

CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Explanatory Memorandum for the “Draft Central Electricity Regulatory Commission (Terms and Conditions of Tariff)(Second Amendment) Regulations, 2020”

1. Background

1.1. The Central Electricity Regulatory Commission (“the Commission”), exercising power under sub-clause (s) of clause (2) of the Section 178 of the Electricity Act, 2003 (“the Act”) read with Section 61 and Section 62 of the Act, has notified the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as the “Principal Regulations”) specifying the terms and conditions of tariff for the Central generating stations; other generating stations whose tariff is determined by the Commission under Section 62 of the Act; and inter-State transmission system. Subsequently, draft CERC (Terms and Conditions of Tariff) (First Amendment) Regulations, 2020 were issued on 1st April, 2020 inviting comments and suggestions of stakeholders.

1.2. Integrated coal mines have been allocated to the generating companies for specified end use generating stations, whose tariff is determined by the Commission under Section 62 of the Act. Integrated lignite mines have also been allocated to other generating companies for which tariff is determined by the Commission and lignite extracted from these mines have been used for running lignite-based thermal generating stations. Presently, the coal supplied from integrated coal mines has been priced at notified price of Coal India Ltd. (CIL) till the computation of input price by the Commission. Until recently, the lignite supplied from integrated lignite mines was being determined as per the guidelines issued in this regard by the Ministry of Coal on 2.1.2015. However, as per the letter No. 28012/1/2014-CA II dated

24.6.2019, the Ministry of Coal has discontinued the determination of the lignite price and conveyed that NLC India Ltd, in consultation with the stakeholders can decide lignite pricing. The Commission, while issuing the draft of the Principal Regulations, had proposed a regulatory framework for determination of input price from integrated coal or lignite mines. However, after considering suggestions of the stakeholders, the Commission felt a need for further study and analysis before specifying regulatory framework for determination of input price of coal or lignite. Relevant paragraph of the Statement of Reasons, while issuing the Principal Regulations, is extracted below:—

“2.1After detailed deliberation during finalization of the regulations, the Commission noticed that the regulatory framework for determination of input price of coal or lignite, particularly the financial and operational parameters requires further study and analysis which will require some more time. The Commission has decided to notify relevant provisions for determination of input price of coal or lignite from integrated mine separately. Accordingly, the provisions pertaining to determination of input price of coal or lignite from integrated mine has not been included at present.”

1.3. The Commission constituted a working group under the Chairperson of West Bengal Electricity Regulatory Commission (WBERC) to examine various aspects and to suggest regulatory framework for determination of input price of coal or lignite from the integrated mines. The report submitted by the working group is available on the website¹ of the Commission. The recommendations of the working group have been considered by the Commission and amendments have been proposed in the Principal Regulations so as to put in place a regulatory framework for computation of input price of coal or lignite.

2. Proposed Amendments

2.1 Introduction

2.1.1 The proposed regulatory framework has been devised for computation of the input price of coal or lignite supplied from integrated mine to

¹[http://cercind.gov.in/2020/reports/SOWG%20RFDIP%20\(SUBMITTED\).pdf](http://cercind.gov.in/2020/reports/SOWG%20RFDIP%20(SUBMITTED).pdf)

determine energy charge component of the tariff. The framework provides for the financial and operational parameters, methodology for computation of input price, recovery mechanism etc. Proposed amendments in the Principal Regulations and rationale thereof have been discussed in the subsequent paragraphs.

2.2 Scope and extent of application (*Regulation 2*)

2.2.1 The Principal Regulations already have a provision for provisional billing of coal or lignite from integrated mine till determination of input price. These amendments provide for computation of input price of coal or lignite which will replace provisional billing already allowed with effect from 1st April, 2019. Accordingly, these amendments are proposed to be made effective retrospectively from 1st April, 2019 except amendments to Regulation 6 and Regulation 59 that relate to treatment of mismatch in date of commercial operation and late payment surcharge pertaining to tariff of generating station and transmission system, respectively. These two regulations shall be applicable from date of notification of the amendments.

2.3 Definitions (*Regulation 3*)

2.3.1 The Regulation 3 is proposed to be amended to include new definitions and to modify some of the existing definitions related to computation of input price of coal or lignite from an integrated mine as under:

2.3.1.1 New Clause (4a) to Regulation 3 of the Principal Regulations is proposed to be inserted to define Annual Target Quantity of coal or lignite to be used to compute the Run of Mine (ROM) Cost on per tonne basis. The Annual Target Quantity specified in the Mining/ Mine Plan represents achievable production level and forms basis for arriving at per tonne input price of coal or lignite.

- 2.3.1.2 The definition of capital cost specified under clause (9) to Regulation 3 of the Principal Regulations is proposed to be modified to expand the scope of the capital cost to include the capital cost of integrated mine.
- 2.3.1.3 Clause 14 to Regulation 3 of the Principal Regulations that defines cut-off date is proposed to be modified to exclude an integrated mine, as concept of cut-off date as used in case of generating stations or transmission systems is not relevant to an integrated mine.
- 2.3.1.4 Definition of date of commercial operation or COD of an integrated mine is proposed to be incorporated under clause 15 to Regulation 3 of the Principal Regulations.
- 2.3.1.5 A new clause (15b) to Regulation 3 of the Principal Regulations is proposed to be inserted to define the date of commencement of production in respect of an integrated mine.
- 2.3.1.6 A new clause (20b) to Regulation 3 of the Principal Regulations is proposed to be inserted to define "Escrow Account". An Escrow Account is a statutory requirement of the Coal Controller, Ministry of Coal specifying deposit and withdrawal of funds for mine closure.
- 2.3.1.7 Clause 21 to Regulation 3 of the Principal Regulations contains the term "project" which was intended for generating station or transmission system. To incorporate provisions related to integrated mine, it is proposed to modify the definition of 'project'.
- 2.3.1.8 The definition of input price under Clause 36 to Regulation 3 of the Principal Regulations is proposed to be modified to include the 'transfer price' of existing lignite mines. The term 'transfer price' was used prior to introduction of the term 'input price' through

this amendment. After proposed amendment, transfer price will be merged with the input price.

- 2.3.1.9 Clause 41 to Regulation 3 of the Principal Regulations provides the definition of the investment approval of project. Since the input price of integrated mine is to be computed separately, it is proposed to add new proviso to specify details of funding and timeline of integrated mine.
- 2.3.1.10 A new clause (41a) to Regulation 3 of the Principal Regulations is proposed to be inserted to define “Loading point” to distinguish the scope of transportation within and outside the integrated mine. The cost of transportation within the integrated mine is considered as a part of the input price of the integrated mine. However, in case of an integrate mine, where coal or lignite is directly fed into generating station, the term loading point may not be relevant.
- 2.3.1.11 A new clause (43a) to Regulation 3 of the Principal Regulations is proposed to be inserted to define “Mine Infrastructure ”i.e. the assets of the integrated mine.
- 2.3.1.12 A new Clause (43b) to Regulation 3 of the Principal Regulations is proposed to be inserted to define the “Mining Plan” or “Mine Plan”. The Mining Plan is statutory requirement for development of mine which stipulates the various technical requirements to be adhered to for efficient mining operations. Any deviation from the parameters specified under the mining plan has commercial implications and impacts input price.
- 2.3.1.13 The scope of the ‘Operation and Maintenance Expenses’ defined under Clause 45 to Regulation 3 of the Principal Regulations is proposed to be modified. In case of integrated mine, the mining charge paid to a Mine Developer and Operator (MDO) engaged by the generating company and the mine closure expenses paid in

Escrow account are not capital expenditures but are booked as revenue expenses. Therefore, these expenses are to be recognized as revenue expenses and accordingly, new proviso is proposed to be added.

- 2.3.1.14 A new clause (46a) to Regulation 3 of the Principal Regulations is proposed to be added to define the peak rated capacity as specified in the mining plan. Till attainment of the peak rated capacity, the development activities will continue as per original scope. The expenditure after achieving the peak rated capacity is of the nature of additional capital expenditure. This has impact on consideration of capital expenditure incurred for the computation of input price.
- 2.3.1.15 The definition of useful life under clause 73 to Regulation 3 of the Principal Regulations is proposed to be expanded to include useful life of integrated mine. The useful life of integrated mine is linked with the permissible operation period as mentioned under the mining plan.

2.4 Interpretations (*Regulation 4*)

2.4.1 The Regulation 4 of the Principal Regulations is proposed to be modified to include new terms and to amend some of the existing terms in respect of the provisions relating to computation of input price of coal or lignite from an integrated mine as under:

- a) A new clause (4a) to Regulation 4 of the Principal Regulations is proposed to be added to specify the meaning of 'tonne';
- b) The term "year" in clause (5) to Regulation 4 of the Principal Regulations is proposed to be modified to bring out clearly the meaning of year and that of the first year.

2.5 Date of Commercial Operation (*Regulation 5*)

2.5.1 The input price of coal or lignite will be computed from the date of commercial operation of the integrated mine and will be recovered through energy charges of the generating station. Accordingly, a new clause (3) to Regulation 5 of the Principal Regulations is proposed to be inserted to provide regulatory framework of date of commercial operation in case of an integrated mine.

2.5.2 The provision of the date of commercial operation is based on the recommendation of the working group. The proposed regulations also deal with circumstances wherein generating company is prevented from declaring commercial operation of integrate mine for reasons beyond its control. In such cases, it is proposed that the Commission may permit deferment of the date of commercial operation and accordingly, proviso is also proposed to be inserted to clause (3) of Regulation 5 of the Principal Regulations.

2.6 Treatment of mismatch in date of commercial operation in respect of generating station and transmission system (*Regulation 6*)

2.6.1 The Regulation 6 of the Principal Regulations provides the regulatory framework for treatment of mismatch in date of commercial operation of generating station and transmission system, and between two transmission licensees. In the recently notified CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020, the issue of such mismatch has been covered. Accordingly, Regulation 6 of the Principal Regulations is proposed to be modified and linked to the CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020.

2.7 Supply of Coal or Lignite prior to the Date of Commercial Operation of Integrated Mine (*Regulation 7A*)

2.7.1 The existing Regulation 7 of the Principal Regulations provides for treatment of electricity supplied prior to date of commercial operation of a generating station. The working group has recommended to give a similar treatment for coal or lignite supplied from an integrated mine prior to the date of its commercial operation. This necessitates assigning price to coal or lignite supplied prior to date of commercial operation.

2.7.2 Accordingly, a new Regulation 7A in the Principal Regulations is proposed to be inserted. In case of coal, it is proposed that coal supplied prior to date of commercial operation of an integrated mine will be valued based on the estimated price of coal as per the investment approval or as per notified price of Coal India Limited. Similarly, in case of lignite, it is proposed that the lignite supplied prior to the date of commercial operation of an integrated mine will be valued based on the estimated price of lignite as per investment approval or as per last available pooled lignite price. The objective is to bring the price as close to actual as possible so that difference between the price charged before date of commercial operation of integrated mine and input price computed subsequently is minimized.

2.7.3 Further, it is proposed that the treatment of any revenue earned from supply of coal or lignite prior to the date of commercial operation of integrated mine will be adjusted in capital cost of the integrated mine. This is on similar lines as in case of generating stations.

2.8 Application for determination of tariff (Regulation 9)

2.8.1 The proposed amendment to Clause (4) of Regulation 9 of the Principal Regulations is to prescribe a procedure for filing application for computation of input price of coal or lignite from integrated mines. It provides for timeline of 60 days, from notification of this amendment, for filing petition to facilitate computation of input price for coal or lignite in a timely manner.

2.8.2 Where integrated mine is commissioned after notification of these regulations, timeline of 60 days will commence from the date of commercial operation of the integrated mine.

2.9 Determination of tariff (*Regulations 10*)

2.9.1 The input price of coal or lignite is input cost for the generating station. Even though the integrated mine has a specified end use generating station, the input price of coal or lignite is required to be computed separately. The generating company has option to file the petition combined with the tariff of the generating station or separately for computation of input price of coal or lignite from the integrated mine.

2.9.2 Since the input price is to be computed separately, the generating company will be required to file required financial and technical details of the integrated mine in a separate format. Accordingly, it is proposed to insert a new clause (1a) to Regulation 10 of the Principal Regulations for enabling separate filing of petition by the generating company for computation of input price of coal or lignite from an integrated mine.

2.10 In-principle approval in specific circumstances (*Regulations 11*)

2.10.1 Additional capitalization undertaken by the generating company in the integrated mine will have implications on the input price and tariff of the generating station payable by the consumer. Therefore, it is proposed to insert a new clause (2) to Regulation 11 to make a provision to inform the concerned beneficiaries of the generating station upfront and undertake such capital expenditure after in-principle approval of the Commission if the estimated expenditure exceeds 10% of the admitted capital cost of the integrated mine or Rs. 100 crore, whichever is lower.

2.11 Truing up of tariff for the period 2019-24 (*Regulations 13*)

2.11.1 The input price of coal or lignite sourced from integrated mine would be computed on multi-year tariff principle, in advance, based on projected capital expenditure and operational cost. Therefore, based on actual cost, input price so computed is required to be trued up. Accordingly, it is proposed to insert anew clause (1a) to Regulation 13 for truing up of capital expenditure on completion of tariff period.

2.12 Energy Charges (Regulation 16)

2.12.1 Regulations 16 of the Principal Regulations provides the framework of energy charges of generating stations defining its components, namely, landed fuel cost of primary fuel, cost of secondary fuel oil consumption, cost of limestone or any other reagent. In case of sourcing of coal or lignite from an integrated mine, the landed fuel cost of primary fuel is required to be worked out by considering input price and transportation cost beyond loading point and, therefore, a third proviso is proposed to be inserted to the Regulation 16 of the Principal Regulations.

2.13 Input Price of coal and lignite for energy charges (Regulation 36)

2.13.1 In clause (1) to the Regulation 36 of the Principal Regulations, the words “the regulations to be notified separately by the Commission” becomes redundant after notifying these amendments and hence, is proposed to be substituted appropriately.

2.13.2. The clause (2) to Regulation 36 of the Principal Regulations provides the generating companies to bill coal sourced from integrated mine based on the price notified by Coal India Limited, where the date of commercial operation of integrate mine occurred prior to the notification of these Regulations. This provision was made as an interim arrangement for the period till date of notification of these Regulations. Now this interim arrangement of billing based on the price notified by Coal India Limited is

proposed to be replaced with actual input price to be computed as per the proposed amendments to the Principal Regulations. Accordingly, the existing clause (2) to Regulation 36 of the Principal Regulations is proposed to be substituted appropriately.

2.13.3. The clause (3) to Regulation 36 of the Principal Regulations provides for the generating companies to bill lignite sourced from the integrated mine as per the price determined based on guidelines of the Ministry of Coal. This provision was made as an interim arrangement for the period till date of notification of these Regulations. Now this interim arrangement of billing as per price determined based on guidelines of the Ministry of Coal is proposed to be replaced with actual input price to be computed as per the proposed amendments to the Principal Regulations. Accordingly, the existing clause (3) to Regulation 36 of the Principal Regulations is proposed to be substituted appropriately.

2.13.4 A new Clause (4) to Regulation 36 of the Principal Regulations is proposed to be inserted to address the difference between the price of coal or lignite billed during interim period pending computation of input price by the Commission and the actual input price computed by the Commission as per the proposed regulatory framework.

2.14 Input Price of coal or lignite (*Regulation 36A*)

2.14.1 The proposed new Regulation 36A in the Principal Regulations provides the components of input price of coal or lignite which include Run of Mine (ROM) cost, Additional charges and statutory charges. The additional charges are part of input price but are to be determined separately in case of integrated coal mine. These charges are in addition to ROM cost and will undergo change on case to case basis based on the mining process adopted.

2.14.2 The additional charges in case of integrated lignite mine are limited to only transportation and handling charges. Separate determination of additional charges in case of integrated lignite mine may not be required, but for purpose of consistency in approach, common framework is proposed for both coal and lignite. The generating company may combine the additional charges with ROM cost in case of lignite, if it is not identified separately.

2.15 Run of Mine (ROM) Cost (*Regulation 36B*)

2.15.1 Proposed new Regulation 36B in the Principal Regulations provides separate frameworks for fixation of Run of Mine Cost: a) for an integrated coal mine allocated through auction; b) for an integrated coal mine allocated through allotment order; and c) for an integrated lignite mine as per clause 36B(1), clause 36B(2) and clause 36B(3) respectively.

2.15.2 If coal mine is allocated through auction under Coal Mines (Special Provisions) Act, 2015, the price discovered through auction represents ROM cost. Accordingly, ROM cost is proposed to be determined based on quoted price of coal in auction and fixed reserve price as provided in the Coal Mine Development and Production Agreement.

2.15.3 If coal mine is allocated through allotment order under Coal Mines (Special Provisions) Act, 2015 without discovery of price, the input price of coal is proposed to be computed through a specified formula. Accordingly, ROM cost is proposed to be determined based on Annual Extraction Cost, mining charge where the coal extraction is carried out by engaging an MDO by generating company and fixed reserve price as provided in the Coal Mine Development and Production Agreement.

2.15.4 In case of lignite mine, the ROM cost is proposed to be determined based on annual extraction cost and mining charge, wherever applicable.

2.15.5 The determination of ROM cost depends on the expenditure incurred as per the activities envisaged under the mining plan. Any deviation from mining plan will have an impact on the ROM cost and consequently on input price and tariff to be recovered from the consumers. One of the principles of tariff determination as specified under Section 61 of the Act is to encourage efficiency and to protect the interest of the consumers. Non-adherence to mine plan is likely to result in inefficient mining and consequential increase in mining costs. Accordingly, the proposed clause (4) in Regulation 36B, stipulates that the generating company shall adhere to the mining plan for extraction of coal or lignite and any deviation from such plan can be considered only if the same has been approved by competent authority.

2.16 Additional Charges (Regulation 36C)

2.16.1 The Ministry of Power in its direction under Section 107 of the Electricity Act, 2003, vide its letter dated 16th April, 2016 issued to the Central Electricity Regulatory Commission, has recognized different components, such as transportation, washery, crushing and handling for computation of input price of coal from an integrated mine. In line with this direction, the working group has recommended determination of additional charges separately for each component, such as transportation charges, washery charges, crushing charges and handling charges. Accordingly, it is proposed to determine transportation charges, washery charges, crushing charges and handling charges based on annual transportation cost, annual washing cost, annual crushing cost and annual handling cost respectively and the respective quantity involved under each of the activity. Therefore, the generating company is required to have separate measurement of quantity involved under each activity.

2.16.2 The working group has observed that coal industry, as per prevailing industry practice, awards mine operation to Mine Developer *cum* Operator

(MDO), wherein extraction of coal or overburden or both is awarded through competitive bidding. The scope of the MDO is decided by the generating company. Sometimes, one or more additional activities such as transportation, crushing or handling are included in the scope of the MDO. The MDO is paid mining charges for the activities undertaken by it. Therefore, the cost towards activities under the scope of MDO is proposed to be recovered through mining charges, as discovered through the process of competitive bidding. Accordingly, it is proposed to exclude, from the scope of Additional charges, the charges for activities which are included in the scope of MDO i.e. for which mining charges are payable. Whichever mining activities (transportation, crushing, handling or washing) are not included in the scope of MDO but are carried out by the generating company by engaging some other agencies, the annual charges of such other agencies will be considered in the Additional charges, provided that the same have been discovered through a process of transparent competitive bidding.

2.17 Capital Cost (*Regulation 36D*)

2.17.1 The proposed new Regulation 36D in the Principal Regulations provides the principles and procedure for determination of capital cost of the integrated mine. The capital cost of the integrated mine will form the basis for determination of annual extraction cost. The principles for determination of capital cost of integrated mine are similar to those of the generating station.

2.17.2 The capital cost will be determined upto the date of commercial operation of the integrated mine based on capital expenditure incurred for various key components, including cost of land (government, private and cultivating including Relief & Rehabilitation), plant & machinery (Coal Handling Plant, Railway sliding, crushing, PS, etc.) and plant & machinery (Heavy Earth Moving Machinery, loading and unloading, control, etc.).

2.17.3 The Additional charges towards various activities such as crushing infrastructure, transportation infrastructure and equipment, handling infrastructure, washing infrastructure and other mine infrastructure required for mining operations shall be arrived at separately. Therefore, it is proposed that the capital cost of these activities shall be worked out separately. The generating company will maintain accounts of expenditure incurred toward these activities separately with the allocation of common expenditure. Wherever any of these activities are carried out by MDO or by engaging other agencies, the capital expenditure incurred by such agencies will be excluded from the capital cost.

2.17.4 The capital cost will be admitted by considering auditor certificate, the Mining Plan, detailed project report, mine closure plan, cost audit report and such other details as required for prudence check. For integrated mine whose date of commercial operation is prior to 1.4.2019, the capital cost already allowed by the Commission as on 31.3.2019 will be the basis for arriving at the capital cost of that integrated mine.

2.18 Additional Capital Expenditure (*Regulation 36E*)

2.18.1 The working group has recommended classification of the additional capital expenditure into two categories: (i) additional capitalization after the date of commercial operation and up to the date of achieving peak rated capacity; and (ii) additional capitalization after the date of achieving peak rated capacity.

2.18.2 The additional capitalization upto the date of achieving peak rated capacity involves the expenditure as per mining plan, un-discharged liabilities and deferred works executed upto date of achieving peak rated capacity, and any other liabilities arising out of complying with orders of competent court and for land procurement. These expenditures will be

capitalized based on the annual target quantity as specified in the mining plan or actual quantity, whichever is higher. The additional capitalization after the date of achieving peak rated capacity are expected to be on limited count as the works under the original scope will be covered by then. After achieving peak rated capacity, the plant & machinery procurement will be against replacement. Accordingly, clause (1) and clause (2) in the proposed new Regulation 36E of the Principal Regulations deal with admissibility of additional capitalization.

2.18.3 The exclusions from the additional capitalization are mainly on account of not putting assets into service, expenditure on items not covered under mining plan and obsolescence of assets. The mine closure expenses are recognized as revenue expenditure and same has been excluded from additional capitalization.

2.19 Annual Extraction Cost (Regulation 36F)

2.19.1 The proposed new Regulation 36 of the Principal Regulations defines the components of Annual Extraction cost. These components are Depreciation, Interest on Working Capital, Interest on Loan, Return on Equity (RoE), Operation and Maintenance Expenses (excluding mining charge), mine closure expenses (if not included in mining charge), and statutory charges, if applicable.

2.20 Capital Structure, Return on Equity and Interest on Loan (Regulation 36G)

2.20.1 The proposed new Regulation 36G in the Principal Regulations provides for treatment of debt-equity ratio, return on equity and interest loan for an integrated mine. The working group has recommended that the approach to treatment of debt-equity ratio, return on equity and interest on

loan could be in line with the practice being followed in determination of tariff of a generating station.

2.20.2 The rate of return on equity represents the cost of equity which comprises of risk-free return and risk premium. The rate of return on equity in case of a generating station is determined based on risk premium, non-servicing of equity during construction period and other factors such as encouraging investment, prevailing financial scenario etc.

2.20.3 Normal risks associated with operation of a coal or lignite mine are geological issues, R&R problems and other non-natural factors. In case of an integrated mine, the operation of the mine is associated with the specified end use generating station and, therefore, the risk associated with an integrated mine is required to be seen on combined basis instead of on standalone basis. The specified end use generating station is the procurer of coal/ lignite mined from integrated mines. Also, as per provisions of Coal Mine (Special Provisions) Act, 2015 and Coal Mine Development and Production Agreement, any surplus coal will be purchased by the Coal India Ltd. Therefore, the risk of non-off-take of coal from an integrated coal mine is minimal.

2.20.4 Unlike a generating company, the equity deployment during development period in case of an integrated coal mine is lesser. Further, the commencement of supply of coal starts normally in 3 to 5 years.

2.20.5 In case of a generating station, risk premium allowed is to the tune of 760 (1550-790) points based on the risk-free return and analysis of capital asset pricing model. Recently, the interest rate on fixed deposit has been reduced drastically by banks. The risk-free return on 10-year G-sec is 570 points during 2020 and is expected to remain low during the coming years. Therefore, in line with the approach followed in case of generating station, the rate of return arrived at is 1330 (570+760) points. The expected rate of

return worked out by using Capital Asset Pricing Model on data of Coal India Limited for the period 2010-19 is 13.69%². Accordingly, the clause (3) in the proposed new Regulation 36G in the Principal Regulations provides for the rate of return on equity for an integrated mine as 14.00%.

2.21 Depreciation (Regulation 36H)

2.21.1 The proposed new Regulation 36H in the Principal Regulations provides the framework of depreciation. The methodology proposed is to work out the depreciation based on historical cost as per generally accepted accounting principles in India and the relevant provisions of the Companies Act, 2013. The depreciation is proposed to be calculated by applying straight line method similar to that in case of a generating station. The land involved in integrated mine is of varying nature viz. freehold, freehold with a condition to return and leasehold. The freehold land which is required to be returned after mining and leasehold land will be considered for depreciation. Salvage value of the asset is considered as per Companies Act, 2013 with exceptions in case of IT related software and in case of agreement, if any, with the State Government. Salvage value and depreciation rate of specialized mining equipment is proposed to be considered as specified by Ministry of Corporate Affairs.

2.22 Operation & Maintenance Expenses (Regulation 36I)

2.22.1 The proposed new Regulation 36I in the Principal Regulations provides for treatment of operation & maintenance expenses. The operation & maintenance expenses are proposed to be considered based on actual expenses. The generating company may carry out some of the activities either through Mine Developer & Operator (MDO) or some other agencies

²The expected rate of return by CAPM based on data of Coal India Ltd from 2010-19 as worked out to 13.69% by considering average risk free Rate of Return (Rf) from 2001 (excluding recent downtrend) and expected market rate of return (Rm) based on annual sensex from 1992 and risk factor (β).

engaged by the generating company through a transparent competitive bidding process. The capital cost incurred by MDO or such other agencies engaged by the generating company will not reflect in the books of account of the generating company but the payment to such agencies will reflect as revenue expenses. Therefore, the capital cost of the activities carried out through such agencies engaged by the generating company shall not form part of capital cost for O&M purpose. Since input price is to be computed based on multi-year tariff principles, the operation & maintenance expenses is proposed as 2% of the average capital expenditure up to the end of the year. This rate will be escalated at the rate of 3.5% per annum.

2.22.2 The operation & maintenance expenses of agencies engaged by the generating company will be recognized differently. In case an activity is part of the scope of the Mine Developer & Operator (MDO), the mining charge payable to the MDO will not form part of the O&M expenses. However, in case an activity which does not form part of the scope of MDO and is carried out by the generating company through other agencies engaged by the generating company, the annual charges of such other agencies will be allowed separately through O&M expenses, provided these charges have been discovered through a transparent competitive bidding process.

2.23 Interest on Working Capital (*Regulation 36J*)

2.23.1 The proposed new Regulation 36J in the Principal Regulations provides, in case of integrated coal mine, for working capital requirement as coal stock for 7 days of production, consumption of stores and spares including explosives, lubricants and fuel @15% of operation and maintenance expenses (excluding mining charge of MDO or annual charges of any other agencies engaged by the generating company), Operation and maintenance expenses for one month in line with recommendation of working group except the stock of coal considered in working capital. In case of integrated

lignite mine, the proposed new Regulation 36J in the Principal Regulations provides for the consumption of stores at a higher rate at 20% of the operation and maintenance expenses, with other items similar as in case of an integrated coal mine.

2.24 Mine Closure Expenses (*Regulation 36K*)

2.24.1 Mine closure is a regulated activity and the present statutory framework of Ministry of Coal provides for mandatory mine closure. Based on the mining plan, the mine closure expenditure can be incurred either at the end of the useful life of the mine or during the useful life of the mine or partly during the life of the mine and partly at the end of useful life of the mine. The mine owner is required to deposit a fixed sum per hectare per annum (which is escalated annually) in interest bearing Escrow Account with the Coal Controller. Reimbursement from the Escrow Account is allowed for the expenditure incurred on mine closure. In case of any surplus in the Escrow account, the amount is refundable to the mine owner.

2.24.2 The mine closure can be undertaken in different modes. It could be within the scope of MDO or may be carried out departmentally by the generating company itself.

2.24.3 The proposed new Regulation 36K in the Principal Regulations provides for the treatment of the mine closure expenses. Clause (1) to the proposed Regulation 36K provides for the mechanism where mine closure is undertaken by the generating company itself departmentally. In such a case, the mine closure expenses will be allowed based on the amount deposited in the Escrow account after adjusting interest earned. Clause (2) to the proposed Regulation 36K provides for the mechanism where the mine closure is within the scope of MDO and is undertaken by the Mine Developer and Operator (MDO). In such a case, the mine closure expenses will be serviced through

mining charge upfront and, therefore, the amount deposited in the Escrow account by the generating company will not form part of input price. However, for the amount deposited in the Escrow account by the generating company, the difference in borrowing cost and the interest earned from the Escrow account will be allowed.

2.25 Computation and Recovery of Input Price (Regulation 36L and 36M)

2.25.1 The proposed new Regulation 36L in the Principal Regulations provides that the input price will be computed on per tonne basis based on ROM cost and additional charges, as applicable.

2.25.2 The proposed new Regulation 36M in the Principal Regulations provides that the input price will be recovered as input charges to be worked out based on quantity supplied to the concerned generating company and applicable statutory charges. The input price worked out will be admitted based on the principle laid down under the statutory framework specified under the Coal Mine (Special Provisions) Act, 2015 as extracted below:

“3. Now in order to ensure that the benefits of coal block auction or allotment are passed on to the consumers, the Central Government, in exercise of the powers conferred under section 107 of the Act, hereby issues this direction to the Central Electricity Regulatory Commission to adopt the following procedure for downward revision of the tariff in already concluded Power Purchase Agreements for (PPAs) (i) generation capacity having cost plus Power Purchase Agreement under section 62 of Electricity Act, 2003, and (ii) generation capacity contracted through tariff bid based Power Purchase Agreements under Case-1/design Build Finance Own and Operate (DBFOO) bids invited under section 63 of the Act and where the coal is being sourced from coal mines auctioned or allotted under Coal Mines (Special Provisions) Second Ordinance, 2014:

(a)...

...

(e) The revision of tariff undertaken by the Central Electricity Regulatory Commission as above shall not lead to higher energy charges and total tariff throughout the tenure of Power Purchase Agreement than that which would have been obtained as per terms and conditions of the existing Power Purchase Agreement.”(Emphasis supplied)

Thus, the intent of the allocation of integrated coal mine to the generating companies is to reduce the tariff compared to the tariff which was charged based on existing coal arrangement. Therefore, energy charges component of tariff worked out based on supply of coal from integrated mine is expected to be lower than energy charges component of tariff worked out based on the existing coal supply arrangement.

2.25.3 The existing provisions of the Principal Regulations provide that a generating plant may use coal from alternate sources (without consent of beneficiaries) to the extent that the energy charges do not exceed 20% of the base energy charges. It implies that the existing coal arrangement provides for a permissible energy charge upto 20% above the base energy charges. Accordingly, if energy charges based on the input price from integrated mine does not exceed 20% of the base energy charges, the consent of beneficiaries would not be required. However, if the energy charges based on the input price from integrated mine exceed 20% of the base energy charges, the consent of beneficiaries is mandatory. Further, in terms of directions of the Ministry of Power dated 16th April 2016, it is also proposed that the energy charge rate based on input price of coal from integrated mine should not lead to higher energy charge rate throughout the tenure of power purchase agreement than that which would have been obtained as per terms and conditions of the existing power purchase agreement.

2.26 Adjustment on account of Shortfall of Overburden Removal (OB Adjustment) (Regulation 36N)

2.26.1 The mining of coal or lignite is required to be carried out in accordance with the mining plan which also stipulates the stripping ratio i.e. volume of overburden to be removed for one unit of coal or lignite extracted from the mine. The Run of Mine (ROM) cost takes into account the cost of overburden removal also. Lesser overburden removal as compared to the stripping ratio

over a period of time signals inefficient extraction of coal or lignite. Such a practice may result in spikes in the expenses leading to higher cost and higher input price during subsequent period, burdening the beneficiaries. In view of the above, the proposed new Regulation 36N in the Principal Regulations provides for a window of three years to the generating company to make good the shortfall in overburden removal of any year on a rolling basis, failing which adjustment as per clause (4) of the proposed Regulation 36N will be attracted.

2.27 Adjustment on account of Shortfall in GCV (GCV Adjustment) (Regulation 36O)

2.27.1 The mining plan provides the Gross Calorific value (GCV) of coal that is to be extracted from the integrated mine. Variation in Gross Calorific Value of coal from the mining plan will have an impact on the cost, as the quoted price of coal or the investment plan is premised on the GCV of coal provided in the mining plan. The generating company may not have control over the GCV of coal extracted from the integrated mine. Therefore, in case of variation in GCV from the mining plan due to reasons not attributable to the generating company, the generating company may approach the competent authority in the Ministry of Coal for regularisation of such deviations. The proposed new Regulation 36O in the Principal Regulations provides for such regularisation. However, the generating company will be liable to bear the cost of lower GCV compared to that in the mining plan, if the same is not approved by the competent authority in the Ministry of Coal, as the beneficiaries cannot be burdened on account of such lower GCV. In view of above, clause (2) in the proposed Regulation 36O provides for an adjustment on account of shortfall in GCV, if the same is not regularised by the competent authority in the Ministry of Coal.

2.28 Adjustment on account of Non-tariff income (NTI Adjustment) (Regulation 36P)

2.28.1 The Coal Mine Development and Production Agreement under the Coal Mines (Special Provisions) Act, 2015 provides for sale of unutilized coal to Coal India Limited (CIL) at CIL notified price. Such sale of coal on CIL notified price may result in non-tariff income for the generating company. In addition, there may be other income due to sale of scraps, washery rejects etc. In order to take these into account, the proposed new Regulation 36P in the Principal Regulations provides for an adjustment due to any non-tariff income.

2.29 Credit Adjustment Note (Regulation 36Q)

2.29.1 Adjustment on account of OB adjustment, GCV adjustment and NTI adjustment for any period would have to be on post facto basis, i.e. after billing to the beneficiaries for that period has already been carried out. The proposed new Regulation 36Q in the Principal Regulations provides for a mechanism for adjustment of credit on account of OB adjustment, GCV adjustment and NTI adjustment through the Credit Adjustment Note. On the basis of credit adjustment note, credit shall be allowed for the amount recovered from or paid to the beneficiaries, as the case may be. This is consistent with the practice being followed in case of linkage coal, where such credit adjustment notes are issued by the coal suppliers like Coal India Limited.

2.30 Quality Measurement (Regulation 36R)

2.30.1 The proposed new Regulation 36R in the Principal Regulations provides for quality measurement at the Loading Point through third party sampling as per the guidelines and procedure specified by the Ministry of Coal.

2.31 Late Payment Surcharge (*Regulation 59*)

2.31.1 The proposed new clause (2) to the Regulation 59 in the Principal Regulations provides clarification regarding the priority of the payment. It is proposed that the charges payable by a beneficiary or long term customers shall be first adjusted towards late payment surcharge on the outstanding charges and thereafter towards other charges, starting from the longest overdue bill.

2.32 Special Provisions relating to NLC India Ltd (*Regulation 71*)

2.32.1 The existing Regulation 71 of the Principal Regulations provides for exception in approach for some of the generating stations of the NLC India Ltd. The proposed amendment in Regulation 71 in the Principal Regulations provides for similar approach for integrated mine associated with those generating stations.
