Terminal, Mear ESI Mospital, Gandhigram Village, Malakapuram Post, Visakh Vi 37-Andhra Pradesh GSTIM:37AAACH1118B1ZB CIN:123201MH1952601008858

Document Type: T A I T A V O I C E Document No. : 237885117883117 Bate 12/88/2017 Time 14:13:58 Ars

Vehicle No.: AP31TW1134 NOT: By Road
Transporter: 28113055RAJESH AND RAMESH TRANSPORT)=1
Load No: 222759 SO Ref: 17005150/53/13603

Description #58/5AC Quantity 8/# Total Value Discount Taxable Value 1651 | Net Amount [188] [188] [188] | Ratet Amount [188] (Incl. Tax) |

THOUSTRIAL DIESEL DIL 27181948 22888,888 LT 817857.92 14388.88- 883557.92 18.88- 144648.43 | 948198.35

Tatal 817857.92 14300.00- 803557.92 144640.43 948198.35 Amount In Words : Rugees WIME LAKE FORTY EIGHT THOUSAND ONE HUMBERY HIMETY EIGHT AND PAISE THIRTY FIVE ONLY (Incl. of Taxes)

arations : hether the Tax is Payable on Reverse Charge Basis : WD Abortment Bill SRV Nu 0255 Dt - 22.8.17

ASK A.E.E.(Fuel) MY 800.4

ACTUAL

T.B.Minz

16/8/17 DIP PL VOL
1 13+4 1883 4500
1 -2 142-1 183-9 4500
3 141-0 183-8 4500
4 141-3 188-0 4500
5 148-1 183-9 4000

Acceletent Precure is a control of the Bogussian what April 6

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Authorized Signatury