

18. The Respondents HPPC, BPRL and BYPL have stated that as the electrification cost for siding also include Rewari-Manharee-Hissar section of Railways, which is used by general public, this amount may be met from the Corporate Social Responsibility (CSR) fund of the Petitioner. They have further submitted that no details/ justifications have been submitted by the Petitioner with regards to change in law event and hence, the additional capitalisation is not covered under Regulation 26(1) (a) or Regulation 26(1)(b). In response, the Petitioner has submitted that the amount of additional capitalisation claimed under this head is only for electrification of the Rewari-Hissar section of the Railway line since, after electrification, the coal supply would only be through electric locos. It has also pointed out that the letter dated 12.11.2012 from Indian Railways clearly states that the cost of electrification of the APCPL Railway siding is to be borne by the Petitioner. This is a clear decision of a Government Authority and needs to be allowed to be capitalised in tariff. The Petitioner has denied that the expenditure is met through Corporate Social Responsibility ('CSR') fund since is not a social responsibility but a cost to be incurred necessarily to receive uninterrupted coal supply at the generating station.

19. The matter has been considered. The projected additional capital expenditure of Rs.918 lakh 2020-21 claimed by the Petitioner is based on the Indian Railways letter dated 12.11.2012, wherein the cost of electrification of Railway Siding which is required to be borne by APCPL has been indicated. In view of this, the projected additional capital expenditure of Rs.918 lakh 2020-21 claimed for Track electrification works is allowed under Regulation 26(1)(b) of the 2019 Tariff Regulations.

(d) Chlorine Dioxide plant



20. The Petitioner has claimed projected additional capital expenditure of Rs.750.00 lakh in 2020-21 under Regulation 26(1)(b) and Regulation 26(1)(d) of the 2019 Tariff Regulations for Chlorine Dioxide (ClO₂) plant. The Petitioner has submitted that chlorine gas is being dozed directly at various stages of water treatment to maintain water quality and to inhibit organic growth in the water retaining structures/ equipment such as clarifiers, storage tanks, cooling towers, condenser tubes & piping etc. It has also stated that Chlorine dosing is done from chlorine stored in cylinders/ tonners and Chlorine gas is very hazardous and may prove fatal in case of leakage; handling and storage of same involves risk to the life of public at large. Therefore, in the interest of public safety, the chlorine dozing system is being replaced by Chlorine Dioxide (ClO₂) system, which is much safer and less hazardous than chlorine. The Petitioner has stated that in the proposed scheme, ClO₂ shall be produced on site by use of commercial grade HCl and sodium chlorite and as ClO₂ is generated at site, avoids handling and storage risk. The Petitioner has further submitted that at Kudgi NTPC project, Department of Factories, Boiler, Industrial Safety and Health, Govt of Karnataka, had asked NTPC to consider the replacement of highly hazardous gas chlorination system with ClO₂ system. Also, SPCB, Odisha while issuing consent to establish in case of Darlipalli Station, had asked NTPC to explore the possibility of installing ClO₂ system, instead of Chlorine gas system. Accordingly, the Petitioner has submitted that in view of the directions of various statutory authorities, in different states of the country and for enhancing the safety of O&M personnel, the Petitioner has considered replacing the chlorination system with ClO₂ system.

21. The Respondents HPPC, BRPL and BYPL have submitted that none of the letters (i.e. State Pollution Control Board, Odisha and the Government of Karnataka)



referred to by the Petitioner is pertaining to the State of Haryana, and hence they may be ignored. They have also submitted that there is no change in law event, which has occurred for allowing the said claim under Regulation 26(1)(b) of 2019 Tariff Regulations and Regulation 26(1)(d) of 2019 Tariff Regulations is also not applicable. As the Petitioner has not placed on record any documentary evidence to show that there is requirement of CIO2 plant as a measure for higher security and safety of the generating station. In response, the Petitioner has submitted that "Draft Safety, Health and Working Conditions Code 2018" was put up by the Ministry of Labour and Employment in March 2018, inviting comments/ suggestions of various stakeholders, wherein the responsibilities of various faculties of industries/factories was mentioned including the employer APCPL, as a responsible employer and took cognizance of the requirement of CIO2 system in a safe manner. It has also submitted that "The Occupational Safety, Health and Working Conditions Code, 2020" was notified by Ministry of Law & Justice, GoI vide Gazette Notification dated 29.9.2020. Accordingly, the Petitioner, has submitted that being under the NTPC management, it has decided the requirement of CIO2 System, in line with the duties necessitated by the Clauses 6(1)(a) and 6(1)(d) of the said Code.

22. The matter has been considered. It is observed that the letter dated 23.9.2019 addressed by the Directorate of Factories, Industrial Safety & Health, State Government of Karnataka to the GM, NTPC, pertains to the site clearance of the Kudgi Super Thermal Power station of NTPC. This letter, in no manner, can be termed as a change in law event or for compliance with any existing law in respect of this generating station warranting the additional capitalization of the expenditure. In regard to Government of Orissa consent to Darlipalli Station, it is noted that the same is applicable only to thermal plants located in the State of Odisha. As there is no specific direction or advice from



any of the Governmental or statutory authorities as regards the requirement of this system for this generating station, the claim of the Petitioner is not allowed

(e) Implementation of 'Enterprise Resource Planning'

23. The Petitioner has claimed projected additional capital expenditure of Rs.919.00 lakh in 2020-21 towards Implementation of 'Enterprise Resource Planning' under Regulation 25(2)(c) of the 2019 Tariff Regulations. The Petitioner has submitted that the generating station is having standalone IT systems for automation of various processes like HR, Finance, Fuel Management, Operation Management, Material Management, Maintenance management etc. It has however submitted that in view of the increased flexibility of generation at non-pit head stations due to increased RE capacity addition and SCED, it is necessary to integrate all the systems and deploy the latest state of art software for managing all the processes at one platform. The Petitioner has also submitted that the proposed implementation of ERP is for integrating all the systems for managing all processes at one platform and since the earlier systems are obsolete; the ERP has been proposed under Regulation 25(2)(c) of the 2019 Tariff Regulations

24. The Respondents HPPC, BRPL and BYPL have submitted that the generating station is in operation since 2011 and there was no support felt for ten years, as such functions were inherent in the operation of the generating station. They have further submitted that no sufficient documents have been submitted by the Petitioner in support of the said claim and hence, the additional capital expenditure claimed may be rejected. In response, the Petitioner has reiterated that the earlier systems are obsolete and hence the ERP has been proposed under Regulation 25(2)(c) of the 2019 Tariff Regulations.



25. The matter has been considered. It is evident from the Petitioner's submission that the claim is for replacement of existing equipment which are obsolete. As the old asset has completed its useful life and the additional capitalization is for replacement of the same, the claim of the Petitioner for additional capital expenditure of Rs.919.00 lakh in 2020-21 is allowed under Regulation 25(2)(c) of the 2019 Tariff Regulations. This is, however, subject to the Petitioner furnishing Management certificate/ OEM certificate for obsolescence at the time of truing-up of tariff, failing which the expenditure may not be considered.

(f) Procurement & installation of Coal Ash Analyser

26. The Petitioner has claimed projected additional capital expenditure of Rs.134.00 lakh in 2020-21 towards Procurement & installation of Coal Ash Analyser under Regulation 26(1)(b) of the 2019 Tariff Regulations. The Petitioner has submitted that MoEF&CC vide its OM dated 26.8.2015, had mandated all coal based thermal power plants with installed capacity of 100 MW and above, located at a distance of 500 kms and above, from coal source for sampling and analysis of coal and reporting of compliance in respect of use and supply of raw or blended coal with ash content not exceeding 34% as content in coal. It has also been directed that real time monitoring using auto mechanical sampling (online) from moving stream of coal to be used for sampling fuels. The Petitioner has submitted that as the present station is located at a distance of about 1000 kms from the linked mine and also source coal from other mines, the Petitioner has to necessarily incur the expenditure for installation of on online coal analyzer, to comply with the directions of MoEF&CC.

27. The Respondents BRPL and BYPL have submitted that the Petitioner was required to comply with the statutory requirement from 5.6.2015. They have also



submitted that the Petitioner was required to measure the GCV on “as received” basis from the samples drawn from wagons, which has not been done till date. In response, the Petitioner has clarified that it has complied with the semi-automated system, which needs to be improved and therefore the online coal analyser has been mandated to be installed.

28. The matter has been considered. It is observed that OM dated 26.8.2015 of the MOEF&CC GOI, mandates all coal-based thermal power plants with an installed capacity of 100 MW & above and located at a distance of 500 km & above from coal source, to have coal with ash content less than 34% and the same shall be complied by sampling and analysis of the coal. With regard to Ash content monitoring, clause 5.0 of the said OM mandates as under:

“5.0 Ash content monitoring (sampling and analysis) technique of coal:

Coal is highly heterogeneous in nature consisting of particles of various shapes and sizes each having different physical characteristics, chemical properties and residual ash content: Sampling is further complicated by the sampling equipment available, the quantity to be represented by the sample mass, and the degree of precision required. In addition, the coal to be sampled may be a blend of different coal types and how the coal is blended has a profound effect on the way a representative sample is obtained. National and international standards have been developed to provide guidelines for coal sampling procedures under different conditions, sample preparation and bias test procedures for the purpose of obtaining unbiased samples.

Real Time monitoring using auto mechanical sampling (online) from moving streams shall be used for sampling fuels. This shall be effective from a date not later than 01 September, 2016 in order to enable the Coal Companies and thermal power plants to install and operationalize the real time monitoring system. Manual sampling and analysis may be done so as to verify the online monitoring results.

*In case of manual monitoring, coal samples may be taken from a moving conveyor belt since sampling from stationary coal such as a coal storage pile or railcars may be problematic. **The analysis of samples shall be carried out by third party** appointed by the respective thermal power plant/coal mine or company, as applicable, as per the guidelines of Coal Controller.”*

29. It is pertinent to mention that the Petitioner has already been mandated to have a system for monitoring of coal through a third-party agency i.e. CIMPFR. Moreover, the Petitioner has also not submitted any reason for the Procurement of Online



Analysed. Accordingly, the projected additional capital expenditure claimed by the Petitioner is not allowed.

(g) Standard BOXN Rail Wagon (1 No) for testing requirement

30. The Petitioner has claimed projected additional capital expenditure of Rs.50.00 lakh in 2020-21 towards Standard BOXN Rail Wagon (1 No) for testing requirement under Regulation 25(1)(b) of 2019 Tariff Regulations. The Petitioner has submitted that testing of weighbridge is necessary to ensure the quantity of coal receipts at the generating station. It has also submitted that as per the Legal Metrology (Government Approved Test Centre) Rules, 2013, notified by the Ministry of Consumer Affairs, Food and Public Distribution, GOI, on 5.9.2013, the testing of the automatic rail weighbridges, is to be carried out by Government approved test centers. The Petitioner has also submitted that to simulate the actual conditions, testing of weighbridges is carried out with standard wagons and therefore, 1 No. BOXN standard wagon is being procured for testing of weighbridges, installed at the generating station, which will help in correct weighing of coal received at generating station and for ensuring proper billing and payment of coal.

31. The matter has been considered. It is observed that as per the Legal Metrology (Government Approved Test Centre) Rules, 2013, notified by Ministry of Consumer Affairs, Food and Public Distribution, GOI, on 5.9.2013, the testing of the automatic rail weighbridges is to be carried out by Government approved test centers. In view of this, there is no requirement of Standard BOXN Rail Wagon (1 No) for testing as the same can be carried out by Government approved test centers. In view of this, the additional capital expenditure claimed is not allowed.



(h) Replacement of DCS HMI

32. The Petitioner has claimed projected additional capital expenditure of Rs.1662.00 lakh during 2010-23 (Rs. 502.00 lakh in 2020-21, Rs. 564.00 lakh in 2021-22 and Rs. 596.00 lakh in 2022-23) towards Replacement of Distributed Control System (DCS) HMI under Regulation 25(2)(c) of the 2019 Tariff Regulations. The Petitioner has submitted that DCS has been supplied and installed by M/s Yokogawa India limited (Centum CS 3000) and M/s BHEL (Max DNA) at the generating station. It has also submitted that the Human Machine Interface (HMI) system, is the frontend interface of DCS and comprises of many operating work stations, servers, LAN switches & firewalls and Yokogawa HMI systems are used to control and monitor the operations of Units, AHP, CHP and other off-site systems and BHEL HMI system is used to control and monitor operations of Main turbine, TDBFPs, FSSS and FOPH. It has further submitted that Data recording, trending, archival, sequence of event recording and report generation functions are performed through these HMI systems and these DCS HMI software of Centum and Max DNA are based on windows XP/Server 2003 operating systems. The Petitioner has pointed out that Microsoft has ended support and security updates for windows XP/ server 2003 operating systems, resulting in increased vulnerability of HMI systems to cyber threats. It has also stated that workstation manufactures are not providing any spares/ replacement of windows XP/2003 machines and up-to-date antivirus software are also not available for these workstations. Accordingly, the Petitioner has submitted that there is a need to replace the existing DCS HMI system software along with workstations and related hardware to overcome obsolescence.



33. The Respondents HPPC, BRPL and BYPL have submitted that no details or documents have been submitted by the Petitioner for carrying out prudence check of the said claim.

34. The matter has been examined. It is observed that the Petitioner has claimed projected additional capital expenditure towards Replacement of DCS HMI as Microsoft has ended support and security updates for windows XP/ server 2003 operating systems. It is noticed that the Petitioner has not provided any obsolescence certificate from the OEM as per Regulation 25(2)(c) of the 2019 Tariff Regulations. However, considering the fact that Microsoft has ended support and security updates for windows XP/ server 2003 operating systems, we allow additional capitalisation claimed by the Petitioner towards Replacement of DCS HMI. The Petitioner is however, directed to submit the obsolescence certificate from the OEM at the time of truing -up of tariff.

(i) Procurement of Fire Tender (4 No.'s)

35. The Petitioner has claimed projected additional capital expenditure of Rs.220.00 lakh (Rs.110.00 lakh in 2020-21 and Rs.110.00 in 2021-22) under Regulation 25(2)(b) of 2019 Tariff Regulations for procurement of fire tender (4 No.). The Petitioner has submitted that in terms of the NGT order dated 11.12.2015, CISF, the agency which is responsible for fire safety and security, vide their letter dated 20.1.2020, has directed the Petitioner, to procure 4 No.s new fire tenders. The Petitioner has submitted that the replacement of the asset/item is being carried out in compliance of NGT order, which is a change in law event.

36. The Respondents HPPC and BRPL have submitted that the proposal is based on a letter from the Deputy Commandant CISF, which has specified that these fire tenders will be used, inside and outside, the plant area, for general public and



accordingly, this amount can be met from Corporate Social Responsibility (CSR) fund of the Petitioner. In response, the Petitioner has submitted that the work is essentially required to prevent any catastrophic damage. It has also submitted that the work is a mandate by the Government instrumentality and is also required from the safety point of view of the generating station.

37. The matter has been considered. It is observed that CISF, which is a statutory agency, responsible for the safety and security of the generating station, vide their letter dated 20.1.2020, has directed the Petitioner to procure 4 No.'s of new fire tenders. As the Petitioner's claim is for capitalisation of new assets, the additional capitalisation claimed is allowed under Regulation 26(1)(b) of 2019 Tariff Regulations.

(j) Implementation of 'Energy Management System'

38. The Petitioner has claimed projected additional capital expenditure of Rs.81.00 lakh in 2020-21 under Regulation 26(1)(d) read with Regulation 76 of the 2019 Tariff Regulations towards the Implementation of 'Energy Management System'. The Petitioner has submitted that the generating station, being a non-pithead generation, is subject to wide load variation and load on auxiliaries also changes accordingly. It has also submitted that with varying loads or with wear and tear, it becomes necessary to monitor the efficiency of auxiliaries and decision to run the most efficient auxiliary is taken. The Petitioner has also submitted that Energy Management System is being installed for 'online monitoring of power consumption (APC)' of the auxiliaries and it will result in saving of APC and any gain on this count, will be shared with the beneficiaries in terms of the regulations. The Respondent BYPL has submitted that in the absence of detailed justification / requisite information, the proposed additional expenditure may be rejected.

