

**CENTRAL ELECTRICITY REGULATORY COMMISSION**  
**NEW DELHI**

**Petition No. 75/TT/2012**

Subject : Determination of transmission tariff for spare converter transformer at Rihand (date of commercial operation: 1.12.2011) for Rihand-Dadri HVDC Bipole terminal from anticipated date of commercial operation to 31.3.2014 in Northern Region for tariff block 2009-14 period.

Date of hearing : 12.2.2013

Coram : Shri Pramod Deo, Chairperson  
Shri S. Jayaraman, Member  
Shri V.S. Verma, Member  
Shri Deena Dayalan, Member

Petitioner : Power Grid Corporation of India Limited

Respondents : Haryana Power Purchase Centre & 16 others

Parties present : Shri S.S. Raju, PGCIL,  
Shri M.M. Mondal, PGCIL  
Shri J. Mazumdar, PGCIL  
Shri Shashi Bhusan, PGCIL  
Shri T.P.S. Bawa, PSPCL  
Shri R.B.Sharma, Advocate, BRPL

**Record of Proceedings**

1. The representative of petitioner submitted that :-
  - (i) The petition has been filed for determination of transmission tariff for two spare converter transformers at Rihand for Rihand-Dadri HVDC Bipole terminal. The asset was put under date of commercial operation on 1.12.2011 and the petition was filed in 1.2.2012. The HVDC Rihand - Dadri was commissioned during 1989-90 period. The Rihand-Dadri has two poles and each pole has got 336 transformers and two spare converter transformers;
  - (ii) The failure of converter transformers was reported during 2001-2002. The issue was discussed at various forums of the NRPC during 2001 to 2004 and finally the NRPC in 2005 decided to allow the petitioner to procure two additional converter transformers. The petitioner approached the Commission in 2005 in Petition No. 38/2005 seeking to capitalize the cost of the two transformers. The Commission by its order dated 21.6.2005 approved the procurement of 2

converter transformers on two conditions. The first condition was that the cost of one transformer would be borne by the petitioner and the cost of the second converter transformer shall be allowed to be capitalized for the purpose of tariff. The second condition was that the existing two spare converter transformers will continue to be in service and they should not be de-capitalized;

- (iii) The petitioner filed an appeal against the Commission's order in Appellate Tribunal of Electricity (hereinafter referred to as "the Tribunal") in 2005. While upholding the Commission's order dated 21.6.2005, The Tribunal in its judgment dated 5.4.2006 held that cost of one converter transformer shall be borne by petitioner and not to be capitalized for tariff fixation and the cost of second converter transformer shall be allowed to be capitalized for the purpose of tariff, provided that existing spare converter will continue to be in service and not to be de-capitalized;
- (iv) As per Investment Approval the spare converter transformers are scheduled to be commissioned within 18 months from the date of letter of award. The letter of award was issued on 30.12.2006. Accordingly, the scheduled date of commissioning works to 1.7.2008. The actual date of commercial operation was 1.12.2011 and hence there was a delay of 41 months;
- (v) As regards time over-run, the petitioner submitted that the order for supply of these spare converter transformers, after a limited tender, was placed with M/s BHEL for installation, erection commissioning and testing of 2 nos. converter transformers. These transformers were manufactured by BHEL under the technology transfer from ABB, Sweden and they were manufactured in Bhopal. The transformers were tested in the factory in Bhopal after fitting the accessories procured from ABB, Sweden. Thereafter the transformers were dismantled and dispatched to site for necessary erection and commissioning;
- (vi) The OLTC of these transformers were to be supplied by M/s ABB Sweden. The transformer tanks and OLTC were separately dispatched to the site at Rihand. The OLTC was received at Rihand in March 2009. The OLTC were damaged in transit due to bad road condition. The damaged OLTC was returned back and fresh OLTC was received at site in January 2011. The transformer was erected in May 2011 and the OLTC was found to be misaligned. The problem was rectified and finally the asset commissioned on 1.12.2011; and
- (vii) The total approved cost is within FR cost. The time over run was beyond the petitioner's control and hence requested to condone the delay.

2. In response to queries of the Commission regarding the reasons for repeated failure of transformers, whether the petitioner was prudent as directed by the Commission in its order of 21.6.2005 in the procurement and transportation of the asset to site and whether they have taken suitable actions in analyzing the failure of the converter transformers, the representative of the petitioner submitted that it was the responsibility of BHEL to supply the transformer and OLTC at site. Further, they have analyzed the failure of converter transformer and had found that it was because of Nomax insulation strip which had caused the failure due to its deterioration in the tropical

climate of India. After the findings, suitable action was taken and failure rate has since reduced drastically.

3. The representative of petitioner further submitted that the first transformer was received at Dadri site in 2009 and it was all right. But the condition of the roads to Rihand was bad and they were not able to visualize that the OLTC would be damaged in transit. However, transportation of the second delivery was supervised by the petitioner and was thus able to mitigate the impact of damage due to poor road conditions.

4. In response to the query of the Commission regarding the liquidated damages clause in the I.A., the representative of the petitioner submitted that liquidated damages covers only 5% of the purchase order and would be around ₹1.25 crore, whereas the liability of IDC and IEDC was about ₹4.8 crore.

5. The representative of PSPCL submitted that the Board of Directors of the petitioner approved ₹72.3 crore for an imported transformer. However, the petitioner procured BHEL make transformers. He further requested the Commission to direct the petitioner to submit the date of charging of transformer and to state how the transformer has been kept ready for use. He also enquired whether the cost of ₹20.31 crore includes the cost of damaged OLTC cost. The representative of petitioner clarified that the cost of the damaged OLTC was borne by BHEL and its cost has not been included in the capital cost of the asset.

6. The representative of BRPL submitted that the justification given by the petitioner for time over-run is not adequate and hence time over-run should not be condoned. He further submitted that the liability of IDC & IEDC is of the order of ₹4.24 crore, while the liquidated damage claim would be only ₹1.25 crore. The IDC and IEDC should not be allowed and the increased impact of IDC and IEDC should not be passed on to the beneficiaries.

7. The representative of the petitioner clarified that delay was beyond its control and hence requested to condone the delay. He also requested that IDC and FC may be decided as per the Tribunal's judgment dated 30.1.2013 in Appeal No.34/2012. The representative of BRPL requested two weeks time to file reply. The representative of the petitioner sought two weeks time to file rejoinder to the reply, if any, filed by BRPL.

8. The Commission directed the petitioner to submit its reply to the submission, PSPCL that the charges for spare transformer should not be loaded on the beneficiaries by 11.3.2013. The Commission further directed BRPL to file its reply by 28.2.2013 and rejoinder, if any, by the petitioner before 11.3.2013.

9. Subject to the above, order in the petition was reserved.

By the order of the Commission,

Sd/-  
(T. Rout)  
Joint Chief (Law)