

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 82/TT/2012

Subject : Determination of transmission tariff for Asset I: 765 kV Moga-Bhiwani T/L (anticipated DOCO 1.4.2012) and Asset II 765 kV Jattikalan-Bhiwani T/L (anticipated DOCO 1.7.2012) associated with 765 kV system for Central part of Northern Grid Part-I for tariff block 2009-14 in Northern region.

Date of Hearing : 17.9.2013

Coram : Shri V.S. Verma, Member
Shri M. Deena Dayalan, Member

Petitioner : Power Grid Corporation India Limited

Respondents : Haryana Power Purchase Centre & 16 others

Parties present : Shri S.S. Raju, PGCIL
Shri M.M. Mondal, PGCIL
Shri B.K. Sahoo, PGCIL
Shri B.C. Pant, PGCIL
Shri Padamjit Singh, PSPCL
Shri R.B.Sharma, Advocate, JSEB

Record of Proceedings

The representative of the petitioner submitted that the petition has been filed for determination of transmission tariff for Asset-1, i.e. 765 kV Moga-Bhiwani transmission line and Asset-2, i.e. 765 kV Jattikalan-Bhiwani transmission line, which are part of Central Part of Northern Grid-I. The petition was filed on 28.2.2012 with anticipated date of commercial operation as 1.4.2012 and 1.7.2012. The assets were scheduled to be commissioned in March, 2012. However, the assets were commissioned on 1.6.2012 and 1.10.2012 and accordingly there was a delay of 3 and 7 months in case of Asset-1 and Asset-2 respectively. The reasons for time over-run were submitted vide affidavits dated 12.9.2012 and 19.7.2013. He submitted that the time over-run was mainly due to delay in acquisition of land, resistance by local villagers, severe RoW issues, court cases and tower erection. The petitioner requested to condone the delay in



commissioning of the transmission assets. He further submitted that the total estimated completion cost is within the approved cost.

2. In response to a query, the representative of the petitioner clarified that reasons for delay along with the period of delay has already been submitted along with the correspondence made by the petitioner with other government agencies vide affidavit dated 19.7.2013.

3. The representative of PSPCL submitted that:-

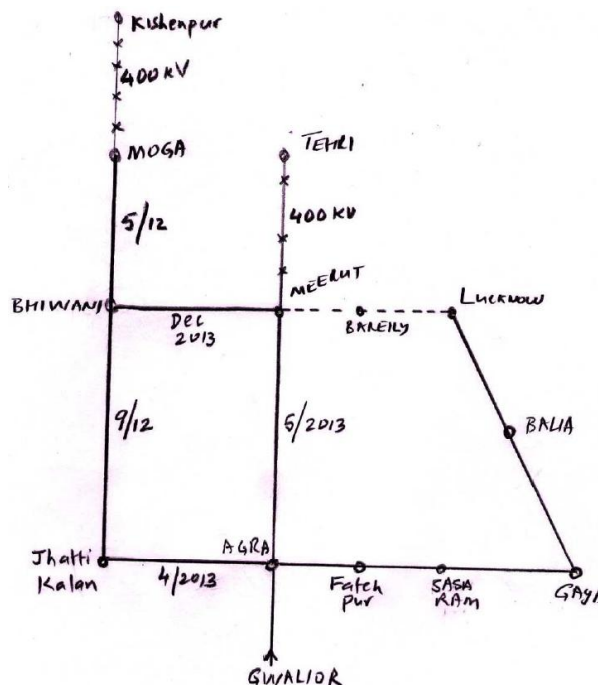
a) In the investment approval given by the petitioner on 20.2.2009 the scope of project is stated as under:-

"Transmission lines

- i) Agra-Meerut 765 kV S/C line - 260 km.
- ii) Agra-Jattikalan 765 kV S/C line -240 km.
- iii) Jatikalan -Bhiwani-Moga 765 kV S/C line - 355 km.
- iv) LILO of both circuits of Mundka/Bawana-Bamnouli 400 kV D/C line (Quad) at Jatikalan - 5 km".

b) The supply (injection) point of 765 kV power being Agra, the investment approval indicates the sequence of execution of project - First Agra - Jattikalan line is to be commissioned, then Jattikalan-Bhiwani line and as a third step the Bhiwani Moga line is to be commissioned. However, the actual commissioning of these lines was in reverse order.

The single line diagram of 765 kV system is given below:-



- Agra is to receive 765 kV supply from (a) Gwalior and (b) Gaya-Sasaram - Fathepur.
 - This 765 kV supply was to be transmitted over Agra-Meerut and Agra-Jattikalan lines.
 - The Agra - Jattikalan line was actually commissioned in April, 2013 and Agra -Meerut in 5/2013
 - Thus the 765 kV supply from Agra to Jattikalan - Bhiwani -Moga could commence only from 4/2013
 - Thus, the commissioning date of Jattikalan - Bhiwani lines and Bhiwani-Moga should be taken only as 4/2013.
- c) The transmission scheme as approved by the petitioner's Board is for setting up a 765 kV ring main around Delhi / NCR with the stations Agra- Jhattikalan-Bhiwani-Meerut-Agra. The 765 kV spur line is Bhiwani -Moga. The scheme has 765 kV power injection at Agra and Meerut and power at 765 kV level is to be stepped down to 400 kV ring main through ICTs of 765/400 kV. The scheme is not envisaged for taking power from 400 kV and stepping it up to 765 kV but for giving power supply at 765 kV and then steeping down to 400 kV to feed the 400 kV ring main and the grid substations connected there to such as Jattikalan-Bhiwani and Moga.
- d) However, firstly, the 765 kV Bhiwani Moga line was commissioned in May, 2012. Power from the existing sub-stations of 400 kV at Moga and Bhiwani was stepped up to 765 kV and the 765 kV Bhiwani Moga line was charged and put in operation. Secondly, the Bhiwani Jattikalan line was commissioned in September, 2012 by stepping up 400 kV supply of Bhiwani to 765 kV and charging the Bhiwani Jattikalan line in radial mode, in unloaded condition. 765/400 kV ICTs at Bhiwani are 2x 1000 MVA whereas the ICTs at Jattikalan are 4x1500 MVA.
- e) The loading of Jattikalan ICTs was after September, 2012 and so it is clear that Bhiwani - Jattikalan line was charged on no load from Bhiwani and date of commercial operation is being claimed on an idle / unloaded line.
- f) As per Investment Approval the elements of the project were to be commissioned within 36 months. The actual date of commercial operation is given overleaf:-

Line	Date of commissioning	Time from date of Investment Approval (Months)
Bhiwani – Moga	May, 2012	39
Bhiwani – Jattikalan	September, 2012	43
Agra - Jattikalan	April, 2013	50

- g) Thus, the functional requirement of giving power at 765 kV from Agra to Jattikalan to Bhiwani - Moga could be achieved only after commissioning of Agra Jhattikalan line and the period of 50 months taken by this line should be counted and made applicable to the Jattikalan-Bhiwani -Moga lines.
- h) By commissioning the lines in reverse order, the petitioner has not followed the provisions of Section 38 of Electricity Act (the "Act"), which specifies the duties of CTU as follows:-
- i) To discharge all functions of planning and coordination relating to inter-State transmission system
 - ii) To ensure the development of an efficient, co-ordinated and economical system of inter-State transmission lines for smooth flow of electricity from generating stations to the load centres.
- i) The petitioner has not executed the project in accordance with Section 38 of the Act. Thus, date of commercial operation of Bhiwani-Moga and Bhiwani -Jattikalan lines should be allowed only from April, 2013, when the 765 kV supply from Agra became available at Jattikalan-Bhiwani-Moga.
- j) The beneficiaries would have benefitted from the scheme only from April, 2013 (commissioning of Agra- Jattikalan line) and hence it is not justified to charge tariff from September, 2012 (Bhiwani- Jattikalan) and May, 2012 (Moga-Bhiwani). The petitioner has neither complied with Section 38 of the Act nor have the conditions of Investment Approval been followed. The tariff should be claimed only from April, 2013.
- k) Further, Regulation 3(12)(c) of the 2009 Tariff Regulations specifies the following conditions for declaration of commercial operation:-

- i) Charging of line
- ii) Trial operation
- iii) Regular service

The declaration of commercial operation certificates dated 30.10.2012 (Bhiwani-Jattikalan) and 31.5.2012 (Moga-Bhiwani) does not specify or certify about trial operation and regular service. In particular, the Jattikalan sub-station was not loaded and so the Bhiwani-Jattikalan line when charged was in unloaded condition. It is not possible to carry out trial operation of an unloaded line, since trial operation necessarily involves operation of the line in loaded condition. Further, an unloaded line cannot be considered in regular service, when it is not carrying the load for which it was envisaged / constructed.

- l) Bhiwani-Jattikalan line could be loaded only with the commissioning of 4x1500 MVA ICTs of 765 / 400 kV. The petitioner may be directed to submit the dates of commercial operation of the 1500 MVA at Jattikalan, 4 nos. ICTs at Jattikalan. The Agra-Jattikalan line was commissioned in April, 2013 and so from September, 2012 to April, 2013 the Bhiwani - Jattikalan line was operating only in radial mode.
- m) The approved system of the petitioner did not envisage that power should flow from 400 kV Bhiwani to Jhattikalan since the 4x1500 MVA ICTs are installed at Jhattikalan, while only 2x1000 MVA ICTs are there at Bhiwani. Clearly, the ICTs of Jhattikalan were supposed to be loaded from 765 kV supply coming from Agra.
- n) The date of commercial operation certificate of Jattikalan-Bhiwani line is dated 30.10.2012. This line can come into operational use only after NRLDC receives the date of commercial operation certificate from the petitioner (NR-2, Jammu). As the certificate was issued on 30.10.2012 the line could have been used only after 30.10.2012 and so it is not justified for a back dated declaration of commercial operation of 1.10.2012.
- o) The cost of the elements should be compared with the cost parameters obtained from other 765 kV single circuit lines of the petitioner with quad conductor. The cost of a thermal project is verified with the capital cost of other similar projects. By the same principle the capital cost figures of these lines may be compared with other 765 kV lines of the petitioner. The petitioner may be directed to submit

per 100 km cost figures for steel towers and conductors for other 765 kV lines so that a comparison can be made.

- p) Jattikalan Sub-station is not loaded, hence it is not right on the part of petitioner to commission the Jattikalan -Bhiwani line as it is not in the spirit of Section 38 of the Act, wherein the CTU is supposed to ensure development of an efficient, co-ordinated and economical system. Further, the date of commercial operation of the Jattikalan line must be considered from April 2013 i.e. when it was loaded and not merely charged.

4. The learned counsel for BRPL submitted that there is a huge cost over-run inspite of time over-run. There is a huge over-estimation in the project cost and hence it is not possible for it to gauge the cost over-run. He further submitted that as per the petitioner's own submission at Page-9 of the petition, the delay is due to acquisition of land for Bhiwani Sub-station and hence the delay should not be condoned.

5. In response, the representative of petitioner submitted that similar issues were raised by PSPCL in Petition No.77/TT/2012 and the petitioner has already replied to these issues in the rejoinder on 25.06.2013. The investment approval covers different elements and these elements are executed by different contractors and completed after resolving various issues and it is always possible that some of the lines completed before schedule and some are commissioned after the scheduled commissioning. It may be appreciated that a scheme consisting of number of elements, all the elements cannot be commissioned on the same day. These lines are part of strengthening schemes and improve reliability and capacity of corridors. It was not a precondition and it was not decided in the Standing Committee or stated in the Investment Approval that power at 765 kV level from Agra only has to flow through these lines. Since Moga and Bhiwani are load centers, which are connected to the grid, power is flowing through these lines. It is the responsibility of the petitioner to make lines ready and approach the Commission for determination of tariff as per Regulations, the quantum of power flow depends upon grid conditions and other parameters of grid and petitioner is not responsible for loading of the lines.

6. The Commission enquired from the representative of the petitioner whether the different elements of the project were commissioned as per the sequence given in the Investment Approval. The Commission directed the representative of the petitioner to get the petitioner's Board's approval indicating that the sequence of commissioning of the elements of the project is in line with the Investment Approval and it has acted according to Section 38 of the Electricity Act. The Commission further directed the

petitioner to submit a PERT chart of the whole scheme showing the critical activities and to submit a comparative chart showing the cost of the instant assets and the cost of similar assets covered in other petitions.

7. The Commission directed the petitioner to maintain PERT charts as well as schedules in case of all projects as they provide a clear picture of the execution activities undertaken/going on. The petitioner was also directed to ensure that the PERT charts clearly establish the critical path of the projects and also mention the slacks available in the activities.

8. The Commission directed the petitioner to file the above information before 19.10.2013 on affidavit with a copy to the respondents. The respondents may file their reply/written submissions before 30.10.2013 and the petitioner may file its rejoinder, if any, by 8.11.2013.

9. The Commission directed to list the petition on 12.11.2013.

By order of the Commission

Sd/-

(T. Rout)
Chief (Law)

