CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 59/MP/2015

Coram:

Shri Gireesh B. Pradhan, Chairperson Shri A. K. Singhal, Member Shri A. S. Bakshi, Member

Date of Hearing: 09.7.2015 Date of Order: 15.2.2016

In the matter of:

Petition under Regulation 54 and 55 of CERC (Terms & Conditions of Tariff) Regulations, 2014 read with Regulation 111 of CERC (Conduct of Business) Regulations, 1999 seeking in-principle approval for considering the expenditure incurred through the Indian Railways for timely completion of rail connectivity and / or capacity augmentation of rail infrastructure required for transportation of coal (as per Railway Board Policy dated 10.12.2012) in the capital cost of power projects for the purpose of tariff.

And In the matter of:

NTPC Limited NTPC Bhawan, SCOPE Complex, 7, Institutional Area, Lodhi Road, New Delhi-110003

.....Petitioner

Parties Present:

Shri Ajay Dua, NTPC Shri A.K.Choudhery, NTPC

<u>ORDER</u>

The petitioner, NTPC Limited, has filed the present petition seeking in-principle approval to consider the expenditure incurred through the Indian Railways for timely

completion of rail connectivity and/or capacity augmentation of rail infrastructure required for transportation of coal (as per Railway Board Policy dated 10.12.2012) in the capital cost of power projects for the purpose of tariff.

- 2. Brief facts of the case leading to the filing of the present petition are as under:
 - (a) As per the Railway Board Policy dated 10.12.2012, an amount of Rs. 902.57 crore (Rs. 400 crore for Doubling of Hotigi-Bijapur-Gadag line, Rs. 250 crore for Flyover at Bakthiyarpur including 3rd line and surface triangle, Rs. 140 crore for Electrification of Manpur-Tilaiya-Bakthiyarpur line and Rs. 112.57 crore for Gauge Conversion of balgona-Kotwa section) has been deposited with Railways under Customer Funding Model to facilitate seamless transportation of coal rakes for its upcoming Super Thermal Power Projects at Kudgi, Barh Stage-II and Kotwa.
 - (b) In case of pit head generating stations such as Singrauli, Korba, Ramagundam, etc., the transportation of coal from linked mines to concerned generating station is through dedicated Merry-go-round (MGR) system operated by NTPC. For supply of coal to non-pit head power stations in the past, NTPC has generally adopted the practice of developing last mile connectivity of rail infrastructure mostly in the form of sidings from the nearest railway station. Such works have been generally offloaded for execution to the Indian Railways/RITES/IRCON on deposit work basis. The capital cost of the above infrastructure is admitted as part of the capital cost of the power project for the purpose of tariff in accordance with extant Tariff Regulations.

- (c) Initially, the entire coal requirement for the pit-head station was being met by the linked mine and therefore, dependence on railway network for transportation of coal did not arise for such stations. However, due to shortage of inked domestic coal in the last few years, transportation of coal from various sources including imported coal to the generating stations is being done through railway system from the nearest port, particularly, in the generating stations such as Kahalgaon and Farakka where coal is sourced from multiple mines/sources, transportation of coal is dependent on the rail network.
- (d) Since in the generating stations commissioned after 2009, linkage of domestic coal is inadequate to meet the coal requirement to achieve target availability, therefore, coal from all sources including imported coal is required to make up for the shortfall. Therefore, railway network is being increasingly used at present in most of generating stations of NTPC for transportation of coal
- (e) NTPC has been allocated number of basket coal mines for supply of coal to its various upcoming generating stations such as Barh, Kudgi, Katwa, etc. Due to large distances between the coal mines and the upcoming power project of NTPC, transportation of coal is envisaged through the Indian Railways. However, existing rail connectivity infrastructure for such mines which are under development is grossly inadequate to meet the fuel requirement of the generating station. To ensure sustained supply of coal from these captive mines to the power plants, creation of new rail infrastructure or substantial capacity addition to existing rail network would be required either towards the mine end or towards the power station end or at both ends. Such works are inclusive of capacity

augmentation of rail infrastructure and involves works such as doubling of single line section, gauge conversion, construction of new lines and construction of flyover / Rail over Rail (ROR), electrification of lines, etc. Implementation of the said railway strengthening/ augmentation projects is necessary in order to ensure smooth transportation of coal to these upcoming NTPC power plants from the new captive mines. In the normal course, capital expenditure on such works would be carried out by the Indian Railways. However, since there are a large number of such rail projects involving capacity augmentation throughout the country for implementation, Indian Railways prioritizes the execution of these projects as per the availability of funds and other considerations. As a result, timely implementation of number of such projects by the Indian Railways are getting delayed due to lack of funds which in turn would impact coal availability to the respective power stations on their being ready for commissioning.

(f) In order to garner funds for the huge investment required for strengthening, modernization and expansion of the railway network, the Ministry of Railway/Railway Board has come out with a policy on "Participative Models in Rail Connectivity and Capacity Augmentation Projects" dated 10.12.2012. Through these participative models, the Ministry of Railways intends to attract investment for accelerated construction of rail infrastructure and to ensure timely availability of transportation infrastructure to industries/ beneficiaries. The policy provides participative investment models for its existing shelf of projects and also for new projects. Beneficiaries/industries can participate and be benefited from timely availability of rail infrastructure. The Policy offers the following participative investment models:

- (i) Non-Governmental Railway Model;
- (ii) JV Model for operationally necessary/bankable sanctioned/to be sanctioned Railway Projects;
- (iii) Railway Projects on BOT awarded through Competitive Bidding;
- (iv) Capacity Augmentation (Doubling/ Third line / Fourth Line, etc.) with Funding provided by customers.
- (g) After evaluation of the above options, NTPC found that option (iv) i.e. Capacity Augmentation with funding provided by customers was most suitable. This model addresses the issue of shortage of funds with the Railways to prioritize and take up the projects identified for the generating stations of NTPC. Timely implementation of number of such projects by the Indian Railways are getting delayed due to lack of funds which in turn would impact coal availability to the generating station on their being ready for commissioning.
- (h) The funds advanced by the customers would be treated as deposits and used solely for timely execution of the concerned project by appropriate ring fencing by the Railways. The project would be constructed, owned, maintained and operated by Indian Railways. In return, Indian Railways would pay up to 7% of the amount invested through freight rebate on freight volumes every year till the funds provided by the project beneficiary is recovered with interest at a rate equal to the prevailing rate of dividend payable by Indian Railways to general exchequer at the time of signing of the agreement. The interest shall be payable on reducing balance.

- (i) In order to ensure timely availability of rail infrastructure for supply of coal to upcoming projects of NTPC, Board of NTPC has decided to undertake implementation of the following rail infrastructure projects associated with upcoming projects of Barh, Kudgi and Katwa under the Policy of Ministry of Railway dated 10.12.2012. The brief of works indentified by Indian Railways is as under:
 - (i) Doubling of Hotgi-Bijapur-Gadag line: The fuel sources for Kudgi are Pakri Barwadih mines of NTPC, Jharkhand and Bhalumuda Block, Chhattisgarh. The coal requirement is 13.1 MTPA (13 rakes per day i.e. a total 26 movements for load & empty per day) and most rake movement to Kudgi shall be from Hotgi side. South Western Railways (SWR) has already communicated to NTPC that the quantum of traffic indicated by NTPC is beyond the capacity of the single line section. Therefore, Ministry of Railways has approved doubling of Hotgi - Gadag section (285 km) and survey work has been completed in this regard. Railways shall take up the work subject to availability of funds. The estimated expenditure on the doubling of line between Hotgi and Kudgi (about 134 km) is about Rs. 946 crore. In the meeting held on 12.12.2013 between NTPC and Railways, Railways had agreed to take up part project i.e. Hotgi-Kudgi if NTPC is interested to fund the part project under customer funding model. In view of the above, Board of NTPC has accorded approval to the funding of Rs. 400 crore to Railways for doubling of Kudgi Hotgi section of SWR to facilitate the seamless coal rake transportation for Kudgi STPS. In this regard, payment of Rs 400 crore has been released and has been

deposited with South Western Railways under Customer Funding Model of the participative policy of Railways.

- (ii) Flyover at Bakthiyarpur including 3rd line and surface triangle: The coal supply to NTPC Barh stage-II is from Chhatti Bariatu (CB) and Kerandari (KD) mines of NTPC and for Stage-I FSA exists with CCL from coal fields in North Karanpura region in Jharkhand. In both cases, transportation would be effected on the Hazaribag-Koderma-(Manpur)-Tilaiya-Karnauti-Bakhtiyarpur-Barh route. The construction of a flyover at Manpur and the third line / surface triangle is required to avoid the surface crossing at Bakhtiyarpur of load rakes moving from Tilaiya to Barh so as to ensure smooth coal supply to Barh Project. NTPC Board accorded approval to the proposal to fund Rs. 250 crore to Railways for construction of third line and surface triangle under Customer Funding Model of Railway's participative models for rail connectivity and has released Rs. 250 crore and deposited the same with East Central Railways.
- (iii) Electrification of Manpur-Tilaiya-Bakthiyarpur line for Barh Project: NTPC has released Rs.140 crore under customer funding model and deposited the same with East Central Railways.
- (iv) Gauge Conversion of balgona-katwa section: The Katwa project (2 x 800 MW) has been provided coal linkage from mines in the area. The Balgona-Katwa section is the coal supply route which is presently having narrow gauge. Coal supply to NTPC Katwa project would not be possible without gauge conversion of Balgona-Katwa section. NTPC has deposited

Rs.112.57 crore with Eastern Railways for the above gauge conversion project of Indian Railways under customer funding model.

- (j) Signing of Agreement/MOU between NTPC and Indian Railways for the above railway projects to be implemented under customer funding model of the participative policy of Indian Railways is in the pipeline.
- (k) The Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (2014 Tariff Regulations) do not envisage such situation. The investment in the rail infrastructure project needs to be serviced in tariff of the respective generating station. Under the customer funding model as per the Ministry of Railway Policy dated 10.12.2012, the amount advanced by NTPC for funding of rail infrastructure project shall be accounted as revenue advance. Therefore, this amount would not be reflected in the gross block in NTPC Books. Accordingly, investment in rail infrastructure is required to be treated as part of capital cost of the respective generating station for the purpose of determination of tariff. Since, the rebate being offered by Indian Railways in freight bills would be reflected in the fuel transportation cost, same would be passed on the beneficiaries of the generating station through corresponding reduction in variable cost.

Analysis and Decision:

3. We have heard the representative of the petitioner. The issue for our consideration is whether in-principle approval can be accorded for incurring the expenditure through the Indian Railways for timely completion of rail connectivity and/or

capacity augmentation of rail infrastructure required for transportation of coal as per Railway Board Policy dated 10.12.2012 in the capital cost of power projects for the purpose of tariff and if so, under which provisions such in-principle approval can be granted. The petitioner has contended that an amount of Rs. 902.57 crore (Rs. 400 crore for Doubling of Hotigi-Bijapur-Gadag line, Rs. 250 crore for Flyover at Bakthiyarpur including 3rd line and surface triangle, Rs. 140 crore for Electrification of Manpur-Tilaiya-Bakthiyarpur line and Rs. 112.57 crore for Gauge Conversion of Balgona-Kotwa section) has been deposited with Indian Railways under Customer Funding Model as per the Railway Board Policy dated 10.12.2012, to facilitate seamless transportation of coal rakes for its upcoming Super Thermal Power Projects at Kudgi, Barh Stage-II and Kotwa.

- 4. Clause 6.4 of Ministry of Railway Policy dated 10.12.2012 deals with participative models for rail connectivity and capacity augmentation provides as under:
 - "6.4 The ownership of the line and its operation and maintenance will always remain with Railways. In return Railways will pay upto 7% of the amount invested through freight rebate on freight volumes every year till the funds provided by the project beneficiary is recovered with interest at a rate equal to the prevailing rate of dividend payable by Railways to General Exchequer at the time of signing of the agreement. The interest shall be payable on the reducing balance."

As per the above provisions, the ownership and operation and maintenance of the lines would remain with the Indian Railways, and as such the asset would not be owned by the petitioner. Railways would pay every year upto 7% of the amount invested through freight rebate till the amount deposited is recovered, though the exact quantum in terms of freight rebate is not known.

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5. During the course of hearing, the representative of the petitioner submitted that the Commission vide order dated 29.7.2010 in Petition No. 308/2009 had allowed the water charges for the purpose of tariff as per the policy laid down by the State Govt. of Chhattisgarh. The Commission's above order dated 29.7.2010 is extracted as under:

Water Charges:

- "19. The petitioner has submitted that an advance amount of Rs. 110 crore was paid to Water Resources Department, State Govt. of Chhattisgarh for building of Mohad Reservoir for availability of water for the entire life of the generating station. The petitioner has submitted that it had received in-principle approval for 1 TMC water per year from the State Govt. of Chhattisgarh during August, 2003 out of the proposed saving of 1.8 TMC, after lining of Tandula main canal. Accordingly, the petitioner had paid commitment charges of Rs. 7.13 lakh to the State Govt. of Chhattisgarh. However, during September, 2005, the State Govt. of Chhattisgarh proposed to the petitioner for building the Mohad reservoir, due to inadequate water savings in the Tandula Canal during the period of low rain fall and also to bear the entire construction cost for the same. Keeping in view of the approval for 1 TMC water per year by the State Govt. of Chhattisgarh, the petitioner requested the State Govt. not to change it for the construction cost of the proposed Mohad Reservoir. However, the petitioner's request was rejected by the State Govt. of Chhattisgarh and it reiterated that the entire construction cost for the reservoir was to be borne by the petitioner. Subsequently, on account of acute water crisis, the State Govt. of Chhattisgarh reduced the water consumption for the generating station from 1 TMC/year to 0.6 TMC/year and the State Govt. by a revised proposal dated 2.11.2007 called upon the petitioner to share an amount of Rs. 110 crore being the proportionate cost for 0.82 TMC water (including 0.22 TMC as evaporation & transmission loss through canal) for Mohad reservoir, against the current estimated cost of Rs. 205 crore, adjustable against the water charges payable in future as per prevailing rates for water supplied by the State Govt.
- 20. Since water forms a major ingredient for operation of the generating station, the petitioner agreed for the payment of the estimated cost of Rs. 110 crore as proposed by the State Govt. of Chhattisgarh. It was also made clear by the State Govt. that the estimated construction cost of Rs. 205 crore was provisional and was subject to any upward or downward revision. In case of upward revision, the petitioner was liable to bear the same.
- 21. As per policy laid down by the State Govt. of Chhattisgarh, the ownership/proprietary right of the Mohad reservoir would remain with the State Government and do not encourage the category of self-made asset for industrial water use. However, it was clarified by the State Govt. that the requirement of water for the generating station would be made available from alternate sources, till the construction of the reservoir was complete.
- 22. The advance amount of Rs. 110 crore has been shown in the books of accounts of the petitioner, under the head "part of loans and advances" and this amount has been considered by the petitioner as part of capital cost of the generating station for the purpose of tariff, in view of the following:

- a. Considering the prevailing rate for industrial water, and without considering any interest burden implications, Rs. 110 crore shall be fully adjusted against annual water charges for a period of about 18 to 19 years and thereafter, water charges are payable to the State Govt. as per prevailing rates.
 - b. While the ownership of the reservoir rests with the State Govt. water shall be made available to the generating station for a period of thirty years as per the agreement.
- c. The project cannot function without industrial water and such water is to be made available only from the State Govt. Hence, the petitioner had no option but to agree to pay the sum as demanded by the authorities.
- d. The beneficiaries have also agreed to share the additional cost in respect of this adjustable advance of Rs. 110 crore as per the PPA executed with them.
- 23. There is no denying of the fact that the generating station requires industrial water, without which it cannot function and water is to be made available only from the State Govt. Also, the efforts made by the petitioner to prevail upon the State Govt. not to impose on it the construction cost of Rs. 110 crore proved futile, as the State Govt. declined the request of the petitioner. Under these circumstances, the petitioner had no other alternative except to deposit the said advance amount, which was raised from the lenders/promoters of the project. The cost of loan needs to be serviced by the petitioner, as it has confirmed that no interest was being received for the amount deposited to the State Govt. The petitioner has thus prayed that the amount paid to the State Govt. of Chhattisgarh, be considered as part of the capital cost of the generating station. In view of the above discussion, the water charges for Rs. 110 crore is allowed and has been considered for the purposed of tariff."
- 6. We have perused the said order dated 29.7.2010. In our view, the said order does not support the case of the petitioner. It is not mandatory for the petitioner to participate in the scheme under the Customer Funding Model as per the Policy of Ministry of Railways. As per the Policy, the fund provided by NTPC shall be refunded by Railways through rebate in the freight which may be upto 7% of the amount invested every year. Further, NTPC will receive interest on the funds provided by it to Railways at a rate equal to prevailing rate of dividend payable by Railways to the general exchequer..

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- 7. In our view, the request of the petitioner to capitalize of such expenditure on funding provided to Railways in the capital cost of the power projects cannot be allowed. However, NTPC may retain the rebate in freight charges in consideration of the investment made by NTPC. It is, however, clarified that beneficiaries will be charged for the normal freight charges in tariff without considering the rebate in freight charges to NTPC.
- 8. The petition is disposed of in terms of the above.

Sd/- sd/- sd/-

(A.S.Bakshi) Member (A.K. Singhal) Member (Gireesh B. Pradhan) Chairperson