

**JHARKHAND URJA SANCHARAN NIGAM LIMITED**



**MULTI YEAR TARIFF PETITION FOR THE 2<sup>nd</sup> CONTROL  
PERIOD (FY 2016-17 to FY 2020-21)**

Submitted to



**JHARKHAND STATE ELECTRICITY REGULATORY  
COMMISSION,  
Ranchi**

Submitted By  
**Jharkhand Urja Sancharan Nigam Ltd.  
Dhurwa, HEC, Ranchi**

**BEFORE THE JHARKHAND STATE ELECTRICITY REGULATORY COMMISSION, RANCHI**

Filing No.....

Case No.....

IN THE MATTER OF: Filing of the Petition under Section 61, Section 62 of the Electricity Act, 2003 read with Jharkhand Electricity Regulatory Commission (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2015 and other enabling provisions seeking approval of Multi Year Tariff for the 2<sup>nd</sup> Control period (FY 2016-2017- to FY 2020-21) for Jharkhand Urja Sancharan Nigam Limited.

AND

IN THE MATTER OF: JHARKHAND URJA SANCHARAN NIGAM LTD. (hereinafter referred to as "JUSNL" or erstwhile "JSEB-Transmission function" which shall mean for the purpose of this petition the Licensee), having its registered office at DHURWA, HEC, RANCHI

**.... Petitioner**

AND

IN THE MATTER OF: Jharkhand Bijli Vitran Nigam Limited JBVNL, having its registered office at DHURWA, HEC, RANCHI

**.... Respondent**

The Petitioner respectfully submits as under: -

1. The erstwhile Jharkhand State Electricity Board (“Board” or “JSEB”) was a statutory body constituted under Section 5 of the Electricity (Supply) Act, 1948 and was engaged in electricity generation, transmission, distribution and related activities in the State of Jharkhand.
2. Jharkhand Urja Vikas Nigam Ltd. (herein after to be referred to as “JUVNL” or “the Holding company”) has been incorporated under Indian Companies Act, 1956 pursuant to decision of Government of Jharkhand to reorganize erstwhile Jharkhand State Electricity Board (herein after referred to as “JSEB”). The Petitioner submits that the said reorganization of the JSEB has been done by Government of Jharkhand pursuant to “Part XIII – Reorganization of Board” read with section 131 of The Electricity Act 2003. The Holding company or JUVNL has been incorporated on 16th September 2013 and registered with the Registrar of Companies, Jharkhand, Ranchi and has obtained Certificate of Commencement of Business on 12<sup>th</sup> November 2013.
3. Jharkhand Urja Sancharan Nigam Ltd. (herein after to be referred to as “JUSNL” or “the Petitioner”) has been incorporated on 23<sup>rd</sup> October 2013 with the Registrar of Companies, Jharkhand, Ranchi and has obtained Certificate of Commencement of Business on 28<sup>th</sup> November 2013. The Petitioner is a Company constituted under the provisions of Government of Jharkhand, General Resolution as notified by transfer scheme vide notification no. 8, dated 6<sup>th</sup> January 2014. The Transmission Company - Jharkhand Urja Sancharan Nigam Ltd. is duly registered with the Registrar of Companies, Ranchi on 23<sup>rd</sup> October 2013.
4. Pursuant to the enactment of the Electricity Act, 2003, every utility is required to submit its Aggregate Revenue Requirement (ARR) for a particular control period and is also required to file Tariff Petitions as per procedures outlined in section 61, 62 and 64, of Electricity Act 2003, and the governing regulations thereof laid down by the respective State Electricity Regulatory Commissions.

5. The present petition is being filed by JUSNL before the Hon'ble Jharkhand State Electricity Regulatory Commission for approval of the Multi-year tariff for the 2<sup>nd</sup> control period (FY 2016-17 to FY 2020-21) as per the Electricity Act, 2003 and as per the provisions of the Terms and Conditions For Transmission Tariff Regulations, 2015 notified by the Hon'ble Jharkhand State Electricity Regulatory Commission (JSERC).
6. JUSNL along with this petition is submitting the prescribed Regulatory formats with data & information to the extent possible and would make available any further information/ additional data as required by the Hon'ble Commission during the course of tariff determination process.

**Prayers before the Hon'ble Commission:**

The petitioner respectfully prays that the Hon'ble Commission may:

- (i) Admit this Multi-year Tariff Petition for FY 2016-17 till FY 2020-21 in accordance with the principles outlined in JSERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2015.
- (ii) Grant an expeditious hearing of this Petition.
- (iii) Approve the Multi-year Tariff for FY 2016-17 till FY 2020-21 to the extent claimed by the Petitioner in accordance with the submissions and rationale submitted in this Petition.
- (iv) Issue appropriate directives for making applicable the Tariff determined for past period.
- (v) Condone any inadvertent omissions/errors/rounding off differences/ shortcomings/deficiencies in the Petition and permit the Petitioner to add/modify/alter this filing and make further submissions as may be required at a future date.

- (vi) Pass such further and other Orders, as the Hon'ble Commission may deem fit and appropriate, keeping in view the facts and circumstances of the Case.

For Jharkhand Urja Sancharan Nigam Limited/  
(Petitioner)

Authorized Signatory

Place: Ranchi

Dated: \_\_\_\_\_ 201X

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## **1. Introduction**

### **1.1. Background**

- 1.1.1. The Govt. of India notified the Electricity Act, 2003 on 10th June, 2003 repealing the Indian Electricity Act-1910, the Electricity (Supply) Act 1948 and the E.R.C. Act, 1998. Among the tariff related provisions, the State Electricity Regulatory Commission (SERC) has to be guided by National Electricity Policy and National Tariff Policy. The generation, transmission and distribution tariff have to be determined separately. The Jharkhand State Electricity Regulatory Commission (hereinafter referred as “Commission”) has framed Regulations specifying the terms and conditions for determination of transmission tariff.
- 1.1.2. In accordance with the above principle, The Jharkhand Electricity Regulatory Commission vide Gazette Notification No. 45 dated 20th January 2016 published the Jharkhand State Electricity Regulatory Commission (Terms & Conditions of Transmission Tariff) Regulations, 2015.
- 1.1.3. While submitting this Multi-year tariff Petition, Jharkhand Urja Sancharan Nigam Limited has placed utmost efforts to adhere to the said Regulations framed by this Hon’ble Commission.
- 1.1.4. As the Hon’ble Commission is aware that the erstwhile Jharkhand State Electricity Board (“Board” or “JSEB”), which was a statutory body constituted under Section 5 of the Electricity (Supply) Act, 1948, and which was engaged in electricity generation, transmission, distribution and other related activities in the State of Jharkhand was restructured to form separate entities.
- 1.1.5. Vide its Notification dated 6th January 2014, the Government of Jharkhand, in exercise of the powers conferred by section 131, 133



and other applicable provisions of the Electricity Act, 2003 had made the Jharkhand State Electricity Reforms Transfer Scheme, 2013 for providing and giving effect to the transfer of properties, interests, rights, assets, liabilities, obligations, proceedings and personnel of Jharkhand State Electricity Board to the Transferees and for matters incidental and ancillary thereto. Copy of the Transfer Scheme is attached at **Annexure-B** to this petition.

- 1.1.6. Thus vide the above notification the following four companies have been created:

*“Jharkhand Bijli Vitran Nigam Ltd”, means the Distribution Company to which the Distribution Undertakings of the Board are transferred in accordance with this Scheme.*

*“Jharkhand Urja Utpadan Nigam Ltd” means the Generating Company to which the Generating Undertakings of the Board are transferred in accordance with this Scheme;*

*“Jharkhand Urja Sancharan Nigam Ltd” means the Transmission Company to which the Transmission Undertakings of the Board are transferred in accordance with this Scheme;*

*“Jharkhand Urja Vikas Nigam Ltd” means the Company that owns all shares of newly incorporated reorganized three companies i.e. Jharkhand Urja Utpadan Nigam Ltd , Jharkhand Urja Sancharan Nigam Ltd and Jharkhand Bijli Vitran Nigam Ltd;*

- 1.1.7. Jharkhand Urja Sancharan Nigam Ltd. (herein after to be referred to as “JUSNL” or “the Petitioner” was incorporated on 23rd October 2013 with the Registrar of Companies, Jharkhand, Ranchi and has

obtained Certificate of Commencement of Business on 28th November 2013.

- 1.1.8. Being a State Transmission Utility (STU), or erstwhile JSEB-Transmission function was catering to the requirements of the State for transmitting power from the state owned generation stations and the power purchases from other external sources into the distribution network. The responsibilities of the erstwhile JSEB- Transmission function as a STU have now been transferred to Jharkhand Urja Sancharan Nigam Ltd (JUSNL).
- 1.1.9. Section 62 of the Electricity Act 2003 requires the STU to furnish details as may be specified by the Appropriate Commission for determination of tariff. In addition, as per the MYT Regulations issued by the Hon'ble Commission, JUSNL is required to file for all reasonable expenses it believes it would incur over the next control period 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, which should be arrived at by a reasonable methodology adopted by the petitioner.
- 1.1.10. The Hon'ble Commission in November 2015 issued JSERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2015 (hereinafter referred as "Transmission Tariff Regulations 2015") which are applicable from 1<sup>st</sup> April 2016 and in force up to 31<sup>st</sup> March 2021 and JUSNL, as per the said regulations, is required to file the Business plan as well Multi-year Tariff petition (MYT) before the Hon'ble Commission for the said control period.
- 1.1.11. In compliance with the said Transmission Tariff Regulations 2015 notified by JSERC, JUSNL hereby files its MYT tariff petition for the 2<sup>nd</sup> control period (FY 2016-17 to FY 2020-21) for the kind perusal and approval of the Hon'ble Commission.

## **1.2. Approach to the present Petition**

The Hon'ble Commission notified the Jharkhand State Electricity Regulatory Commission (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2015" on 20th Jan'16. As required by these regulations, the Petitioner has already filed its Business plan with the Commission for the 2nd control period on 16th November 2016. Subsequently, we intend to file our Multi Year Tariff for the 2nd control period (FY 2016-17 to FY 2020-21) before this Hon'ble Commission in accordance with the JSERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2015. The said matter may kindly be listed by the Hon'ble Commission for hearing and further processing and approval.

## **1.3. Details of Past filings of JUSNL**

Pursuant to the enactment of the Electricity Act, 2003 (EA-2003), JUSNL is required to submit its Aggregate Revenue Requirement (ARR) and Tariff Petitions as per the procedures outlined in Section 61, 62 and 64, of EA-2003, and the governing Regulations thereof. The history of the relevant petitions filed by JUSNL before the Hon'ble Jharkhand State Electricity Regulatory Commission is as follows:

### **a) ARR petition of FY 2015-16**

As an independent transmission utility framed after unbundling, JUSNL had filed a petition before the Hon'ble Commission, and prayed for Review of ARR for FY 2013-14 (6 January 2014 to 31 March 2014) & FY 2014-15 and determination of Aggregate Revenue Requirement (ARR) and Transmission Tariff for FY 2015-16.

The tariff order issued by Hon'ble commission on the sad JUSNL's petition is summarized below-

**Table 1 ARR Summary and Transmission tariff for 2015-16**

Particulars	FY 2015-16 (projected)	
	Submitted by the Petitioner	Approved by the Commission
Employee Cost	48.04	36.52
R&M Cost	30.62	18.31
A&G Cost	3.79	8.19
Total O&M cost	82.45	63.02
Interest on Normative loan	71.34	54.34
Interest on Working Capital	10.03	7.83
Depreciation	79.84	64.1
Total Cost	243.66	189.3
Add: Return on Equity	53.43	45.96
Less: Non-tariff Income	4.47	4.93
<b>Aggregate Revenue Requirement (A)</b>	<b>292.61</b>	<b>230.32</b>
Energy Wheeled at Transmission level (MU)	7444.59	7200.22
Revenue from sale of power (B)	134	129.6
<b>Revenue Gap/(Surplus) (A-B)</b>	<b>158.6</b>	<b>100.72</b>

#### 1.4. Filings under present petition

- 1.4.1. The present petition is being filed by JUSNL for Aggregate Revenue Requirement (ARR) as per Multi Year Tariff (MYT) Principles for the Control Period from FY 2016-17 to FY 2020-21 in accordance with

the JSERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2015.

- 1.4.2. In addition to the above, the projections for the Control Period from FY 2016-17 to FY 2020-21 are presented in Section 2 of the present petition.
- 1.4.3. The compliance to various directives of Hon'ble Commission provided in the Tariff Order dated 14th Dec, 2015 in Case No. 3 of 2015 have been covered in Section 3 of the present petition.

## 2. Determination of MYT for 2nd Control period

The Petitioner is submitting this Petition for approval of Multi Year Tariff for its Transmission Business for the 2nd control period (FY 2016-17 to FY 2020-21) based on the rationale provided in the subsequent paragraphs. The various applicable & prescribed tariff filling forms, principles, procedures provided by this Hon'ble Commission for Transmission Licensees as prescribed in the JSERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2015 have been duly filled in and are enclosed as **Annexure – A**.

### 2.1. Capital Expenditure

- 2.1.1 The licensee has prepared a detailed capital investment plan for the 2<sup>nd</sup> Control Period based on the 'Power for all' plan notified by the Government of Jharkhand and has already filed the same with the Hon'ble Commission on 16<sup>th</sup> Nov'16. The Business plan was prepared keeping in mind the existing network loading conditions and the expected future loading of the network during each year of the control period based on the projected load growth and also for evacuating power from generating stations.

Regulation 7.3(a) of JSERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2015 specifies as under:

*7.3 Capital cost for a Project shall include:*

- (a) the expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan - (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, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check shall form the basis for determination of tariff;*

In complying with the directive, regarding taking appropriate steps to strengthen the state transmission network, of the Hon'ble Commission given to the petitioner in its previous tariff order, the petitioner intends to construct and capitalize various transmission lines and substations at 400 kV, 220 kV and 132 kV level during the said 2<sup>nd</sup> control period. Further, it is expected that schemes worth Rs.10,429.96 Crore will be capitalized during the 2<sup>nd</sup> control period. Year wise details of capitalization are as follows:

**Table 2 : Capitalization for the control period FY 2016-17 to 2020-21 (Rs. Crs)**

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Capitalization	1,978.65	1,060.83	5,092.80	1,050.25	1,247.43

2.1.2 The closing balance of Capital Works-in-progress (CWIP) for 2014-15 as per the unaudited accounts is around 328.6 Cr. CWIP is expected to increase by 158 Cr. in 2015-16. Considering the same, the opening value of CWIP for the 2<sup>nd</sup> control period has been considered as 486 Cr. The CWIP table for the control period FY 2016-17 to FY 2020-21 is given below:

**Table 3 : CWIP for the control period FY 2016-17 to 2020-21 (Rs. Crs)**

Particular	2016-17	2017-18	2018-19	2019-20	2020-21
CWIP	974.17	3228.22	1321.28	1253.94	730.82

## 2.2. Renovation & Modernization

The petitioner has prepared a detailed plan for undertaking the renovation and modernisation of the existing transmission network in the state, during the control period FY 2016-17 to FY 2020-21, in compliance with the Transmission Tariff regulations 2015. The various elements in the state transmission network requiring renovation, modernisation and augmentation have been identified and provided to the Hon'ble Commission through the Business plan for the 2<sup>nd</sup> control period filed on 16<sup>th</sup> Nov' 2016. Further, it is expected that projects worth Rs.600.69 Crore will be capitalized under this head during the 2<sup>nd</sup> control period. Year wise details of capitalization are as follows:

**Table 4 Capitalization (R&M and augmentation) for the control period FY 2016-17 to 2020-21 (Rs. Crs)**

Particular	2016-17	2017-18	2018-19	2019-20	2020-21
Capitalization (R&M and augmentation)	24.98	67.13	89.73	198.24	220.61

The projected capitalization towards the Renovation, modernization and augmentation of the SLDC is expected to be 0.65 Crore during the 2<sup>nd</sup> control period. Year wise details of capitalization are as follows:



Table 5 : Capitalization (R&M and augmentation) of SLDC for the 2<sup>nd</sup> control period (Rs. Crs)

Particular	2016-17	2017-18	2018-19	2019-20	2020-21
Capitalization (R&M and augmentation)	0.13	0.13	0.13	0.13	0.13

### 2.3. Debt: Equity Ratio

The petitioner has estimated the debt equity requirement of the 2<sup>nd</sup> control period in accordance with the Terms and Conditions for Determination of Transmission Tariff) Regulations, 2015. The regulation 7.10 of the JSERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2015 states

*7.10 For a project declared under commercial operation on or after 1.04.2016, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:*

*Provided that where equity deployed is less than 30% of capital cost, the actual equity shall be considered for determination of tariff:*

*Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:*

In line with the above regulations the licensee has considered a Debt equity ratio of 70:30 for the control period FY 2016-17 to FY 2020-21. Year wise requirement of debt and equity is as follows:

**Table 6 : Debt and equity requirements for the control period FY 2016-17 to 2020-21 (Rs. Crs)**

Particular	2016-17	2017-18	2018-19	2019-20	2020-21
Debt	1726.77	2320.42	2230.10	688.04	507.02
Equity	740.04	994.47	955.76	294.87	217.30
Total capital expenditure in 2 <sup>nd</sup> control period	2466.82	3314.88	3185.86	982.91	724.32

## 2.4. Return on Equity

Regulation 7.12 and 7.13 of the JSERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2015 state that:

*7.12 Return on equity shall be computed on pre-tax basis at the base rate of 15.50% applicable only for those Transmission systems which meet the norms of operation specified under clause 8.3 of these Regulations to be grossed up as per clause 7.13 of these Regulations.*

*7.13 The rate of return on equity shall be computed by grossing up the base rate with the applicable tax rate for the year applicable to the Transmission Licensee.*

In accordance with the above, the applicable tax rate for grossing up the base rate has been considered as 33.99% (normal corporate tax rate). Using the formula prescribed by the Hon'ble Commission, the rate of pre-tax return on equity is computed as follows;

Rate of pre-tax return on equity = Base rate (1-t) = 15.5% (1-0.3399) = 23.481%

The closing value of equity for 2014-15 is INR 169.67 Cr. and has been considered as the opening value of equity for 2<sup>nd</sup> control period. Further, using the above pre-tax return on equity, the petitioner has estimated the return of equity for the control period FY 2016-17 to FY 2020-21. Year wise projections are as follows:

**Table 7 : Return on equity for the control period FY 2016-17 to 2020-21 (Rs. Crs)**

<b>Particular</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-20</b>	<b>2020-21</b>
Regulatory Equity at the beginning of the year	169.67	763.27	1,081.51	2,609.35	2,924.43
Capitalisation during the year	1,978.65	1,060.83	5,092.80	1,050.25	1,247.43
Equity portion of capitalisation during the year	593.60	318.25	1,527.84	315.08	374.23
Regulatory Equity at the end of the year	763.27	1,081.51	2,609.35	2,924.43	3,298.66
Return on Regulatory Equity at the beginning of the year	39.84	179.22	253.95	612.70	686.69
Return on Equity portion of capitalisation during the year	69.69	37.36	179.38	36.99	43.94
<b>Return on equity</b>	<b>109.53</b>	<b>216.59</b>	<b>433.33</b>	<b>649.69</b>	<b>730.62</b>

**Table 8 : Return on equity for the control period FY 2016-17 to 2020-21 (Rs. Crs)**

<b>Particular</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-20</b>	<b>2020-21</b>
Regulatory Equity at the beginning of the year	0.99	0.99	0.99	0.99	0.99
Capitalisation during the year					
Equity portion of capitalisation during the year					
Regulatory Equity at the end of the year	0.99	0.99	0.99	0.99	0.99
Return on Regulatory Equity at the beginning of the year	0.23	0.23	0.23	0.23	0.23
Return on Equity portion of capitalisation during the year					
<b>Return on equity</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>

## **2.5. Interest & Finance Charges**

The debt amount has been considered as per JSERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2015 and as mentioned in section 2.3 of this petition. The repayment for the year has been considered equal to the depreciation as per the provisions of the Transmission Tariff Regulations 2015 notified by the Hon'ble Commission. Relevant provisions of the Transmission Tariff regulations are reproduced below for ready reference:

- 7.19 *The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each Year applicable to the Project:*  
*Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:*  
*Provided further that if the Transmission System does not have actual loan, then the weighted average rate of interest of the Transmission Licensee as a whole shall be considered:*
- 7.20 *Provided further, in case of new licensee commencing its operation after the date of effectiveness of these Regulations, and which doesn't has actual loan portfolio, the rate of interest shall be considered on normative basis and shall be equal to the Base rate of State Bank of India plus 200 basis points as on the date on which the licensee is declared under commercial operation.*
- 7.21 *The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.*

In accordance with the above, for calculation of Interest and Finance charges, the closing balance of 2014-15 i.e. 696 Cr. has been considered as the opening balance for the 2<sup>nd</sup> control period. The weighted average interest rate of the loan portfolio has been considered as 11.3% (SBI Base rate of 9.3% + 200 basis points). The interest charges for the respective year is being calculated on the average of opening and closing balances. Closing balance of the current year has been considered as the opening balance for the next year. The projected interest and finance charges for the control period FY 2016-17 to FY 2020-21 is as follows:

**Table 9 : Interest & Finance charges for the control period FY 2016-17 to 2020-21 (Rs. Crs)**

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Opening balance	696.45	1,970.92	2,527.01	5,751.84	5,993.49
Asset Addition (Debt portion of Capitalised assets)	1,385.06	742.58	3,564.96	735.18	873.201
Less Depreciation	110.59	186.49	340.14	493.52	550.89
Closing balance	1,970.92	2,527.01	5,751.84	5,993.49	6,315.80
Interest	150.71	254.13	467.75	663.61	695.47

In the similar lines, the respective SLDC charges for the projected interest and finance charges for the control period 2016-17 to 2020-21 is as follows:

*Table 10 : Interest & Finance charges for the control period FY 2016-17 to 2020-21 (Rs. Crs)-SLDC*

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Opening balance	2.31	2.13	1.95	1.78	1.60
Asset Addition					
Less :Depreciation	0.18	0.18	0.18	0.18	0.18
Closing balance	2.13	1.95	1.78	1.60	1.42
Interest	0.25	0.23	0.21	0.19	0.17

## 2.6. Depreciation

The depreciation for the 2<sup>nd</sup> control period has been estimated considering the following regulations of Transmission Tariff Regulations 2015.

1. *Depreciation shall be calculated for each year of the Tariff period, on the amount of Capital Cost of the assets admitted by the Commission; (section 7.25)*

2. *The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset. (section 7.26)*
3. *Land other than land held under lease shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset. (section 7.27)*
4. *Depreciation shall be calculated annually based on 'Straight Line Method' and at rates specified in Appendix-I to these Regulations for the assets of the Transmission System: (section 7.28)*

Provided that, the remaining depreciable value as on 31<sup>st</sup> March of the Year closing after a period of 12 Years from the Date of Commercial operation shall be spread over the balance useful life of the assets.

It is considered that the depreciation of an asset shall start the very next year an asset has been capitalized. For instance if the asset is capitalized in 2017-18 then the depreciation as per the applicable rate is charged in 2018-19, 2019-20, 2020-21 till the last year of the second control period. Closing balance of the current year has been considered as the opening balance for the next year. Following depreciation rates, which are in line with the Transmission tariff regulations, have been considered:

**Table 11 : Depreciation rates considered**

<b>Sr. No.</b>	<b>Particulars</b>	<b>Depreciation rate</b>
1	Land and land rights	0.00%
2	Building	3.34%
3	Plant and Machinery	5.28%
4	Lines and Cable Network	5.28%
5	Vehicles	9.50%
6	Furniture and Fixture	6.33%
7	Office Equipment	6.33%
8	Spare Units/Service Units	5.28%
9	Others Civil Works	5.28%

The below table provides the year wise projections estimated by JUSNL for the second control period. Closing value of gross block for 2014-15 i.e. INR 1,066.54 Cr. has been considered as the opening value for the 2<sup>nd</sup> control period. The depreciation for the respective year is being calculated on the average of opening and closing balance of gross block and the projections are as follows:

**Table 12 : Depreciation for the control period FY 2016-17 to 2020-21 (Rs. Crs)**

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Depreciation	105.31	181.21	334.86	488.24	545.61

The below table provides the year wise projections estimated by SLDC for the second control period. The depreciation for the respective year is being calculated on the average of opening and closing balance as shown below:

**Table 13 : Depreciation for the control period FY 2016-17 to 2020-21 (Rs. Crs)-SLDC**

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Depreciation	0.18	0.18	0.18	0.18	0.18

## 2.7. Working Capital

The following components are considered in determining the working capital requirements of the petitioner, which is in accordance with the regulation 7.31 of the JSERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2015

- a) *Maintenance spares @ 15% of the O&M expenses*
- b) *Receivables equivalent to two months of annual fixed cost; and*
- c) *Operation and Maintenance expenses for one month*



- d) *Less: Interest on amount, if any, held as security deposits from Transmission system users.*

The year wise estimation of working capital for the 2<sup>nd</sup> control period FY 2016-17 to FY 2020-21 are as follows:

**Table 14 : Working capital requirements for the control period FY 2016-17 to 2020-21 (Rs. Crs)**

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Working Capital	97.30	158.43	256.01	385.71	420.83

The year wise estimation of working capital for the 2<sup>nd</sup> control period 2016-17 to 2020-21 for SLDC are as follows:

**Table 15 : Working capital requirements of SLDC for the control period FY 2016-17 to 2020-21 (Rs. Crs)**

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Working Capital	0.81	0.86	0.91	0.97	1.03

## **2.8. Interest on Working Capital**

The JSERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2015 specifies that the rate of interest on working capital shall be computed as per the regulation 7.32 and 7.33 which are as follows:

- 7.32 Rate of interest on working capital shall be on normative basis and shall be considered equal to the base rate of State Bank of India as on 30<sup>th</sup> September of the financial year in which the Petition is filed plus 350 basis points. At the time of true up, the interest rate shall be adjusted as per the actual rate prevailing*

on 1st April of the financial year for which truing up exercise has been undertaken.

7.33 The interest on working capital shall be payable on normative basis notwithstanding that the Transmission Licensee has not taken working capital loan from any outside agency.

As per Regulations 7.32 of Transmission Tariff Regulations 2015, the interest on loan shall be considered as base rate of State Bank of India plus 350 basis points. The base rate of State Bank of India notified on 05<sup>th</sup> Oct'15 and applicable in this case is 9.3%. Copy of the SBI base rate is attached at **Annexure-D** to the present petition. Considering an addition of 350 plus points, the interest rate on working capital works out to 12.8%, which is considered for the purpose of the interest calculations. The interest on working capital for the 2<sup>nd</sup> control period (FY 2016-17 to 2020-21) is given below:

**Table 16 : Interest on Working capital for the control period FY 2016-17 to 2020-21 (Rs. Crs)**

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Working Capital	97.30	158.43	256.01	385.71	420.83
Interest	12.45	20.28	32.77	49.37	53.87

The interest on working capital for the state load dispatch center projected for the 2<sup>nd</sup> control period (FY 2016-17 to 2020-21) is given below:

**Table 17 : Interest on Working capital of SLDC for the control period FY 2016-17 to 2020-21 (Rs. Crs)**

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Working Capital	0.81	0.86	0.91	0.97	1.03
Interest	0.10	0.11	0.12	0.12	0.13

## 2.9. Operation & Maintenance Expenses

The O&M expenses of JUSNL for the 2<sup>nd</sup> MYT control period have been projected considering the historical expenses. The O&M expenses of FY 2014-15 are being used as base figures, which are escalated to arrive at the expenses for FY 2015-16, and then the expenses for FY 2015-16 are being escalated to arrive at the future projections for 2<sup>nd</sup> control period. The O&M expenses, as per the JSERC regulations 2015 are segregated across the following expense heads:

- *Salaries, wages, pension contribution and other employee costs;*
- *Administrative and General costs;*
- *Repairs and maintenance expenses; and*
- *Other miscellaneous expenses, statutory levies and taxes (except corporate income tax).*

### 2.9.1. Salaries, wages, pension contribution and other employee costs;

As per regulation 7.36 of the Transmission Tariff regulations 2015, the following formula shall be used for estimating Employee expenses:

$$EMP_n + A\&G_n = (EMP_{n-1} + A\&G_{n-1}) * (INDX_n / INDX_{n-1}) ; \text{ and}$$

where

- a)  $EMP_n$  – Employee Costs of the Licensee excluding terminal liabilities for the nth Year
- b)  $INDX_n$  – Inflation factor to be used for indexing the employee cost and A&G cost. This will be a combination of the Consumer Price Index (CPI) and the Wholesale Price Index (WPI) for immediately preceding year before the base year;

The petitioner would like to submit that all the above expense heads have been projected for the control period in accordance with the procedure

outlined in the JSERC transmission tariff regulations 2015 for transmission function. The rate used for escalation of employee costs and A&G expenses is 8%. The escalation rate has been calculated by using the following formula as mentioned in regulation 7.36:

$$\text{INDX} = 0.55 * \text{CPI} + 0.45 * \text{WPI}$$

The value of CPI has been considered as 9% (average of last 5 years) and WPI has been considered as 6.7% (average of last 5 years).

The petitioner submits to the Hon'ble Commission that due to the expansion of the state transmission network on a larger scale in the upcoming years, substantial increase in the number of employees for JUSNL is envisaged. An escalation factor of 8% was used to arrive at the employee costs of the JUSNL. Year Wise projections are as follows:

**Table 18 : Employee expenses for the control period FY 2016-17 to 2020-21 (Rs. Crs)**

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Employee expenses	44.33	47.88	51.71	55.85	60.31

Similarly, the employee expenses of SLDC have been projected. Year Wise projections of SLDC are as follows:

**Table 19 : Employee expenses of SLDC for the control period FY 2016-17 to 2020-21 (Rs. Crs)**

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Employee expenses	1.30	1.40	1.52	1.64	1.77

### 2.9.2. Administration & General (A&G) Expenses

As per regulation 7.36 of the Transmission Tariff regulations 2015, the following formula shall be used for estimating A&G expenses:

$$EMP_n + A\&G_n = (EMP_{n-1} + A\&G_{n-1}) * (INDX_n / INDX_{n-1}); \text{ and}$$

where

- a) A&G<sub>n</sub> – Administrative and General Costs of the Licensee for the n<sup>th</sup> year; INDX<sub>n</sub> – Inflation factor to be used for indexing the employee cost and A&G cost. This will be a combination of the Consumer Price Index (CPI) and the Wholesale Price Index (WPI) for immediately preceding year before the base year;

For projecting the A&G expenses, JUSNL has used the escalation rate of 8%. The A&G expenses for JUSNL is based on the number of employees for the year 2014-15. Accounts of FY 2014-15 has been taken, the same has been escalated over the years using a rate of 8% to arrive at the projected A&G expenses for each year.

**Table 20 : A&G Expenses for the control period FY 2016-17 to 2020-21**

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Administration & General (A&G) Expenses	6.46	6.98	7.53	8.14	8.79

The A&G expenses for the state load dispatch centre are projected for the 2<sup>nd</sup> control period and are as follows:

**Table 21: A&G Expenses of SLDC for the control period FY 2016-17 to 2020-21**

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Administration & General (A&G) Expenses	0.31	0.33	0.36	0.39	0.42

### 2.9.3. Repairs & Maintenance (R&M) Expenses

As per regulation 7.36 of the Transmission Tariff regulations 2015, the following formula shall be used for estimating Repairs & Maintenance expenses:

$$\text{Where, } R\&M_n = K * \text{GFA};$$

- a) 'K' is a constant (expressed in %) governing the relationship between R&M costs and Gross Fixed Assets (GFA) and will be calculated based on the % of R&M to GFA of the preceding year of the Base Year;
- b) 'GFA' is the opening value of the gross fixed asset of the nth year;

The 'K' factor for the 2<sup>nd</sup> control period is considered @ 5.57% (which is calculated after considering the values of R&M and GFA from the 2014-15 accounts). Detailed calculations are as follows:

Opening GFA for 2014-15 = 509.37 Cr.

R&M expenses for 2014-15 = 28.34 Cr.

Value of 'K' =  $28.34/509.37 = 5.57\%$

This K factor is then multiplied with the sum total of opening GFA and assets capitalized to arrive at the Repair & Maintenance expenses for each year from FY 2016 to FY 2021.

Based on this methodology the projected Repair expenses for the JUSNL for the control period are provided in the table below:

*Table 22 : R&M expenses for the control period 2016-17 to 2020-21*

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
R&M expenses	59.36	169.48	228.52	511.95	570.40

The SLDC R&M expenses for the 2<sup>nd</sup> control period year wise are estimated based on the budgeted values, which are as follows:

**Table 23 : R&M expenses of SLDC for the control period 2016-17 to 2020-21**

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
R&M expenses	0.13	0.13	0.13	0.13	0.13

The summary of O&M expenses for the 2<sup>nd</sup> control period (FY 2016-17 to 2020-21) is given in the table below:

**Table 24 : Summary of O&M expenses for the 2nd control period (FY 2016-17 to 2020-21)**

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Employee expenses	44.33	47.88	51.71	55.85	60.31
Administration & General (A&G) expenses	6.46	6.98	7.53	8.14	8.79
R&M expenses	59.36	169.48	228.52	511.95	570.40
<b>Total</b>	<b>110.15</b>	<b>224.33</b>	<b>287.76</b>	<b>575.93</b>	<b>639.50</b>

The summary of O&M expenses of SLDC for the 2<sup>nd</sup> control period (FY 2016-17 to 2020-21) is given in the table below:

**Table 25 Summary of O&M expenses of SLDC for the 2nd control period (FY 2016-17 to 2020-21)**

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21
Employee expenses	1.30	1.40	1.52	1.64	1.77
Administration & General (A&G) Expenses	0.31	0.33	0.36	0.39	0.42
R&M expenses	0.13	0.13	0.13	0.13	0.13
Total	1.74	1.87	2.01	2.16	2.32

## 2.10. Tax on income

As per the Transmission Tariff regulations 2015 notified by the Hon'ble Commission, Tax on the income streams of the Transmission Licensee

shall not be recovered from the Beneficiaries. Therefore, the same has not been considered as part of ARR in this petition.

## 2.11. Non-Tariff income

The Transmission tariff regulation 2015 state that

*7.38 All incomes being incidental to electricity business and derived by the Licensee from sources, including but not limited to profit derived from disposal of assets, rents, delayed payment surcharge, miscellaneous receipts from the Beneficiaries shall constitute Non-Tariff Income of the Licensee.*

*7.39 The amount received by the Licensee on account of Non-Tariff Income shall be deducted from the aggregate revenue requirement in calculating the net revenue requirement of such Licensee.*

For estimating the Non-Tariff Income, the petitioner has used the metric of 8% escalation rate as was used by the Hon'ble Commission in its previous tariff order. The Non-Tariff Income for JUSNL is based on audited accounts of 2014-15, the figures were then escalated by 8% to get the projections for 2015-16 and then these 2014-15 figures were escalated to get the projections for 2<sup>nd</sup> control period. The details of the Non-tariff income for the 2<sup>nd</sup> control period are as follows.

**Table 26 : Non –Tariff for the Control period FY 2016-17 to 2020-21**

Non-tariff income	Control Period				
	2016-17	2017-18	2018-19	2019-20	2020-21
Interest Income from Investments					
Interest on fixed deposits					
Interest from Banks other than Fixed Deposits	2.04	2.21	2.38	2.57	2.78
Interest on (any other items)					



Non-tariff income	Control Period				
	2016-17	2017-18	2018-19	2019-20	2020-21
Interest on loans and Advances to staff					
Interest on Loans and Advances to Licensee					
Interest on Loans and Advances to Lessors					
Interest on Advances to Suppliers / Contractors					
Income from Trading (other than Electricity)					
Gain on Sale of Fixed Assets					
Income/Fee/Collection against staff welfare activities					
Miscellaneous receipts	4.32	4.67	5.04	5.44	5.88
Delayed payment charges from consumers					
Meter Rent					
Misc. charges as per Schedule of General and Service Charges as applicable from consumers					
Interest Charges Capitalized					
Income from Disinvestment (if any)					
<b>TOTAL</b>	<b>6.37</b>	<b>6.87</b>	<b>7.42</b>	<b>8.02</b>	<b>8.66</b>

**2.12. Other income of the Transmission Licensee**

No other income has been proposed by the petitioner in this tariff petition.

**2.13. ARR Summary for the control period**

The year wise ARR for the 2<sup>nd</sup> control period (FY 2016-17 to FY2020-21) is estimated as follows:

**Table 27 : ARR Summary and the revenue gap for the control period FY 2016-17 to 2020-21**

ARR	Control Period				
	2016-17	2017-18	2018-19	2019-20	2020-21
Operation & Maintenance Expenses	110.15	224.33	287.76	575.93	639.50
Employee Expenses	44.33	47.88	51.71	55.85	60.31
A&G Expenses	6.46	6.98	7.53	8.14	8.79
R&M Expenses	59.36	169.48	228.52	511.95	570.40
Depreciation Expenses	105.31	181.21	334.86	488.24	545.61
Interest and Finance Charges	151.00	255.03	469.25	665.70	698.16
Interest on Working Capital	13.60	25.82	41.87	69.27	76.31
Return on Equity Capital	109.53	216.59	433.33	649.69	730.62
<b>Aggregate Revenue Requirement</b>	<b>489.60</b>	<b>902.97</b>	<b>1,567.06</b>	<b>2,448.84</b>	<b>2,690.20</b>
Less: Non Tariff Income	6.37	6.87	7.42	8.02	8.66
Less: Income from Open Access charges					
<b>Aggregate Revenue Requirement from Transmission</b>	<b>483.23</b>	<b>896.10</b>	<b>1,559.63</b>	<b>2,440.82</b>	<b>2,681.54</b>
Un accounted Approved Gap of previous T.O.	100				
<b>Aggregate Revenue Requirement Proposed</b>	<b>583.23</b>	<b>896.10</b>	<b>1,559.63</b>	<b>2,440.82</b>	<b>2,681.54</b>

The year wise ARR of SLDC for the 2<sup>nd</sup> control period (FY 2016-17 to 2020-21) is estimated as follows:

**Table 28 : ARR Summary and the revenue gap of SLDC for the control period FY 2016-17 to 2020-21**

ARR	Control Period				
	2016-17	2017-18	2018-19	2019-20	2020-21
Operation & Maintenance Expenses	1.74	1.87	2.01	2.16	2.32
Employee Expenses	1.30	1.40	1.52	1.64	1.77
A&G Expenses	0.31	0.33	0.36	0.39	0.42
R&M Expenses	0.13	0.13	0.13	0.13	0.13
Depreciation Expenses	0.18	0.18	0.18	0.18	0.18
Interest and Finance Charges	0.25	0.23	0.21	0.19	0.17
Interest on Working Capital	0.10	0.11	0.12	0.12	0.13
Return on Equity Capital	0.23	0.23	0.23	0.23	0.23
Aggregate Revenue Requirement	<b>2.50</b>	<b>2.62</b>	<b>2.74</b>	<b>2.88</b>	<b>3.03</b>
Less: Non-Tariff Income					
Less: Income from Open Access charges					
<b>Aggregate Revenue Requirement from Transmission</b>	<b>2.50</b>	<b>2.62</b>	<b>2.74</b>	<b>2.88</b>	<b>3.03</b>
Un accounted Approved Gap of previous T.O.					
<b>Aggregate Revenue Requirement Proposed (In Cr.)</b>	<b>2.50</b>	<b>2.62</b>	<b>2.74</b>	<b>2.88</b>	<b>3.03</b>

#### 2.14. Recovery of transmission charges

Regulation 8.6 of the Transmission tariff regulations 2015 states that

*The fixed cost of the Transmission System shall be computed on annual basis, in accordance with norms contained in these Regulations, aggregated as appropriate, and recovered on monthly basis as transmission charge from the users.*

In accordance with the above regulations, the monthly transmission charges for the 2nd control period are proposed as follows:

**Table 29 : Proposed monthly charges**

<b>Particulars</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-20</b>	<b>2020-21</b>
ARR Proposed	583.23	896.10	1,559.63	2,440.82	2,681.54
Monthly Transmission charges (in INR Cr.)	48.60	74.68	129.97	203.40	223.46
Projected Transmission (MU's)	13,175	16,475	20,901	21,958	23,130

Further, regulation 8.9 of the Transmission tariff regulations 2015 states that

*The Annual Transmission Charge (ATC) shall be divided between Beneficiaries of the Transmission System on monthly basis based on the Allotted Transmission Capacity or contracted capacity, as the case may be.*

The petitioner submits that JBVNL is the sole beneficiary of the JUSNL's transmission system, and hence, the entire transmission charges proposed in this petition are to be recovered from JBVNL.

### **2.15. Proposal for SLDC charges**

It is proposed that the Annual charges for SLDC be recovered through a mix of System Operation charges and Market Operation charges. Annual Charges shall comprise of:

1. System Operation charges : 80% of Annual charge
2. Market Operation charge : 20% of Annual charge

System Operation Charges (SOC) shall be collected from the users in the following ratio

1. Intra State Transmission Licensee - 10% on the basis of Ckt-KMs
2. Generating Company & Sellers - 45% in the basis of Installed capacity
3. Distribution Licensee & Buyers - 45% in the basis of allocation

Market Operation Charges (MOC) shall be collected equally from the Discoms and Generating Companies apportioning to the entitlement and Installed Capacity respectively.

Considering the above, SLDC charges for the 2<sup>nd</sup> control period are proposed to be recovered in the following manner:

**Table 30 : Proposal for SLDC charges**

<b>Particulars</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-20</b>	<b>2020-21</b>
<b>Annual Fixed Charges (AFC)</b>	<b>2.50</b>	<b>2.62</b>	<b>2.74</b>	<b>2.88</b>	<b>3.03</b>
<u>SOC (80% of AFC)</u>	2.00	2.10	2.19	2.30	2.42
Intra state transmission licensee @10% of SOC	0.20	0.21	0.22	0.23	0.24
Generating company @45% of SOC	0.90	0.94	0.99	1.04	1.09
Distribution licensee @45% of SOC	0.90	0.94	0.99	1.04	1.09
<u>MOC (20% of AFC)</u>	0.50	0.52	0.55	0.58	0.61
Generating company @50% of SOC	0.25	0.26	0.27	0.29	0.30
Distribution licensee @50% of SOC	0.25	0.26	0.27	0.29	0.30

1. Registration Fee: The petitioner submits that, besides the above charges, provision for collection of Registration Fee @ Rs 1.00 lac from all users may be allowed by the Hon'ble Commission.
2. Application Fee and Scheduling Charges: The petitioner further submits that Application fee and Scheduling Charges of Rs 5000/- per application and Rs.2000/- per day or part thereof respectively may be paid by the short term open access Customers.

### 3. Directives & Responses

The tariff order of the Hon'ble Commission dated December 14, 2015 pertaining to Transmission business contained a significant number of directives to be addressed by the Licensee. Further, JUSNL is confident of having met the Hon'ble Commission's expectations on most of them and there are certain directives where complete or substantial compliance may not have been feasible due to operational reasons. The Licensee requests the Hon'ble Commission to consider these in the context of the overall performance of the Licensee.

While filing the present MYT petition for Transmission business, JUSNL has endeavoured to comply with the various applicable legal and regulatory directions and stipulations including the directions of the Hon'ble Commission.

Based on the information available, the Applicant has made all efforts to comply with the directions of the Hon'ble Commission and discharge its obligations to the best of its abilities. However, should any further material information becomes available in the near future, the Applicant reserves its right to file such additional information and consequently amend/revise the application, for which act of kindness of the Hon'ble Commission, the petitioner shall pray forever.

The directives of the honourable commission to the licensee and the response of the licensee are captured in the below section:

#### **Directive 1:**

##### ***Final transfer scheme***

- 8.1 *The Commission directs the Petitioner to submit the opening balance sheet of the successor companies along with the copy of final transfer scheme copy notified by Govt. of Jharkhand vide notification dated 6th January 2014 and any amendments thereon indicating the opening*

*balances of GFA, CWIP, equity, loan etc. for each of the successor companies of the erstwhile JSEB.*

JUSNL Response:

In compliance with the above directive, the final transfer scheme is being enclosed at **Annexure – B**.

**Directive 2:**

***True-up Petitions for FY 2011-12, FY 2012-13, FY 2013-14 (pre-unbundling) for the transmission function of erstwhile JSEB and FY 2013-14 (post unbundling) & FY 2014-15 for JUSNL***

8.2 *The Commission directs JUSNL to file the true-up Petition for transmission function of the erstwhile JSEB for the period FY 2011-12, FY 2012-13 and FY 2013-14 (for period 1st April 2013 to 5th January 2014) and also for the period post unbundling i.e. FY 2013-14 (6th January 2014 to 31st March 2014) and FY 2014-15 along with its next Petition for approval of ARR for second MYT control period.*

JUSNL Response:

JUSNL is in the process of preparation of true up petition and submits that it shall file the true up petition with the Hon'ble Commission at the earliest.

8.3 *It should be ensured that functionally segregated informations of the individual companies for the FY 2011-12, FY 2012-13 and FY 2013-14 (up to 5th January 2014) reconcile with the information of the erstwhile JSEB based on the audited accounts of FY 2011-12, FY 2012-13 and FY 2013-14.*

JUSNL Response:

JUSNL is in the process of preparation of true up petition and submits that it shall ensure compliance with this directive while filing the true up petition.

### **Directive 3:**

#### **Strengthening of transmission network**

*8.4 The Commission directs the Petitioner to take appropriate steps to strengthen the Transmission network. The Petitioner is directed to submit a detailed plan with cost benefit analysis along with the next tariff Petition.*

JUSNL Response:

The demand for power has been increasing gradually in Jharkhand over the years. For JBVNL alone, the state's largest distribution licensee, it is expected to increase by almost 80% from 9,759 MUs to 17,133 MUs during the said control period from FY 2016-17 to FY 2020-21. The exponential rise in electricity sales is primarily seen as a result of the ambitious efforts to enhance accessibility of electricity to households besides meeting the requirement of industries and other category of consumers.

The projected requirement of power transmission for the said period from FY 2016-17 to FY 2020-21, is expected to increase by almost 50% from 13,175 MUs to 23,130 Mus. Such a huge growth in power transmission is expected owing to development of large IPPs in state of Jharkhand, up gradation of Patratu Thermal power plant and downstream strengthening of 220/132 KV network which is required to ensure efficient power transfer from interstate generation projects. All the above necessitate large addition in transmission capacity to facilitate open access, decongest the transmission system and



strengthen the intra state grid to provide the required support to the downstream discoms, thus requiring a robust transmission infrastructure to transmit requisite electricity from the generation sources to the Discom periphery.

Considering the criticality of requirement of strengthening the transmission system, JUSNL has lined up a large capacity addition program with a total investment of around 11,000 Cr. and further requests the Hon'ble Commission to approve the said plan.

For Jharkhand Urja Sancharan Nigam Limited/Deponent/  
(Petitioner)

Authorized Signatory

Place: Ranchi

Dated: \_\_\_\_\_ 201X

**BEFORE THE JHARKHAND STATE ELECTRICITY REGULATORY COMMISSION,  
RANCHI**

Case No. \_\_\_\_\_ of \_\_\_\_\_ (year)

IN THE MATTER OF: Filing of the Petition under Section 61, Section 62 of the Electricity Act, 2003 read with Jharkhand Electricity Regulatory Commission (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2015 and other enabling provisions seeking approval of Multi Year Tariff for the 2<sup>nd</sup> Control period (FY 2016-2017- to FY 2020-21) for Jharkhand Urja Sancharan Nigam Limited.

AND

IN THE MATTER OF: JHARKHAND URJA SANCHARAN NIGAM LTD. (hereinafter referred to as "JUSNL" or erstwhile "JSEB-Transmission function" which shall mean for the purpose of this petition the Licensee), having its registered office at DHURWA, HEC, RANCHI

**.... Petitioner**

IN THE MATTER OF: Jharkhand Bijli Vitran Nigam Limited  
JBVNL, having its registered office at DHURWA, HEC,  
RANCHI

**.....Respondent**

Affidavit verifying the Petition

I, ..... son of Shri ..... Aged..... years residing at  
\_\_\_\_\_ Police Station \_\_\_\_\_ District

\_\_\_\_\_ do hereby solemnly affirm and states as follows:

1. That I am working as \_\_\_\_\_ in the office of the petitioner and am duly authorised by the petitioner to swear this affidavit
2. That I solemnly affirm at..... on this day of..... that
  - (i) The contents of the above petition are true to my knowledge and I believe that no part of it is false and no material has been concealed there from.
  - (ii) That the statements made in paragraphs..... of the petition are true to my knowledge and those made in paragraphs..... are based on information derived from the records of the case which I believe to be true and rest of the paragraphs are by way of submissions. Identified before me by

Verified at     th day of                     , 201X

For Jharkhand Urja Sancharan Nigam Limited/  
(Deponent/Petitioner)

Authorized Signatory

#### **4. List of ANNEXURES**

- a. Annex-A: Tariff Filing Formats (duly filled-in)
- b. Annex-B: Copy of the Transfer Scheme
- c. Annex-C: Allocation Statement between the transmission business and SLDC activity.
- d. Annex-D: Screen Shot of SBI Base Rate as on 30<sup>th</sup> September
- e. Annex-E: Copy of the Audited Accounts for FY 2013-14 and unaudited accounts for FY 2014-15 duly approved by the board of the JUSNL