

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 386/TT/2014**

**Coram:**

**Shri A.S. Bakshi, Member  
Dr. M.K. Iyer, Member**

**Date of Order : 10.10.2017**

**In the matter of:**

Approval of tariff for Transmission and Distribution system activities of the DVC network for the period for the period from 1.4.2014 to 31.3.2019.

**And in the matter of**

Damodar Valley Corporation,  
DVC Towers, VIP Road  
Kolkata

.....**Petitioner**

**Versus**

1. West Bengal State Electricity Distribution Company Limited  
Block 'DJ' Sector-11, Salt Lake City,  
Kolkata-700 091
2. Jharkhand Bijli Vitran Nigam Limited  
Engineering Building, HEC, Dhurwa,  
Ranchi- 834 004

.....**Respondents**

Parties present:

For Petitioner:

Shri M.G Ramachandran, Advocate, DVC  
Ms. Anushree Bardhan, Advocate, DVC  
Shri P.Bhattacharya, DVC  
Shri Subrata Ghosal, DVC  
Shri A.Biswas, DVC  
Shri D.K Aich, DVC  
Shri S.Ganguly, DVC

For Respondents:

None



## ORDER

This petition has been filed by the petitioner, Damodar Valley Corporation (DVC), for approval of tariff of Transmission and Distribution network (hereinafter referred to as the “T&D network”) for the period 2014-19 in accordance with the provisions of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”).

2. The petitioner is a statutory body established by the Central Government under the Damodar Valley Corporation Act, 1948 (hereinafter referred to as the 'DVC Act') for the development of the Damodar Valley, with three participating Governments, namely, the Central Government, the Government of West Bengal and the Government of Jharkhand.

3. The Commission vide order dated 27.9.2013 in Petition No. 270/TT/2012, determined the annual fixed charges for the T&D network based on actual additional capital expenditure for the years 2009-10, 2010-11 and 2011-12, projected additional capital expenditure for the years 2012-13 and 2013-14. Thereafter, in order dated 26.2.2014 in Petition No. 272/2010 the Commission revised the capital cost as on 31.3.2007 for the T&D network by including the additional capital expenditure of ₹264.08 lakh. The Commission vide order dated 29.9.2017 in Petition No. 547/TT/2014 had considered the revised capital cost and accordingly revised the annual fixed charges of the generating station for the period 2009-14, after truing-up exercise in terms of Regulation 6(1) of the 2009 Tariff Regulations, as summarized under:-



(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	7266.59	8192.78	9132.16	10333.17	12336.32
Interest on Loan	14.61	90.43	102.10	235.59	915.82
Return on Equity	6130.09	5646.04	6211.85	8669.97	8141.82
Interest on Working Capital	1051.06	1174.74	1256.96	1390.20	1497.92
O&M Expenses	15424.22	17680.93	18692.56	19776.07	21031.52
<b>Sub-Total</b>	<b>29886.57</b>	<b>32784.91</b>	<b>35395.63</b>	<b>40405.01</b>	<b>43923.40</b>
Common Office Expenditure	236.04	249.91	156.08	167.87	159.18
Pension & Gratuity Contribution	6429.12	6429.12	6429.12	6429.12	6429.12
Sinking Fund Contribution	1999.69	1932.46	1849.23	1838.95	1967.67
<b>Sub-Total</b>	<b>8664.86</b>	<b>8611.49</b>	<b>8434.42</b>	<b>8435.93</b>	<b>8555.97</b>
<b>Total Annual Fixed Charges</b>	<b>38551.42</b>	<b>41396.41</b>	<b>43830.05</b>	<b>48840.95</b>	<b>52479.37</b>

4. The petitioner vide affidavit dated 25.9.2014 has sought approval of tariff of the T&D Network for the period 2014-19 in accordance with the provisions of the 2014 Tariff Regulations. The Commission vide ROP of hearing dated 6.9.2016 directed the petitioner to submit the details of additional capitalization for Transmission A to N Stage, Transmission Main Division and Communication System. In response, the petitioner vide affidavit dated 28.9.2016 has submitted the revised projection of additional capital expenditure for the period 2016 -19 tariff period. However, the petitioner did not submit the revised tariff forms considering the revised additional capital expenditure. Thereafter, the Commission directed the petitioner to submit the revised tariff forms as per revised projected additional capital expenditure along with details of additional capital expenditure as per the revised projections. In response, the petitioner vide affidavit dated 4.11.2016 has submitted the same. The petitioner in its replies has submitted that actual additional capitalization for 2014-15 and 2015-16 has already been booked in the audited annual accounts in respect of T&D system.



The petitioner has further submitted that the actual additional capital expenditure incurred during 2014-15 and 2015-16 is less than the projected values as submitted by the petitioner on 25.9.2014 due to constrained financial condition causing deferment in project execution. The petitioner has submitted that due to financial constraints, the 12<sup>th</sup> plan programme has been curtailed so that ongoing T&D projects along with few others linked with load growth, replacement/ augmentation of ageing infrastructure and unit retirement have been planned to be taken up over the period 2016-17 to 2019-20. The petitioner has further submitted that additional capital expenditure projected for 2016-17 to 2018-19 has also been revised considering minimum T&D requirement up to 2020 due to cash shortage and submitted the Board resolution along with MOM of Ministry of Power as documentary evidence.

5. Accordingly, the revised capital cost and the annual fixed charges claimed by the petitioner for the period 2014-19 are as under:-

### Capital Cost

	<i>(₹ in lakh)</i>				
	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Opening Capital Cost	176262.48	183924.75	198498.70	233680.52	256244.02
Add: Additional capital expenditure	8626.68	15419.44	35273.48	22760.01	28372.60
Less: De-capitalization during the year/ period	964.40	845.49	91.66	196.50	980.87
Net Additional Capitalization	7662.28	14573.95	35181.82	22563.51	27391.73
Closing Capital Cost	183924.75	198498.70	233680.52	256244.02	283635.76
Average Capital Cost	180093.62	191211.73	216089.61	244962.27	269939.89



## Annual Fixed Charges

(₹ in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	13898.74	14756.78	16676.73	18904.98	20832.63
Interest on Loan	1066.43	489.69	743.17	1117.46	866.42
Return on Equity	11495.04	12149.13	13612.73	15311.35	16780.81
Interest on Working Capital	1755.84	1864.59	2004.06	2169.86	2332.59
O & M Expenses	20455.68	22000.37	22943.25	24084.62	25685.08
Additional O & M Expenses	267.28	304.00	361.21	409.06	435.05
Common Office Expenditure	85.96	80.14	102.11	149.83	169.78
<b>Sub-Total</b>	<b>49024.97</b>	<b>51644.71</b>	<b>56443.27</b>	<b>62147.18</b>	<b>67102.36</b>
Pension and Gratuity & Impact of Pay Revision	2371.89	4956.28	4956.28	4956.28	4956.28
<b>Grand Total</b>	<b>51396.82</b>	<b>56600.90</b>	<b>61399.46</b>	<b>67103.37</b>	<b>72058.56</b>

6. In compliance with the directions of the Commission, the petitioner has filed additional information and has served copies on the respondents. None of the respondents have filed any reply. Taking into consideration the documents available on record, we proceed to consider the claims of the petitioner.

7. The annual fixed charges claimed by the petitioner are based on opening capital cost of ₹176262.48 lakh as on 1.4.2014 and additional capital expenditure claimed by the petitioner from 1.4.2014 to 31.3.2019 under Regulation 14 of the 2014 Tariff Regulations. The petitioner has claimed additional capital expenditure for the years 2014-19 under following heads:-



a) Transmission A to N Stage

- 1) New Assets
- 2) Replacement

b) Transmission Main Division

- 1) New Assets
- 2) Replacement

8. The break-up of the projected additional capital expenditure claimed in the 2014-19 period is detailed as under:

	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Transmission A to N Stage</b>					
<b>New</b>					
Sub-station	1629.32	4258.91	721.06	4656.78	15034.68
Lines	2261.36	8168.29	33347.91	15967.49	8354.35
Communication	0.00	41.50	28.74	64.92	0.00
<b>Sub-Total</b>	<b>3890.67</b>	<b>12468.69</b>	<b>34097.71</b>	<b>20689.19</b>	<b>23389.03</b>
<b>Replacement</b>					
Sub-station	4035.57	2625.56	237.15	237.15	2426.16
Lines	0.00	(-) 0.26	5.60	5.60	0.00
Communication	49.41	0.00	142.51	230.58	90.25
<b>Sub-Total</b>	<b>4084.98</b>	<b>2625.30</b>	<b>385.26</b>	<b>473.33</b>	<b>2516.41</b>
<b>Total</b>	<b>7975.66</b>	<b>15093.99</b>	<b>34482.97</b>	<b>21162.52</b>	<b>25905.43</b>
<b>Transmission Main Division</b>					
<b>New</b>					
Sub Station	131.76	369.79	679.31	1164.55	178.25
Line	0.00	0.31	0.00	0.00	0.00
Communication	0.71	7.17	0.00	0.00	0.00
Others	200.92	0.00	0.00	0.00	0.00
<b>Sub-Total</b>	<b>333.39</b>	<b>377.28</b>	<b>679.31</b>	<b>1164.55</b>	<b>178.25</b>
<b>Replacement</b>					
Sub Station	271.65	385.02	111.20	432.94	1001.32
Communication	16.43	27.26	0.00	0.00	0.00
Line	0.00	0.00	0.00	0.00	1287.60
Others	29.16	0.00	0.00	0.00	0.00
<b>Sub-Total</b>	<b>317.24</b>	<b>412.28</b>	<b>111.20</b>	<b>432.94</b>	<b>2288.92</b>
<b>Total</b>	<b>650.63</b>	<b>789.57</b>	<b>790.51</b>	<b>1597.49</b>	<b>2467.17</b>
Disposal of Assets	0.00	(-)101.25	0.00	0.00	0.00
Adjustment Entries	0.00	(-)464.12	0.00	0.00	0.00
<b>Grand Total</b>	<b>650.63</b>	<b>224.20</b>	<b>790.51</b>	<b>1597.49</b>	<b>2467.17</b>



	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Excluding Disposal of Assets & Other Assets (As Claimed)	650.63	325.45	790.51	1597.49	2467.17
<b>Grand (A to N and Main)</b>	<b>8626.28</b>	<b>15419.44</b>	<b>35273.48</b>	<b>22760.01</b>	<b>28372.60</b>

9. The petitioner was directed vide ROP dated 6.9.2016 to submit the copy of planning document approved/due diligence report along with Board approval for projection of the additional capital expenditure claimed. In response, the petitioner vide affidavit dated 28.9.2016 submitted that the 5 year plan is in accordance with the national requirement and in direct coordination, consultation and with the necessary approval from the CEA (Central Electricity Authority). The plans including the financial parameters were subsequently approved by the petitioner's Board. Project wise sanction order was thereafter issued for the purpose of execution of each plan. The projects for which additional capital expenditure claimed by the petitioner on the present petition are part of 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> five year plan. The petitioner has submitted the copies of the plans.

10. The petitioner was further directed vide ROP dated 6.9.2016 to submit the details of additional capitalization for Transmission A to N Stage, Transmission Main separately as works approved/allowed in the original scope of work, works completed which was approved till 31.3.2009, works completed which was not approved (not falling within the original scope of work) and works remaining to be completed. In response the petitioner vide affidavit dated 28.9.2016 has submitted as under:-



- a) Works approved/ allowed in the original scope of work does not stand for any particular project for which additional capitalization is being claimed. Rather it is the claim against addition/augmentation of assets in the existing T&D network. However, scope of such addition/augmentation is defined as per approval of the 5 year plans by CEA (Central Electricity Regulatory Authority) followed by approval from the petitioner's Board and individual project sanction orders which are furnished along with the petition. All items are within the original scope of works with respect to the approved five year plans;
- b) Further, the list of works has been prepared with reference to the approved plans and sanction orders submitted. The entire T&D network of the petitioner is an integrated one. Addition of sub-stations, transmission lines, elements of T&D network are undertaken in order to meet the entire load growth in the petitioner's command area spread over the states of West Bengal and Jharkhand;
- c) Capital expenditure claimed for all such additions/augmentation/ replacements during any particular year are considered as additional capital expenditure in respect of the entire T&D system existing as on the last day of the preceding year;
- d) No specific consumer or specific group of consumer can be identified with reference to any particular transmission segment and benefit of strengthening the system or its augmentation is shared by all the consumers.





11. It is observed that the petitioner has claimed projected additional capital expenditure of certain assets/items for the period 2014-19 and has prayed that the capitalization of the same may be allowed under Regulation 14 (3)(vii) and Regulation 14(3)(ix) of the 2014 Tariff Regulations. Regulation 14 (3) of the 2014 Tariff Regulations provides as under:

*“14.(3) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:*

*(i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law;*

*(ii) Change in law or compliance of any existing law;*

*(iii) Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies of statutory authorities responsible for national security/internal security;*

*(iv) Deferred works relating to ash pond or ash handling system in the original scope of work;*

*(v) Any liability for works executed prior to the cut-off date, after prudence check of the details of such un-discharged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.;*

*(vi) Any liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;*

*(vii) Any additional capital expenditure which has become necessary for efficient operation of generating station other than coal / lignite based stations or transmission system as the case may be. The claim shall be substantiated with the technical justification duly supported by the documentary evidence like test results carried out by an independent agency in case of deterioration of assets, report of an independent agency in case of damage caused by natural calamities, obsolescence of technology, up-gradation of capacity for the technical reason such as increase in fault level;*

*(viii) In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of*



*the generating company) and due to geological reasons after adjusting the proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation;*

*(ix) In case of transmission system, any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement due to obsolescence of technology, replacement of switchyard equipment due to increase of fault level, tower strengthening, communication equipment, emergency restoration system, insulators cleaning infrastructure, replacement of porcelain insulator with polymer insulators, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system; and*

*(x) Any capital expenditure found justified after prudence check necessitated on account of modifications required or done in fuel receiving system arising due to non-materialization of coal supply corresponding to full coal linkage in respect of thermal generating station as result of circumstances not within the control of the generating station:*

*Provided that any expenditure on acquiring the minor items or the assets including tools and tackles, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, computers, fans, washing machines, heat convectors, mattresses, carpets etc. brought after the cut-off date shall not be considered for additional capitalization for determination of tariff w.e.f. 1.4.2014:*

*.....*

12. Regulation 14 of the 2014 Tariff Regulations provides for the additional capital expenditure in the existing transmission system. The capital cost of the new transmission element and system is to be examined separately with reference to the specific approval, commercial operation date, capital cost as on COD etc. During pendency of this petition, the Commission has issued order dated 29.9.2017 in petition 547/TT/2014 truing up the annual fixed charges from 1.4.2009 to 31.3.2014. The Commission has observed in Para 74 of the order dated 29.9.2017 as under:-



“74. However, it is observed that the new transmission lines and substation claimed in the Transmission A to N Stage will expand the capital base of the petitioner. The capitalization claimed by the petitioner in the instant petition is based on entire company wise expenditures incurred. Transmission A to N Stage includes new transmission systems and existing transmission systems. The 2009 Tariff Regulations provides the tariff determination for project or scheme or transmission system or element. In the instant case, the petitioner has claimed the transmission tariff for all the transmission system of the Company as a whole. The determination of tariff of the new transmission element and existing transmission element is to be examined differently. The new transmission element is to be examined for admissibility of commercial operation date, capital expenditure, debt:equity ratio for that individual element. Therefore, we are of the view that the capital cost additions due to new transmission system is to be treated separately.

75. Accordingly, the capital cost on account of the new transmission system under Transmission A to N Stage is to be treated as new capital cost and the existing transmission system is to be treated as additional capital expenditure within the meaning of the 2009 Tariff Regulations. Therefore, the admissibility of capital cost, of new transmission systems henceforth would be considered within Regulation 9 of the 2014 Tariff Regulations and allowed after prudence check. Further, the capital cost of existing transmission system would be considered as additional capitalization within the meaning of Regulation 14 of the 2014 Tariff Regulations.

76. In light of the above discussion, the petitioner, is therefore directed to file the application for the purpose of tariff determination separately for the new additions claimed in 2014-19 tariff period as under:

a) The each transmission element or system shall be distinctly identified in the investment approval along with the details of long term transmission customer or beneficiaries who has requested for the creation of the transmissions system;

b) The commissioning of each individual elements or group of elements shall be claimed separately along with trial operation certificate of RLDC and other requirements as per the 2014 Tariff Regulations;

c) The capital cost shall be admitted for the new assets after prudence check in accordance with the provisions of the 2014 Tariff Regulations. The petitioner shall have to comply with requirements by providing details of latest Audited accounts, Balance sheet, IDC, allocation of loans, IEDC and Initial Spares procured for individual/group elements. The admissibility of time overrun, cost overrun, initial spares shall be examined for individual elements or group of elements along with relevant documentary evidence;



*d) The allocation of loan and infusion of equity in the different project shall be separately identified by the petitioner and the same will be examined by the Commission for individual project on case to case basis;*

*e) The segregation of additional capitalization of New works (Transmission A to N Stage) and existing works shall be claimed in accordance with the 2014 Tariff Regulations;*

*f) Once the capital cost, debt and equity is admitted for individual element or group of elements, the petitioner may combined the same with existing asset base and revised the tariff allowed by the Commission with reference to the commissioning of the assets.*

*g) The tariff for the 2014-19 period shall be determined taking into consideration the submissions made by the petitioner.”*

13. In view of the above direction, the petitioner is directed to file a revised petition for determination of tariff for 2014-19 period separately for the new transmission elements (transmission lines and substations) for individual project clearly identifying separate capital cost, initial spares, loan allocation and debt:equity ratio etc..

14. Petition No. 386/TT/2014 is disposed of in terms of the above.

**Sd/-  
(Dr. M. K. Iyer)  
Member**

**Sd/-  
(A.S. Bakshi)  
Member**

