# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

### Petition No. 162/TT/2018

#### Coram:

Shri P. K. Pujari, Chairperson Dr. M. K. Iyer, Member Shri I. S. Jha, Member

#### Date of Order: 25.04.2019

#### In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for determination of Transmission Tariff from DOCO to 31.03.2019 for Asset: 02 Nos 400 kV line bays at Ranchi 400 kV Sub-station for Raghunathpur TPS - Ranchi 400 kV D/C Transmission Line under Common Scheme for 765 kV Pooling Stations and Network for NR, Import by NR from ER and from NER/SR/WR via ER and Common scheme for network for WR and Import by WR from ER and from NER/SR/WR via ER in Eastern Region.

#### And in the matter of:

Power Grid Corporation of India Limited "Saudamini", Plot No.2, Sector-29, Gurgaon -122 001

.....Petitioner

#### Vs

- Bihar State Power (Holding) Company Ltd., (formerly Bihar State Electricity Board) Vidyut Bhawan, Bailey Road, Patna – 800 001.
- West Bengal State Electricity Distribution Company Ltd., Bidyut Bhawan, Bidhan Nagar, Block DJ, Sector-II, Salt Lake City, Culcatta – 700 091.
- Grid Corporation of Orissa Ltd., Shahid Nagar, Bhubaneswar – 751 007.
- Damodar Valley Corporation, DVC Tower, Maniktala, Civic Centre, VIP Road, Culcutta – 700 054.
- 5. Power Department,



Government of Sikkim, Gangtok - 737 101.

6. Jharkhand State Electricity Board, Doranda, Ranchi – 834 002.

.....Respondents

Parties present : Shri S. K. Venkatesan, PGCIL Shri S. S. Raju, PGCIL Shri S. K. Niranjan, PGCIL Shri Amit Yadav, PGCIL

### <u>ORDER</u>

The petitioner, Power Grid Corporation of India Limited (hereinafter referred to as "PGCIL") has filed the instant Petition for approval of transmission tariff, from DOCO to 31.3.2019, for 02 Nos. 400 kV line bays at Ranchi 400 kV Sub-station for Raghunathpur TPS-Ranchi 400 kV D/C Transmission Line under common scheme for 765 kV pooling stations and network for NR, import by NR from ER and from NER/SR/WR via ER and common scheme for network for WR and import by WR from ER and from NER/SR/WR via ER in Eastern (hereinafter referred to as "instant asset"), in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations").

2. The petitioner was entrusted with the implementation of "Supplementary transmission system common scheme for 765 kV pooling stations and network for NR, import by NR from ER and from NER/SR/WR via ER and common scheme for network for WR and import by WR from ER and from NER/SR/WR via ER in Eastern Region". The petitioner has submitted that the scheme was discussed and deliberated in the Meeting of Standing Committee (hereinafter referred to as "SCM") on Power System Planning in ER held on 5.5.2007 and 5.11.2007 and the 5<sup>th</sup> & 7<sup>th</sup>



ERPC meetings held on 22.9.2007 and 26.7.2008, respectively. The petitioner has not submitted supporting documents in respect of SCM dated 5.11.2007 and ERPC meetings dated 22.9.2007 and 26.7.2008, respectively. Therefore, the Petitioner is directed to submit the same at the time of truing up.

3. The Investment Approval (hereinafter referred to as "IA") for implementation of the project was accorded by the Board of Directors of the petitioner company in its 212<sup>th</sup> meeting held on 6.8.2008 (communicated vide Memorandum Ref.: C/CP/DVC and Maithon RB project dated 29.8.2008), at an estimated cost of ₹7075.33 Crore including IDC of ₹713.60 Crore, based on 1<sup>st</sup> Quarter, 2008 price level. The petitioner has considered 29.8.2008 as the date of IA and has calculated relevant days for time over-run. However, as per IA, the project was scheduled to be commissioned within 48 months from the date of IA, i.e. 6.8.2008. Accordingly, the scheduled date of commercial operation (hereinafter referred to as "SCOD") of the instant asset works out to 6.8.2012, the same has been considered for working out time over-run for the purpose of tariff.

4. The Revised Cost Estimate (hereafter referred to as "RCE") for the project was accorded by the Board of Directors of the petitioner company in its 326<sup>th</sup> meeting held on 9.3.2016 (communicated vide Memorandum Ref.: C/CP/RCE- DVC and Maithon RB project dated 11.3.2016), at an estimated cost of ₹6570.54 Crore including IDC of ₹677.14 Crore, based on December, 2015 price level.

The scope of work covered under the instant project is as follows:
Transmission Lines:



- Maithon-Gaya 400 kV Quad D/C line along with multi-circuit portion in common forest stretch.
- 2) Gaya-Sasaram 765 kV S/C line.
- 3) Gaya-Balia 765 kV S/C line 235.10 Km.
- 4) Balia-Lucknow 765 kV S/C line.
- 5) Ranchi-WR Pooling Station 765 kV S/C line.
- Lucknow 765/400 kV new Sub-station-Lucknow 400/220 kV existing Substation 400 kV Quad D/C line.
- Ranchi 765/400 kV new Sub-station-Ranchi 400/220 kV existing Substation 400 kV Quad 2 x D/C line.
- LILO of both circuits of Allahabad-Mainpuri 400 kV D/C line at Fatehpur 765/400 kV Sub-station of POWERGRID.
- 9) LILO of Barh-Balia 400 kV Quad D/C line at Patna.

## Substations:

- 1) Augmentation of Maithon 400/220 kV Sub-station:
  - > 2 nos 400 kV line bays (for terminating Maithon-Gaya D/C line).
  - > 2 nos 400 kV line bays (for terminating Mejia-Maithon D/C line).
- 2) New 765/400 kV sub-station at Gaya:
  - > 3 x 1500 MVA, 765/400 kV transformer along with associated bays.
  - 2 nos 765 kV line bays (for Gaya–Sasaram/Fatehpur and Gaya-Balia 765 kV lines).
  - 4 nos 400 kV line bays (for Maithon-Gaya line and Kodarma-Gaya line).
- 3) New 765/400 kV Sub-station at Sasaram:
  - > 1 x 1500 MVA, 765/400 kV transformer along with associated bays.

- > 2 nos 400 kV bays (for Biharsharif-Sasaram 400 kV Quad D/C line).
- 4) Augmentation of Biharsharif 400/220 kV Sub-station:
  - > 2 nos 400 kV bays (for Biharsharif-Sasaram 400 kV Quad D/C line).
- 5) New 765/400 kV Sub-station at Fatehpur:
  - > 2 x 1500 MVA, 765/400 kV transformer along with associated bays.
  - 2 nos 765 kV line bays (for Sasaram-Fatehpur and Fatehpur-Agra 765 kV lines).
  - 4 nos 400 kV line bays (for LILO of Allahabad-Mainpuri 400 kV D/C line).
- 6) Augmentation of 400 kV Agra Sub-station to 765 kV:
  - > 2 x 1500 MVA, 765/400 kV transformer along with associated bays.
  - > 1 nos 765 kV line bay (for Fatehpur-Agra 765 kV line).
- 7) Augmentation of 400 kV Balia Sub-station to 765 kV:
  - > 2 x 1500 MVA, 765/400 kV transformer along with associated bays.
  - 2 nos 765 kV line bay (for Gaya-Balia and Balia-Lucknow 765 kV lines).
- 8) New 765/400 kV Sub-station at Lucknow:
  - > 2 x 1500 MVA, 765/400 kV transformer along with associated bays.
  - > 1 nos 765 kV line bay (for Balia-Lucknow 765 kV line).
  - 2 nos 400 kV line bays (for Lucknow 765/400 kV new Sub-station-Lucknow 400/220 kV existing Sub-station 400 kV Quad D/C line).
- 9) Augmentation of existing Lucknow 400/220 kV Sub-station:
  - 2 nos 400 kV line bays (for Lucknow 765/400 kV new Sub-station-Lucknow 400/220 kV existing Sub-station 400 kV Quad D/C line).
- 10) New 2 x 1500 MVA, 765/400 kV Sub-station at Ranchi:

- > 1 nos 765 kV line bays (for Ranchi-WR Pooling 765 kV S/C line).
- A nos 400 kV bays (for Ranchi 400 kV new Sub-station-Ranchi 400/220 kV existing Sub-station 400 kV Quad 2 x D/C line).
- 11) Augmentation of Ranchi 400/220 kV Sub-station:
  - 6 nos of 400 kV bays (4 nos for Ranchi 765/400 kV new Sub-station-Ranchi 400/220 kV existing Sub-station 400 kV Quad 2 x D/C line and 2 nos for Raghunathpur TPS-Ranchi line).
- 12) 765/400 kV WR Pooling Sub-station:
  - > 1 nos 765 kV line bays (for Ranchi-WR Pooling 765 kV S/C line).
- 13) Augmentation of Patna 400/220 kV Sub-station:
  - > 4 nos 400 kV line bay (for LILO of Barh-Balia 400 kV Quad line).
- 6. The instant Petition covers following asset:

| Name of Assets  |           |  |  |
|---|-----------|--|--|
| Asset-1: 02 Nos 400 kV line bays at Ranchi 400 kV Sub-station for | 30.8.2017 |  |  |
| Raghunathpur TPS-Ranchi 400 kV D/C transmission line.             |           |  |  |

7. Annual Fixed Charges (hereinafter referred to as "AFC") was allowed for the instant asset vide order dated 14.11.2018 under Regulation 7(7) of the 2014 Tariff Regulations for inclusion in the PoC computation as under:

|                    | (₹ in lakh) |
|--------------------|-------------|
| 2017-18 (pro-rata) | 2018-19     |
| 125.86             | 216.88      |

8. The details of the transmission charges claimed by the petitioner are as under:

|                  |                    | (₹ in lakh) |
|------------------|--------------------|-------------|
| Particulars      | 2017-18 (pro-rata) | 2018-19     |
| Depreciation     | 27.38              | 46.76       |
| Interest on Loan | 15.43              | 24.94       |
| Return on Equity | 30.51              | 52.10       |



| Interest on Working Capital | 5.70   | 9.89   |
|-----------------------------|--------|--------|
| O&M Expenses                | 78.31  | 137.42 |
| Total                       | 157.33 | 271.11 |

9. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under Section 64 of the Electricity Act. Also none of the Respondents have filed any reply in the matter.

10. The Petition was heard on 22.1.2019 and the Commission reserved the order in the Petition.

11. Based on the documents available on record and after considering the submission of the petitioner, we dispose of the claim of the petitioner in the instant Petition in terms of the provisions of the 2014 Tariff Regulations, as stated in the subsequent paragraphs.

## Date of Commercial operation (COD)

12. The petitioner has claimed date of commercial operation of the instant asset as 30.8.2017 and has also submitted the self-declared "Notification of DOCO" letter dated 20.2.2018, RLDC certificate dated 3.10.2017 regarding completion of trial operation of transmission element and CEA certificate dated 29.3.2013, as required under Regulation 43 of CEA (Measures relating to Safety and Electric Supply) Regulations, 2010 and CMD certificate as required under Grid Code in support of its claim. The petitioner had earlier claimed the tariff for the instant assets in Petition No. 298/TT/2013 for the 2009-14 tariff period under the Central electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations"). The petitioner had claimed



the COD of the instant asset as 1.4.2013 and sought approval of the COD under Proviso to Sub-clause (c) of Clause 12 of Regulation 3 of the 2009 Tariff Regulations, as it was not able to declare the commercial operation of the instant asset as the associated transmission line under the scope of DVC was not put into commercial operation. Second Proviso to Sub-clause (c) of Clause 12 of Regulation 3 of the 2009 Tariff Regulations provides as under:

"Provided further that in case an element of the transmission system is ready for regular service but is prevented from providing such service for reasons not attributable to the transmission licensee, its suppliers or contractors, the Commission may approve the date of commercial operation prior to the element coming into regular service."

13. The Appellate Tribunal for Electricity (hereinafter referred to as "APTEL") in its judgement dated 2.7.2012 in Appeal No. 123 of 2011 has examined the Second Proviso to Sub-clause (c) of Clause (12) of Regulation 3 of the 2009 Tariff Regulations and has come to the conclusion that three conditions are required to be met for declaration of COD under the said regulation. Relevant paragraph of the judgement is extracted as under:

"10. A transmission system may comprise of one or more transmission lines and substation, inter-connecting transformer, etc. According to above definition an element of the transmission system which includes a transmission line, could be declared as attained COD if the following conditions are met:

i) It has been charged successfully,

ii) its trial operation has been successfully carried out, and

iii) it is in regular service."

14. Taking into consideration the above said judgement of APTEL, the Commission did not approve the COD and tariff for the instant asset and directed the petitioner to file a fresh petition after COD of the 400 kV D/C Raghunathpur TPS-Ranchi Transmission Line, under the scope of DVC. The relevant portion of the order dated 14.3.2016 in Petition No. 298/TT/2013 is extracted hereunder:



"13. As per findings of the Tribunal's, which was upheld by the Hon'ble Supreme Court, an element of transmission system can be declared as having attained commercial operation only if it has been charged successfully, after successful trial operation and is in regular service. In the instant case, bays were ready, but the successful trial operation and charging could not be carried out without the Raghunathpur TPS-Ranchi 400 kV D/C transmission line getting commissioned. As per the information available on the CEA's website, Raghunathpur TPS-Ranchi transmission line 400 kV D/C line got completed in March, 2015. As the bays could not have been charged for trial operation without the transmission line, we are not inclined to approve the date of commercial operation of instant asset as 1.4.2013, as claimed by the petitioner.

14. We are of the view that the instant transmission assets could be charged and trial operation could be successfully carried out only on commissioning of the 400 kV D/C Raghunathpur TPS-Ranchi Transmission Line, which is stated to have been commissioned in March, 2015. Accordingly, the instant assets could be commissioned only in or after March, 2015. The petitioner is directed to file a fresh petition claiming tariff by taking the commissioning of the 400 kV D/C Raghunathpur TPS-Ranchi Transmission Line as the date of commissioning of the bays."

15. The corresponding provision to the Second Proviso to Sub-clause (c) of Clause (12) of Regulation 3 of the 2009 Tariff Regulations has been modified in the 2014 Tariff Regulations. The Proviso (ii) to Clause (3) of Regulation 4 of the 2014 Tariff Regulations provides as under:-

" (iv) In case a transmission system or an element thereof is prevented from regular service on or before the Scheduled COD for reasons not attributable to the transmission licensee or its supplier or its contractors but is on account of the delay in commissioning of the concerned generating station or in commissioning of the upstream or downstream transmission system of other transmission licensee, the transmission licensee shall approach the Commission through an appropriate application for approval of the date of commercial operation of such transmission system or an element thereof."

16. In the instant petition, the petitioner has submitted that the associated 400 kV D/C Raghunathpur TPS-Ranchi Transmission Line of DVC was put into commercial operation on 30.8.2017 and accordingly the petitioner has claimed COD of the instant asset as 30.8.2017 and has submitted the documents in support thereof. The petitioner has also sought tariff from 30.8.2017 for the instant asset under the 2014 Tariff Regulations.

17. We have considered the submissions of the petitioner. The petitioner



submitted that the instant bays were ready on 1.4.2013 and claimed COD of the instant bays under (c) of Clause 12 of Regulation 3 of the 2009 Tariff Regulations. However, the Commission did not approve the same taking into consideration the Tribunal's judgement dated 2.7.2012 in Appeal No. 123 of 2011 and the fact that the associated transmission lines of DVC were stated to have been put into commercial operation in March, 2015. Vide order dated 14.3.2016 in Petition No. 298/TT/2013, the petitioner was directed to file a fresh petition claiming tariff considering the COD of the associated transmission lines as the COD of the instant bays. It is observed that the associated transmission lines of DVC were not put into commercial operation in March, 2015 as stated in our order dated 14.3.2016 in Petition No.298/TT/2013. The downstream transmission line of DVC is now stated to have been put into commercial operation on 30.8.2017 and the petitioner is claiming tariff from 30.8.2017. Approval of the COD of the instant asset as 30.8.2017 as claimed by the petitioner would amount to capitalisation of the IDC and IEDC for the period starting from 1.4.2013 and 30.8.2017 and it would increase the capital cost of the instant asset, which we feel would go against the interest of the beneficiaries as they would be paying higher transmission charges for a period of 25 years. Therefore, we are not inclined to approve the COD of the instant bays as 30.8.2017.

18. As stated above, the COD of the instant asset was not approved as 1.4.2013 under proviso (c) of Clause 12 of Regulation 3 of the 2009 of the Tariff Regulations in view of the judgement of the Tribunal dated 2.7.2012 in Appeal No. 123 of 2011. However, the corresponding provision, i.e. proviso (2) of Clause 3 of Regulation 4, in the 2014 Tariff Regulations is modified to take care of such situations.

19. In a similar case, the Commission in order dated 29.4.2015 in Petition No.



105/TT/2012 did not approve the COD and did not grant tariff of Kalpakkam PFBR-Kanchipuram 230 kV D/C Transmission Line of the petitioner, PGCIL, as the associated sub-station of TANGEDCO was not ready and the petitioner's said transmission line was not capable of regular use. The petitioner filed Appeal No. 168 of 2015 before APTEL. APTEL in its judgement dated 20.9.2018 in Appeal No. 168 of 2015 observed that the Commission's decision in not approving the COD of the Kalpakkam PFBR-Kanchipuram 230 kV D/C Transmission Line was consistent with the 2009 Tariff Regulations and various judgements. However, APTEL observed that proviso (c) of Clause (12) of Regulation 3 of the 2009 Tariff Regulations was modified by the Commission for the control period 2014-19 to take care of the eventualities as in the case of Kalpakkam PFBR-Kanchipuram 230 kV D/C Transmission Line. Further, APTEL taking into consideration that PGCIL has completed the asset under its scope, remanded the matter to the Commission directing to reconsider PGCIL's prayer and to allow tariff for the Kalpakkam PFBR-Kanchipuram 230 kV D/C Transmission Line as per the 2014 Tariff Regulations considering the capital cost as on 31.3.2014 including the admissible IDC and IEDC.

The relevant portion of the judgement dated 20.9.2018 is extracted hereunder:

"8.9 The learned counsel for the Appellant has vehemently contended to apply the proviso to Regulation 3(12)(c) which deals with such circumstances as in the present case. Admittedly, the Appellant alleges for getting penalised for the fault / inaction of the others due to which it is not able to put the reference asset to its regular use. On the other hand, the learned counsel for the Respondents quick to point out that the findings of the Central Commission are just and right, taking into consideration of the judgments of this Tribunal and the Apex Court which are for the cases of identical nature. In view of the above submissions and the decisions contained in the judgments of this Tribunal and the Hon'ble Supreme Court, we are of the considered opinion that though the transmission line between Kalpakkam PFBR and Kanchipuram, i.e. Asset-3, has been made ready by the Appellant but the same could not be put to regular service because of nonreadiness of sub-station at Kanchipuram end. We, further opine that there is not much interpretation left in the proviso of the Regulations 3(12)(c) as far as the entitlement of the Appellant to tariff under the Tariff Regulation 2009-2014 is concerned. It is, however, pertinent to note that the provisions of Regulation 3(12)(c) of the Tariff Regulation, 2009 has now



been modified by the Central Commission for the control period commencing from 01.04.2014 which deals with such eventualities as in the present case in an elucidated manner.

8.10 Keeping all these aspects in view, we are of the considered opinion that the findings of the Central Commission in the impugned order pertaining to the COD of Asset-3 as 01.09.2012 are consistent with various judgments and its Tariff Regulations, 2009. As the Appellant has completed all the works under its scope of work and a considerable time of more than six years has elapsed, the Appellant deserves a liberty to file an application before the Central Commission seeking grant of approval in terms of the Tariff Regulations, 2014 to enable the tariff determination for Asset-3 with capital cost being considered as on 31.03.2014 including admissible IDC /IEDC."

20. In the instant case, the petitioner was ready with the instant asset on 1.4.2013 but the same could not be put to use as the associated transmission line of DVC was not put into commercial operation. The facts of the instant case are similar to the Kalpakkam PFBR-Kanchipuram 230 kV D/C transmission line in Petition No. 105/TT/2012. Accordingly, in line with above judgement of APTEL, we approve the COD of the instant asset as 1.4.2014 under proviso (ii) of Clause (3) of Regulation 4 of the 2014 Tariff Regulations and approve tariff for the instant asset from 1.4.2014, by capitalising the IDC and IEDC from 1.4.2013 to 31.3.2014. The transmission charges for the instant asset from 1.4.2014 till the date of commercial operation of the associated transmission charges from 30.8.2017 shall be borne by DVC. Thereafter, the transmission charges from 30.8.2017 shall be governed as per the provisions of Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) Regulations, 2010 (hereinafter referred to as "the 2010 Sharing Regulations").

## <u>Time over-run</u>

21. As stated above, the SCOD of the instant asset is 6.8.2012. The instant asset was ready on 1.4.2013 and thus there was a time over-run of 238 days.



22. The petitioner, vide affidavit dated 22.11.2018, has submitted as under:

a) The instant asset was earlier declared under commercial operation on 1.4.2013. However, in accordance with Commission's direction in order dated 14.3.2016, the petitioner has claimed COD of instant asset as 30.8.2017 matching with the associated transmission line i.e. 400 kV D/C Raghunathpur TPS-Ranchi Transmission Line.

b) As such, considering the SCOD of 1.9.2012 there is an apparent delay of 60 months (calculated by the petitioner considering date of IA as 29.8.2008 instead of 6.8.2008) upto COD of 30.8.2017. This delay is apparent in nature as the same is only due to direction of Commission in order dated 14.3.2016 regarding shifting the DOCO of the instant asset matching with the associated transmission line.

c) Further, considering SCOD of 1.9.2012 there is a delay of 7 months upto 1.4.2013 (earlier claimed COD). This initial delay was mainly due to time lost with an attempt to match commissioning of the instant asset with the 400 kV D/C Ranchi–Raghunathpur Transmission Line of DVC. However, the said transmission line was held up due to certain approvals / issues and the petitioner owing to various contractual obligations could no longer wait for matching completion of the associated transmission line and had accordingly, proceeded with the commissioning of the instant asset on 1.4.2013.

 d) The scope of work i.e. 400 kV D/C Ranchi–Raghunathpur Transmission Line is to be carried out by DVC.

e) The major events leading to the current status of subject related assets (i.e.



400 kV D/C Ranchi-Raghunathpur Transmission Line under the scope of DVC and associated 2 nos. 400 kV line bays under the scope of the POWERGRID) is as follows:

| Date              | Remark   |
|-------------------|--|
| May, 2008         | LOA issued by DVC for 400 kV D/C Ranchi- Raghunathpur TL package                       |
| July, 2009        | Check Survey of TL approved  |
| August, 2009      | Forest Clearance proposal for TL is submitted and completion target set                |
|                   | as Aug'2010 by DVC   |
| August, 2009      | LOA issued by POWERGRID for Sub Station package (02 nos 400kV                          |
|                   | line bays at Ranchi)   |
| November, 2010    | Stage-I forest clearance for TL obtained by DVC  |
| May, 2012         | Final Forest Clearance obtained for TL by DVC and target completion                    |
|                   | date revised to Dec'2012   |
| December, 2012    | MoEF directed PCCF to issue work clearance for DVC                                     |
| December, 2012    | Revised target completion date of TL not intimated/updated by DVC as                   |
| to February, 2013 | per CEA monthly reports  |
| March, 2013       | Bays commissioned by POWERGRID with COD as 01.04.2013                                  |
| April, 2013       | Commercial declaration of 02 nos bays at Ranchi by POWERDRID                           |
|                   | was listed in 24 <sup>th</sup> ERPC held on 26 <sup>th</sup> April 2013. Also, DVC was |
|                   | requested by ERPC to expedite the work of 400kV D/C Ranchi-                            |
|                   | Raghunathpur TL  |
| April, 2013       | Target further revised to Dec'2013 by DVC  |
| August, 2018      | Commissioning of TBCB line 400kV D/C Ranchi- Raghunathpur TL                           |

f) The LOA was placed by DVC in May, 2008 and after the check survey the forest proposal was submitted by it in August, 2009 with a completion schedule of August, 2010. Keeping in view the progress of the associated TBCB line of DVC, the petitioner placed LOA of the instant Bays in August, 2009 so as to line up the commissioning of the associated Bays with the completion schedule of TBCB line being executed by DVC. Final forest clearance for the TBCB line was obtained by DVC in May, 2012 and the target completion schedule was further revised to December, 2012 (as intimated to CEA) by them.

g) The pace of the works (of Bays under the scope of POWERGRID) were



propped up by the petitioner as the schedule completion date of subject project was nearing and also keeping in mind the revised likely completion of TBCB line as December, 2012. However, the line got delayed and it was not possible to further delay the associated Bays due to contractual obligations. The petitioner could have easily completed the instant asset within SCOD. However, it kept on deferring the completion of said assets owing to assurance provided by DVC regarding anticipated completion of its TBCB line.

h) The delay of 7 months (i.e. from 01.9.2012 to 01.04.2013) may be condoned as the same was a result of inability of DVC to abide by its own deadlines which it kept flouting repeatedly.

i) The details of time over-run as per format prescribed in Form-12, for the instant asset, is as under:

| Activity   |          | Period o | of activity |         | Reason(s) for delay   |
|------------|----------|----------|-------------|---------|---|
|            | Planned  |          | Achieved    |         |   |
|            | From     | to       | From        | to      |   |
| LOA        | 29.9.08  | 29.9.08  | 27.8.09     | 27.8.09 | The subject project was accorded in<br>August'2009 (with broad schedule timeline<br>of 48 months). However, keeping in mind<br>the matching of bays and TBCB line, the<br>LOA for instant asset (bays) was awarded<br>only after completion of check survey and<br>submission of Forest approval by agency<br>executing TBCB line.                  |
| Civil Work | 27.11.08 | 6.7.11   | 27.10.09    | 31.3.13 | Civil works were initiated immediately<br>upon award of works (LOA). However, the<br>pace of execution of same was carried out<br>as per slow progress of Forest/Working<br>clearance of TBCB line. The line received<br>Forest Stage-I approval in Nov'2010,<br>Stage-II clearance in May'2012 and<br>Working permission clearance in<br>Dec'2012. |



| Supplies                 | 12.5.09 | 30.1.12 | 16.7.10 | 2.1.12  | There was delay in supplies owing to late<br>award of works (LOA) with reasons<br>already explained above.   |
|--------------------------|---------|---------|---------|---------|--|
| Erection                 | 9.6.09  | 3.7.12  | 1.10.10 | 1.3.13  | There was initial delay in supplies owing to<br>late award of works (LOA) with reasons<br>already explained above. The erection<br>works were kept on hold by petitioner as<br>the TBCB line was nowhere near<br>completion. The same were propped up<br>during fag end of completion schedule (i.e.<br>01.09.2012) to Dec'2012 (i.e. revised<br>anticipated DOCO of TBCB as updated by<br>DVC in CEA forum) |
| Testing<br>Commissioning | 4.7.12  | 28.8.12 | 1.3.13  | 31.3.13 | Testing & commissioning works completed<br>swiftly when the decision to go ahead for<br>charging of bays was taken in absence of<br>line completion whose completion was<br>getting deferred inordinately.   |

j) However, in view of the directions given by the Commission in its order dated 14.3.2016 regarding shifting of DOCO of instant asset to match with the DOCO of the associated transmission line, the instant asset has been declared under commercial operation on 30.8.2017. The delay of 60 months in commissioning of the instant assets is apparent in nature and may be condoned.

23. We have considered the submissions of the petitioner. The petitioner claimed the COD of the instant assets as 1.4.2013 in Petition No. 298/TT/2013. The Commission vide order dated 14.3.2016 in the said petition directed the petitioner to file a fresh petition claiming tariff for the instant asset after the COD of the 400 kV D/C Raghunathpur TPS-Ranchi Transmission Line. The 400 kV D/C Raghunathpur TPS-Ranchi Transmission Line was put in to commercial operation on 30.8.2017. Accordingly, the petitioner has filed the instant petition claiming tariff for the two bays at Ranchi Sub-Staton with effect from 30.8.2017.



24. As stated above, the SCOD of the instant asset was 6.8.2012 and the instant asset was ready on 1.4.2013. However, the instant asset was prevented from declaration of COD on 1.4.2013 due to non declaration of COD of the associated transmission line, i.e 400 kV D/C Raghunathpur TPS-Ranchi Transmission Line, under the scope of DVC. The petitioner has not furnished any documentary evidence to show that the instant asset was ready before 1.4.2013. Accordingly, we are not inclined to condone the time over-run of 238 days i.e. from SCOD (6.8.2012) to 31.3.2013. As such, the IDC and IEDC for the same period is not capitalised for the purpose of tariff in the instant petition. However, IDC and IEDC for the period from 1.4.2013 to 31.3.2014 will be capitalised as decided in para no. 20 of this order.

25. Further, as stated the transmission charges for the instant asset from 1.4.2014 till the date of commercial operation of the associated transmission line of DVC, i.e. upto 29.8.2017 shall be borne by DVC.

## Capital Cost

26. The details of capital cost claimed by the petitioner in terms of the Auditor's certificate dated 3.3.2018 as on actual COD (i.e. 30.8.2017) along with the actual / estimated additional capital expenditure to be incurred for the instant transmission asset is summarized below:

|               |             |           |               | (₹ in lakh)     |
|---------------|-------------|-----------|---------------|-----------------|
| Apportioned   | Expenditure | Estimated | d expenditure | Estimated       |
| approved cost | up to COD   | 2017-18   | 2018-19       | completion cost |
| 1195.04       | 885.73      | 0.00      | 0.00          | 885.73          |

27. As per the aforesaid Auditor certificate, the details of expenditure upto 31.3.2019 is as shown below:



|   |              |       | (      | ₹ in lakh) |
|---|--------------|-------|--------|------------|
| Particulars                             | Capital Cost | IEDC  | IDC    | Total      |
| Expenditure upto 31.3.2013              | 525.64       | 15.32 | 8.93   | 549.89     |
| Expenditure from 1.4.2013 to 31.3.2014  | * 158.07     | 8.25  | 32.94  | 199.26     |
| Expenditure from 1.4.2014 to 31.3.2015  | * 16.68      | 8.25  | 25.47  | 50.40      |
| Expenditure from 1.4.2015 to 31.3.2016  | * 23.98      | 8.25  | 25.60  | 57.83      |
| Expenditure from 1.4.2016 to 31.3.2017  | * -7.56      | 8.25  | 25.34  | 26.03      |
| Expenditure from 1.4.2017 to 29.8.2017  | * -11.46     | 3.45  | 10.33  | 2.32       |
| Expenditure from 30.8.2017 to 31.3.2018 | 0.00         | 0.00  | 0.00   | 0.00       |
| Expenditure from 1.4.2018 to 31.3.2019  | 0.00         | 0.00  | 0.00   | 0.00       |
| Total                                   | 705.35       | 51.77 | 128.61 | 885.73     |

\* FERV Loss/Gain is adjusted in (Added to / Deducted from) Capital Cost.

28. The total estimated completed cost of the instant asset is ₹885.73 lakh as against the apportioned approved cost of ₹1195.04 lakh. Hence, there is no cost over-run in the commissioning of the instant asset.

### Capital cost as on 1.4.2014

29. As stated above, the tariff of the instant asset is being allowed from 1.4.2014 considering capital expenditure inclusive of IDC and IEDC incurred upto 31.3.2014. Accordingly, the capital cost incurred upto 31.3.2014, amounting to ₹749.15 lakh (inclusive of IDC amounting to ₹41.87 lakh and IEDC amounting to ₹23.57 lakh), as certified by Auditor has been considered for the purpose of tariff as on 1.4.2014, subject to adjustment of IDC and IEDC on account of time over-run for the period from SCOD (i.e. 6.8.2012) to 1.4.2013 (i.e. date on which instant asset was ready).

30. The details of loans as submitted by the petitioner in the "Statement showing IDC Discharged upto DOCO" are not adequate to check/re-workout the admissible IDC for the purpose of tariff. Accordingly, for the present, the IDC has not been allowed for the purpose of tariff. However, the same will be considered at the time of truing up based on adequate submission relating to applicable rate of interest /



exchange rates and date of drawl / repayments of various loans.

31. As stated above, the IEDC upto 31.3.2014 is ₹23.57 lakh. And as per the statement showing "Abstract of Cost" corresponding to IA, IEDC as a percentage of accorded capital cost (before IDC, IEDC and FERV) is 5%, in line with the prevailing practice the same has been considered as ceiling limit for working out the admissible IEDC. Accordingly, the admissible IEDC after adjusting for time over-run works out to ₹21.42 lakh.

32. The capital cost incurred upto 29.8.2017 includes FERV amounting to ₹53.44 lakh and its break-up upto 31.3.2014 is not available in the petition. Further, the details of loans as submitted by the petitioner are not adequate to re-workout the admissible FERV upto 31.3.2014. For the present no adjustment has been made to the capital cost as on 1.4.2014, on account of FERV, subject to truing up.

33. Further, as regards initial spares the petitioner has claimed initial spares amounting to ₹16.00 lakh upto 29.8.2017 and its break-up upto 31.3.2014 is not available in the petition. Considering the capital cost admitted upto cut-off date, in the instant petition, the same is well within the ceiling limit of 6% as prescribed in the 2014 Tariff Regulations. Accordingly, for the present no adjustment is being made to the capital cost on account of initial spares, subject to truing up.

34. In view of above, the capital cost considered as on 1.4.2014, subject to truing up, works out to ₹705.13 lakh.

## Additional capital expenditure

35. The details of additional capital expenditure (hereinafter referred to as "ACE")



claimed by the petitioner under Regulation 14(1) of 2014 Tariff Regulations are as under:

|   |         | (₹ in lakh) |
|---|---------|-------------|
| Particulars                                     | 2017-18 | 2018-19     |
| ACE to the extent of unexecuted work            | 0.00    | 0.00        |
| Discharges of un-discharged IDC as on COD       | 8.91    | 0.40        |
| Discharges towards balance & retention payments | 0.00    | 0.00        |
| ACE claimed                                     | 8.91    | 0.40        |

36. Since, COD of the instant asset is approved as 1.4.2014, the cut-off date of the instant asset is considered as 31.3.2017. Accordingly, the capital expenditure incurred (net of IDC and IEDC), as per Auditor certificate as stated above, for the period from 1.4.2014 to 31.3.2017 (i.e. cut-off date) has been considered as ACE in the instant petition, subject to truing up.

## Capital cost for the tariff period 2014-19

37. Accordingly, the capital cost considered for the tariff period 2014-19, subject to truing up, is as under:

|                             |         |         |          |         | (₹ in lakh) |
|-----------------------------|---------|---------|----------|---------|-------------|
| Particulars                 | 2014-15 | 2015-16 | 2016-17  | 2017-18 | 2018-19     |
| Opening Capital Cost        | 705.13  | 721.81  | 745.79   | 738.23  | 738.23      |
| Add: ACE                    | 16.68   | 23.98   | (-) 7.56 | 0.00    | 0.00        |
| <b>Closing Capital Cost</b> | 721.81  | 745.79  | 738.23   | 738.23  | 738.23      |
| Average Capital Cost        | 713.47  | 733.80  | 742.01   | 738.23  | 738.23      |

## **Debt-Equity Ratio**

38. The debt-equity ratio of 70:30 as claimed by the petitioner has been considered for the purpose of tariff in the instant petition, subject to truing up. Accordingly, the details of debt-equity considered in respect of the assets under consideration, subject to truing up, is as under:

(₹ in lakh)



| Particulars | %      | As on 1.4.2014 | As on 31.3.2019 |
|-------------|--------|----------------|-----------------|
| Debt        | 70.00  | 493.59         | 516.76          |
| Equity      | 30.00  | 211.54         | 221.47          |
| Total       | 100.00 | 705.13         | 738.23          |

#### Return on equity

The petitioner has claimed RoE considering rate of 19.610% after grossing up 39. the RoE of 15.5% (base rate) with Minimum Alternative Tax (hereinafter referred to as "MAT") rate of 20.961% in terms of the provisions contained in the 2014 Tariff Regulations. The petitioner has further submitted that the grossed up RoE is subject to truing up based on the actual tax paid along with any additional tax or interest, duly adjusted for any refund of tax including the interest received from IT authorities, pertaining to the tariff period 2014-19 on actual gross income of any financial year. Any under-recovery or over recovery of grossed up ROE after truing up shall be recovered or refunded to the beneficiaries on year to year basis.

40. The petitioner has further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of the tax including interest received from IT authorities shall be recoverable / adjustable after completion of income tax assessment of the financial year.

41. ROE has been computed at the rate of 19.610% for the period 2014-19 after grossing up the ROE with MAT rate in terms of provisions contained in the 2014 Tariff Regulations. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying MAT, the MAT rate including surcharge



and cess will be considered for the grossing up of return on equity. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return on equity. This is however subject to truing up based on the actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. Accordingly, ROE has been allowed, subject to truing up, as under:

|                            |         |         |         |         | (₹ in lakh) |
|----------------------------|---------|---------|---------|---------|-------------|
| Particulars                | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19     |
| Opening Equity             | 211.54  | 216.54  | 223.74  | 221.47  | 221.47      |
| Addition due to ACE        | 5.00    | 7.19    | (-)2.27 | 0.00    | 0.00        |
| Closing Equity             | 216.54  | 223.74  | 221.47  | 221.47  | 221.47      |
| Average Equity             | 214.04  | 220.14  | 222.60  | 221.47  | 221.47      |
| Return on Equity (Pre-tax) | 41.97   | 43.17   | 43.65   | 43.43   | 43.43       |

## Interest on loan

42. In terms of the provisions of Regulation 26 of the 2014 Tariff Regulations, the petitioner's entitlement to interest on loan has been calculated on the following basis:

- (i) Gross normative loan of ₹493.59 lakh has been considered as on 1.4.2014.
- (ii) The gross opening loan as on COD as stated at Form-9C is at variance with the amount of loan used for computing the IDC as shown at "Statement showing IDC Discharged upto DOCO". Further, the petitioner has not furnished the applicable rate of interest for loans carrying floating rates as well as for foreign currency loan. Accordingly, for the present the weighted average rate of interest as claimed by the petitioner for the year 2017-18 has been considered for the tariff period 2014-19, subject to truing up.
- (iii) The normative repayment for the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for that period.
- 43. Based on the above, interest on loan has been calculated, subject to truing up,

as follows:

|             |         |         |         |         | (₹ in lakh) |
|-------------|---------|---------|---------|---------|-------------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19     |



| Gross Normative Loan              | 493.59 | 505.27 | 522.06   | 516.76 | 516.76 |
|-----------------------------------|--------|--------|----------|--------|--------|
| Cumulative Repayment upto         | 0.00   | 37.67  | 76.42    | 115.59 | 154.57 |
| previous Year                     |        |        |          |        |        |
| Net Loan-Opening                  | 493.59 | 467.60 | 445.64   | 401.17 | 362.19 |
| Addition due to ACE               | 11.68  | 16.79  | (-) 5.29 | 0.00   | 0.00   |
| Repayment during the year         | 37.67  | 38.74  | 39.18    | 38.98  | 38.98  |
| Net Loan-Closing                  | 467.60 | 445.64 | 401.17   | 362.19 | 323.21 |
| Average Loan                      | 480.60 | 456.62 | 423.40   | 381.68 | 342.70 |
| Weighted Average Rate of Interest | 4.346% | 4.346% | 4.346%   | 4.346% | 4.346% |
| Interest on Loan                  | 20.89  | 19.84  | 18.40    | 16.59  | 14.89  |

## **Depreciation**

The depreciation has been calculated annually based on Straight Line Method 44. at the rates specified in Appendix-II of the 2014 Tariff Regulations. Based on the above, the depreciation has been considered and allowed, subject to truing up, as under:

|                             |         |         |         |         | (₹ in lakh) |
|-----------------------------|---------|---------|---------|---------|-------------|
| Particulars                 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19     |
| Average Capital Cost        | 713.47  | 733.80  | 742.01  | 738.23  | 738.23      |
| Rate of Depreciation        | 5.28%   | 5.28%   | 5.28%   | 5.28%   | 5.28%       |
| Depreciable Value           | 642.13  | 660.42  | 667.81  | 664.41  | 664.41      |
| Remaining Depreciable Value | 642.13  | 622.75  | 591.40  | 548.82  | 509.84      |
| Depreciation                | 37.67   | 38.74   | 39.18   | 38.98   | 38.98       |

## **Operation and Maintenance Expenses (O&M Expenses)**

45. Regulation 29 (4) (a) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system based on the type of sub-station and the transmission line. Norms specified in respect of the elements covered in the instant petition are as under:

|                         |         |         |         |         | (₹ in lakh) |
|-------------------------|---------|---------|---------|---------|-------------|
| Particulars             | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19     |
| 400 kV Bay (₹ lakh/Bay) | 60.30   | 62.30   | 64.37   | 66.51   | 68.71       |

46. The petitioner's entitlement to O&M Expenses has been worked out as under:



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| Particulars         | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |  |
|---------------------|---------|---------|---------|---------|---------|--|
| 400 kV Bay – 2 nos. | 120.60  | 124.60  | 128.74  | 133.02  | 137.42  |  |

#### Interest on Working Capital (IWC)

47. The petitioner is entitled to claim interest on working capital as per the 2014 Tariff Regulations. The components of the working capital and the petitioner's entitlement to interest thereon are discussed hereunder:

#### (i) Receivables

Receivables as a component of working capital will be equivalent to two months fixed cost. In the tariff being allowed, receivables have been worked out on the basis of 2 months transmission charges.

#### (ii) Maintenance spares

Regulation 28 of the 2014 Tariff Regulations provides for maintenance spares @ 15% per annum of the O&M expenses. The value of maintenance spares has accordingly been worked out.

#### (iii) O & M expenses

O&M expenses have been considered for one month as a component of working capital.

#### (iv) Rate of interest on working capital

The petitioner has considered 12.80% as the rate of interest on working capital. However, in accordance with the provisions contained in Regulation 28 the rate of interest on working capital is considered as 13.50% (i.e. SBI Base Rate of 10.00% as on 01.04.2014 + 350 bps).



48. The interest on working capital, subject to truing up, has been worked out and allowed as under:

|                             |         |         |         |         | (₹ in lakh) |
|-----------------------------|---------|---------|---------|---------|-------------|
| Particulars                 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19     |
| Maintenance Spares          | 18.09   | 18.69   | 19.31   | 19.95   | 20.61       |
| O&M expenses                | 10.05   | 10.38   | 10.73   | 11.09   | 11.45       |
| Receivables                 | 38.35   | 39.26   | 39.90   | 40.27   | 40.76       |
| Total                       | 66.49   | 68.34   | 69.94   | 71.31   | 72.82       |
| Interest on Working Capital | 8.98    | 9.23    | 9.44    | 9.63    | 9.83        |

## Annual Transmission Charges

49. In view of the above, the transmission charges allowed for the instant asset is as under:

|                             |         |         |         |         | (₹ in lakh) |
|-----------------------------|---------|---------|---------|---------|-------------|
| Particulars                 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19     |
| Depreciation                | 37.67   | 38.74   | 39.18   | 38.98   | 38.98       |
| Interest on Loan            | 20.89   | 19.84   | 18.40   | 16.59   | 14.89       |
| Return on Equity            | 41.97   | 43.17   | 43.65   | 43.43   | 43.43       |
| Interest on Working Capital | 8.98    | 9.23    | 9.44    | 9.63    | 9.83        |
| O&M Expenses                | 120.60  | 124.60  | 128.74  | 133.02  | 137.42      |
| Total                       | 230.11  | 235.58  | 239.41  | 241.64  | 244.55      |

## Filing fee and the publication expenses

50. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 52 of the 2014 Tariff Regulations. The petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with clause (1) of Regulation 52 of the 2014 Tariff Regulations.

## License fee and RLDC Fees and Charges

51. The petitioner has prayed to allow the petitioner to bill and recover License fee



and RLDC fees and charges, separately from the respondents. We are of the view that the petitioner shall be entitled for reimbursement of licence fee and RLDC fees and charges in accordance with Clause (2)(b) and (2)(a) of Regulation 52 of the 2014 Tariff Regulations.

## Goods and Services Tax

52. The petitioner has prayed for reimbursement of tax, if any, on account of proposed implementation of GST. The petitioner has submitted that the Commission should allow to recover GST from the beneficiaries, if imposed on transmission charges under the proposed GST when implemented by Government of India. We are of the view that petitioner's prayer is premature.

## Sharing of Transmission Charges

53. As stated above, the transmission charges for the instant asset for the period from 1.4.2014 till the date of commercial operation of the associated transmission line of DVC, i.e. upto 29.8.2017 shall be borne by DVC. Thereafter, the transmission charges from 30.8.2017 shall be governed as per the provisions of the 2010 Sharing Regulations, as amended from time to time.

54. This order disposes of Petition No. 162/TT/2018.

| Sd/-        | Sd/-             | Sd/-           |
|-------------|------------------|----------------|
| (I. S. Jha) | (Dr. M. K. lyer) | (P. K. Pujari) |
| Member      | Member           | Chairperson    |

