

### THE SINGARENI COLLIERIES COMPANY LIMITED

(A Government Company)

# 2 X 600 MW SINGARENI THERMAL POWER PROJECT Jaipur (V&M)-504216, Mancherial (Dist), T.S.

Ref no: STPP/COML/2023-24/327

Dt:18.10.2023

To,
The Secretary,
T.S. Electricity Regulatory Commission,
5<sup>th</sup> Floor, Singareni Bhavan, Red Hills,
Lakdi ka pool, Hyderabad – 500 008.

Sir,

Sub: SCCL – Reply to the Submissions/objections by Sri M. Venugopala Rao regarding Capital investment plan (CIP) OP No. 25 of 2023 and Business Plan (BP) OP No. 26 of 2023 for the period FY 2024-25 to FY 2028-29 in respect of Singareni Thermal Power Project, Phase-I (2X600 MW) – Reg.

**Ref:** Email dated 12.10.2023 received from Sri M. Venugopala Rao on Capital investment plan (CIP) OP No. 25 of 2023 and Business Plan (BP) OP No. 26 of 2023 of STPP.

The reply to the Submissions/objections made by the objector related to 2X600MW STPP vide reference email relating to Capital investment plan (CIP) OP No. 25 of 2023 and Business Plan (BP) OP No. 26 of 2023 for the period FY 2024-25 to FY 2028-29 in respect of Singareni Thermal Power Project, Phase-I (2X600 MW) is hereby submitted with six copies each.

The Hon'ble commission is kindly requested to accept the same.

Thanking you.

Yours sincerely

CTC (STPP)

Chief Technical Consultant 2X600 MW, STPP - Jaipur.

Encl: Reply to the email dated 12.10.2023 with 6 copies.

CC:

M. Venugopala Rao Senior Journalist & Convener, Centre for Power Studies H.No.1-100/MP/101, Monarch Prestige, Journalists' Colony, Gopanpally, Serilingampally Mandal, Hyderabad - 500 032.

# **INDEX**

SL no.	Item	Page no.	
1	Reply to the Submissions/Suggestions raised by Sri.M Venugopala rao dated 12.10.2023	1-8	
2	Annexure - A: CEA flexible operation regulation Gazette dated 30.01.2023	9-10	
3	<b>Annexure - B</b> : Ministry of Coal, GoI methodology for flexible utilisation of coal mine documents.	11-14	
4	Annexure – C: SCCLs coal pricing structure to bridge linkage customers like STPP & Mahagenco documents	15-20	

Chief Technical Consultant 2X600 MW, STPP - Jaipur.

# Reply to the Submissions/Suggestions raised by Sri.M Venugopala rao dated 12.10.2023

With reference to the Submissions/Suggestions raised by Sri.M Venugopala rao vide email dated 12.10.2023 relating to Capital investment plan (CIP) OP No. 25 of 2023 and Business Plan (BP) OP No. 26 of 2023 for the period FY 2024-25 to FY 2028-29 in respect of Singareni Thermal Power Project, Phase-I (2X600 MW), it is to submit that the submissions/objections made are not tenable under the regulation in force. The point wise reply of SCCL to the submissions raised by Sri.M Venugopala rao is given in table below:

### Submissions/suggestions

1. SCCL is not a licensee of the Hon'ble Commission. As such, business plan and capital investment plan of SCCL are not within the purview of the Hon'ble Commission. As and when PPAs are entered into with SCCL by TSDISCOMs and submitted to the Hon'ble Commission for its consideration, the latter examines the same after holding public hearings and gives its orders. The Hon'ble Commission determines permissible capital cost and tariff for the power plant concerned in the regulatory process, considering applicable regulations and | 2. norms. Business plan and capital investment plan of SCCL are an internal matter of the utility and the Hon'ble Commission has nothing to do with it. In other ERCs, especially in APERC, there is no such regulation providing for submission of business plan and capital investment plan of APGENCO for the consideration of the Commission. The clause in TSERC Regulation 1 of 2019 providing for the said arrangement is unwarranted and without jurisdiction for various reasons. Similarly, TSDISCOMs have nothing to do with business plan and capital investment plan of SCCL and vice versa in terms of the regulatory process of the Hon'ble Commission. Similar is the case with private power generation companies with whom TSDISCOMs enter into PPAs and the Hon'ble Commission has nothing to do with business plan and capital investment plan of those private power generation companies. As such, the Hon'ble Commission is once again requested to examine the legal position and dispense with the questionable provisions in its regulation concerned which is providing for submission to and consideration of business plan and capital investment plan of SCCL by the Hon'ble Commission. The Hon'ble Commission is considering long-term load forecast, procurement plan and investment plan of TSDISCOMs and TSTRANCO as its licensees and issuing multi-year tariff order for transmission business and distribution business, after holding public hearings, for

### **SCCL Reply**

- 1. It is to submit that the Hon'ble TSERC has notified terms and condition of generation tariff regulation 2019 (Regulation no TS 01 of 2019) for determination of Aggregate Revenue Requirement for generating entities within the state of Telangana and this regulation was made applicable from 01.04.2019 to 31.03.2024.
- 2. The Capital investment plan and Business plan has to be submitted as per the clause 7 of this regulation (TS 01 of 2019).
- Accordingly, SCCL filed CIP and BP for next control period i.e FY 2024-25 to FY 2028-29 as per the above regulations.

Chief Technical Consultant 2X600 MW, STPP - Jaipur.



	the control period concerned. There is no such arrangement in the case of TSGENCO relating to its plans for adding installed capacity, except considering renewal of its PPAs with TSDISCOMs periodically, considering all relevant factors, as decided by the Hon'ble Commission in its orders. The same holds good in the case of SCCL also.	
2.	Even while admitting that applicability of the said Regulation of the Commission was not extended beyond the current control period of 2019-24, SCCL has referred to filing of capital investment and business plans of TSGENCO for the next control period and acceptance of the same by the Commission and holding public hearing thereon. In view of the same, SCCL has submitted that based on the presumption that applicability of the said regulation is being extended for the next control period, it has submitted the subject plans to the Hon'ble Commission.	No comments to offer.
3.	Except for the year 2024-25 for which a PLF of 81.43% for the second unit of STPP (600 MW) is projected, SCCL has projected a PLF exceeding the threshold level for both the units for all the years of the next control period. We request the Hon'ble Commission to take into consideration threshold level of PLF as approved by it only into consideration. Whether generation exceeding the threshold level of PLF is to be considered for taking the same should be left to the discretion of the TSDISCOMs, depending on their requirement periodically, especially in view of the principle of merit order dispatch coming into play when abnormal quantum of surplus power is projected to be available during the next control period.	It is to submit that the projections made by SCCL are likely capacity to be generated after considering overhauling and forced outages. However, the day ahead schedule will be given as per state grid code and beneficiary may opt for the required quantum of generation as per merit order.
4.	SCCL has requested the Hon'ble Commission to consider normative auxiliary energy to 6.25% in line with the norms of CERC for 600 MW units, even while submitting that during the last four financial years, the recorded auxiliary consumption of the subject project ranges from 5.83% to 6.12%. It confirms our contention over the years that the normative parameters being determined by the ERCs for generation of power are very much liberal, providing for concealed profits, thereby imposing avoidable burdens on consumers of power. We have	1. It is to submit that the auxiliary energy allowed for STPP (2X600 MW) by Hon'ble commission during 2019-24 is 5.75%. However, actual aux for present control period is higher i.e FY 2019-20: 6.01%, FY 2020-21: 6.12%, FY 2021-22: 5.83% & FY 2022-23: 6.05%.

been submitting repeatedly over the years that normative parameters should be prescribed with the rider that normative parameter or actual performance whichever is lower shall be applicable. We once again request the Hon'ble Commission to consider the point accordingly. The yearly variations in actual percentage of auxiliary consumption of power by the subject project confirms that the performance is not consistent due to unexplained factors and that there has been no special efficiency due to measures being taken by the project.

- 2. Considering the historical actual values, the Hon'ble commission is prayed to allow increase in the normative auxiliary energy to 6.25% before FGD installation in line with the CERC norms for 600MW units which is 6.25% and CERC has many units of 600MW capacity under their jurisdiction.
- 5. As a result of flue gas de-sulpherization (FGD) plant to meet emission standard as per applicable environmental stipulation after obtaining in principle approval from the Commission, and commissioning of the FGD plan in August, 2024 as expected, SCCL has estimated that there would be 1% additional auxiliary consumption to run its different systems. Nevertheless, that SCCL has requested the Hon'ble Commission to consider auxiliary consumption, including for the FGD plant, at a rate of 6.75% shows that the additional auxiliary consumption is considered 0.5% only. Here, too, we request the Hon'ble Commission to examine the auxiliary consumption required for running a FGD plant based on experience elsewhere and determine a normative parameter accordingly, with the rider that normative parameter or actual performance whichever is lower shall be applicable.
- 1. It is to submit that the STPP, FGD plant is expected to be commissioned in August-2024. This FGD plant is estimated to consume 1% additional auxiliary energy to run its different systems such as:
  - Absorption system.
  - Lime stone preparation system.
  - Primary gypsum dewatering system.
  - Gypsum dewatering system.
  - Process water system.
  - Flue gas duct booster fans and dampers.
  - Lime stone handling system.
  - Gypsum handling system.
  - Primary gypsum dewatering system/Gypsum dewatering system.
  - Auxiliary storage system.
  - Process water system.
  - Hoisting system/ other miscellaneous system.
- 2. SCCL projected auxiliary consumption as per the norms provided by TSERC i.e 5.75% plus 1% for FGD total 6.75%. However, SCCL prays Hon'ble Commission to allow 7.25% after FGD installation in line with CERC norms for 600MW and as per the operational history of STPP.

6. Projection of generation by the two units of the subject project made by SCCL for the next five years shows an increasing trend from 9331.2 MU during 2024-25 to 9607.68 MU for the remaining years, except 9635.328 MU for 2027-28. We request the Hon'ble Commission to consider availability of power from the two units as per threshold levels of PLF for the reasons explained above.

It is to submit that the projections made by SCCL are likely capacity to be generated after considering overhauling and forced outages. However, the day ahead schedule will be given as per state grid code and beneficiary may opt for the required quantum of generation as per merit order.

7. It may be noted that the period required for overhauling is normally considered and based on that only the threshold level of PLF, not 100% PLF, is being determined. New plants can exceed threshold level of PLF for generation of power. Similarly, variations in approved capacity for generation within prescribed limits are being approved in techno-economic clearances given for the plants concerned. In other words, due to unforeseen forced outages of the plants, the resultant reduction in generation can be compensated by achieving higher PLF, exceeding threshold level of PLF, and higher generation due to the abovementioned factors. Therefore, we request the Hon'ble Commission to consider generation at threshold level of PLF only.

It is to submit that the projections made by SCCL are likely capacity to be generated after considering overhauling and forced outages. However, the day ahead schedule will be given as per state grid code and beneficiary may opt for the required quantum of generation as per merit order.

- SCCL has projected a capital investment of Rs.1090 crore for the next five financial years, with the proposed investment for the year 2024-25 as Rs.889 crore. Out of the total CIP, the lion's share of Rs.844 crore pertains to FGD system, in-furnace modifications for Nox mitigation and operation and maintenance of modules, Rs.240 crore for railway works and Rs.6 crore for township civil works. The basis for the estimates is not explained by SCCL. SCCL has submitted that approval for FGD and furnace modification for NOx were already given by the Hon'ble Commission in its order dated 28.8.2020, that the works of FGD for STPP was awarded to PES Engineering Pvt. Ltd. on 28.12.2021 and that the work is under progress scheduled to be completed in August, 2024. Based on market trends and ensuring real and transparent competitive bidding, ensuring as wider a participation of bidders as possible in the bidding, the proposed works and purchase of materials need to be taken up. Without that, the basis for the proposed capital investment and approval, if given, for the same cannot be understood. In other words, prudence check and regulatory process of the Hon'ble Commission should play a crucial role in
- 1. It is to submit that STPP sought the permission from the Commission to submit any expenditure during mid-term review and end of control period review as the present power sector is dynamic due to change of energy mix from conventional to renewable. For example the new CEA flexible operation regulation mandates generating station to increase ramp rates which requires additional capital investments.
- CEA recently notified the regulations through the Gazette, CG-DL-E-31012023-243299, dated 30.01.2023, on the issue of implantation of flexible operation by all power stations.
- 3. As per the new regulations issued by CEA, the minimum unit generation should be reduced to 40%





ensuring real, wider and transparent competitive bidding, with required terms and conditions, to ensure prudence in expenditure. SCCL has maintained that it is difficult to project the actual capital expenditure for 2024-29 and as such it has sought the permission from the Commission to submit these expenditures during mid-term review and end of control period review for its consideration. Then what is the purpose of submitting the subject plans now to the Hon'ble Commission?

- (i.e., 240 MW) of maximum continuous rating of unit (i.e., 600 MW) and minimum ramp rate capability should be 3% per minute (i.e., 18 MW/min) between 100% to 70% (i.e., between 600 MW-420 MW) of maximum continuous rating, 2% per minute (i.e., 12 MW/min) between 70% to 55% (i.e., between 420 MW to 330 MW) of maximum continuous rating and 1% per minute (i.e., 06 MW/min) between 55% to 40% of maximum continuous rating (330 MW to 240 MW).
- 4. These regulations are required to be complied within one year from the date of the notification of the regulations, which is released on 30.01.2023.
- 5. In view of this additional capital investment of Rs.20.77Crores is required for modifications.
- 6. The relevant documents of the same are attached in annexure-A.
- 9. SCCL has maintained that it is observed from the past experiences that it is utmost important to keep necessary capital spares, which are prone to failure, available during the coming control period for successful execution of generation plan. When such equipment fails, original equipment manufacturer (OEM) requires a time of around one year either to supply a new one or at least four months for refurbishment, it has explained. If such failures take place, apart from replacement cost, the project cannot be run for six months to one year, thereby causing loss of fixed charges, etc., to SCCL and non-supply of power from the project to TSDISCOMs, forcing the latter to go in for market purchases of power at higher costs, SCCL has explained. Therefore, it has submitted, it should be allowed to purchase one set of LP rotor and excited assembly which would cater to the needs of both the units of the project. SCCL has projected a capital cost of Rs.32 crore for 2023-25 and Rs.36 crore for 2025-26 for this purpose. SCCL has not explained whether there has been any warranty from the OEM when it placed
- It is to submit that SCCL has pruned down initial spares proposed by OEM BHEL and in later date the capitalization was not done due to lack of regulatory approval.
- 2. STPP has 4 no's LP rotors and 2 no's exciter assembly installed which are the major constituents of turbine generator assembly used for generation of electricity. It is found that these components failed in other generating stations without giving any warning sign of failure. In view of this, SCCL this time proposed for one LP rotor and one exciter assembly as capital spare and the same will be procured from OEM BHEL for sustainability of nor mative generating level.

and received the equipment, installed and running it, especially in view of the fact stated by itself that "these modules will definitely improve the plant availability not only for the coming control period but for the entire life of the plant." Plant availability is one of the inherent aspects to be ensured by supplier of equipments, with an enforceable warranty. When SCCL claims that the said modules to be purchased afresh will definitely improve the plant availability for the entire life of the plant, i.e., for another 18 years till expiry of the PPA and even later, if the useful lifespan of the plant can be continued, presuming failures after a span of seven years from the year of COD looks self-contradictory.

- 10. Regarding capitalization plan for railway siding, SCCL has explained that to facilitate unloading of rakes from BOXN wagon installation of 2 numbers wagon tippler and laying track lines for wagon tippler are necessary. Once coal production from Naini block, Odisha, commences, it will be difficult to transport coal through BOBRN rakes, as railways prefer to transport coal through BOXN wagons only considering the travel distance, SCCL has maintained. When SCCL is taking up these works, it implies that efforts to get coal from its mines in Telangana to the subject proposal are given up in view of the adamant attitude and intransigence of the Modi government to the requests of SCCL and GoTS to allocate coal to the subject project from its mines in Telangana, which would save thousands of crores of Rupees in the long run by bringing such costs to a nominal level, besides avoiding the capital investment proposed by SCCL for the above works to the minimum level. It is despite the fact that the Hon'ble Commission had directed SCCL and authorities concerned in the GoTS long time back to get allocation of coal to the subject project from the mines of SCCL in Telangana. In other words, the continued Tuglaquian approach of the Modi government to continue allocation of coal from Naini block to the subject project, despite SCCL expressing its ability and readiness to supply coal from its mines in Telangana to its own subject project, after meeting requirements of allocations made to others, shows failure or inability of SCCL and GoTS to make the authorities concerned in the GoI to see reason and act reasonably. The result is that, consumers of power will continue to be saddled with avoidable burdens of costs of transportation of coal from Naini blcok and capital investment proposed by SCCL for the said railway works on a long-term basis. This is another glaring
- 1. It is to submit that as per TSERC directive SCCL is putting all efforts for swapping of coal from Naini to SCCL Telangana mines.
- 2. SCCL is actively pursuing for the swapping of Naini mines with other allottees/linkage holder of coal mines as per recent GoI methodology for flexible utilisation of coal mine. The office memorandum given by Ministry of Coal, GoI is attached as annexure-B.
- 3. Approvals including Stage-I and Stage-II forest clearances have been obtained for Naini coal block. SCCL is only awaiting handing over of forest land by the State Govt. of Odisha. Swapping/ Flexible utitlisation will be done once the coal production starts from Naini mine.

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example of the Modi government harming the interests of the state of Telangana and its people.

11. SCCL has proposed a capital investment of Rs.6 crore for civil works for township. SCCL has projected profit after tax every year during the next control period ranging from the highest Rs.428.07 crore for 2024-25 to the lowest Rs.373.37 crore for 2028-29. These civil works have nothing to do with generation of power. Cannot SCCL bear the proposed amount from its profits, instead of seeking to recover it, with interest, from consumers of the DISCOMs as a part and parcel of tariffs to be revised, if the said investment plan is approved by the Hon'ble Commission? This applies to TSGENCO also.

It is to submit that STPP submitted the capital expenditure including civil works as required by the regulation TS 01 of 2019. The low realisation of power sale to TSDISCOMs is proving to be a hurdle for such kind of capital expenditure from profit earned.

12. In O.P.No.13 of 2023, TSDISCOMs have submitted that the present coal price being paid to SCCL as a part of variable cost for the subject project is more than three times the coal price accepted as normative by the CERC, which is burdening the end consumer with additional cost. The DISCOMs have maintained that they are at the receiving end for the reason at the coal price being the fuel cost is a pass through and has to be paid for under the PPA. They have made it clear that cost of coal from Naini block as a captive mine for the subject project would be much less even after including the transportation charges. The coal cost of such coal mine is in accordance with the CERC Regulation and would be beneficial to the petitioners. Even after including transportation costs of coal from Naini block to the normative price determined by CERC, the cost of coal would be only 30% of the present cost being charges by SCCL, the DISCOMs have made it clear. The DISCOMs have criticised that the attitude of SCCL seems to be to enrich itself at the cost of the power consumers. It has not been making efforts to start production in the captive coal mine and draw coal for generation of power. Due to exorbitant fuel cost, the consumers of the power are being mulcted with unnecessary cost, the DISCOMs have made it clear. They have requested the Hon'ble Commission to regulate the price of coal used for the subject project as per the normative price determined in accordance with regulations of CERC. It is obvious that SCCL, taking undue advantage of the anarchic policy of the Modi government of deregulating pricing of coal, has been

It is to submit that SCCLs coal pricing structure to all bridge linkage customers like NTPC, Mahagenco and STPP is uniform. The relevant documents are attached as annexure-C.

2X600 MW, STPP - Jaipur.

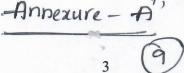
abusing its position of monopoly by increasing the price of coal indiscriminately, as if it were doing so to recover in this manner the component of its claimed capital cost of the subject project disallowed by the Hon'ble Commission. Is SCCL increasing the price of coal being supplied to other allottees accordingly? What is the GoTS, which has a share of 51% in SCCL, doing to exercise its authority to bring round the Company to fix price of coal for the subject project reasonably?

13. SCCL has pointed out that a review petition is filed in the Commission, seeking revision upwards of the capital cost approved by the Hon'ble Commission in its order dated 23.3.2023. O.P.No.77 of 2022 filed by SCCL seeking true up of a hefty sum of Rs.782.18 crore for the period 2019-22 and revised tariff for 2022-24 is already pending before the Hon'ble Commission. A spree of claims for enhancing capital cost and seeking true up of hefty sums is being facilitated by the questionable and unwarranted clauses in the Commission's Regulation 1 of 2019. We once again request the Hon'ble Commission to examine such clauses before it considers the said Regulation for extending its validity and bringing about any changes to the same and take appropriate measures and decisions to curb claims for exorbitant increase in capital investments and expenditures, revision of tariffs and true up claims by generators of power with whom TSDISCOMs had and enter into PPAs. Otherwise, continued and repetitive claims of generators would lead to increasing burdens on consumers as a permanent process. We expect SCCL as a responsible and prestigious public sector utility to keep in mind larger public interest and need for serving the people in an efficient manner and act accordingly maintaining prudence in its decisions and actions.

It is to submit that the regulatory procedure in power sector provides for truing up for its licensee. Similarly then why revision and truing up shall not be there for generators. It is also to submit that SCCL is a Government company & so it has the responsibility to increase the share holder value and the share holders in this case is Government/Public at large.

In view of the above point wise reply of SCCL, the Submissions/Suggestions raised by Sri.M Venu gopala rao vide email dated 12.10.2023 relating to Capital investment plan (CIP) OP No. 25 of 2023 and Business Plan (BP) OP No. 26 of 2023 for the period FY 2024-25 to FY 2028-29 in respect of Singareni Thermal Power Project, Phase-I (2X600 MW) are not tenable.

Chief Technical Consultant 2X600 MW, STPP - Jaipur.



- (2) कोयला आधारित तापीय विद्युत उत्पादन इकाइयां इन विनियमों के विनियम 5 के उप-विनियम (2) में उल्लिखित चरणबद्ध योजना के अनुसार अधिकतम निरंतर विद्युत दर के चालीस प्रतिशत से पचपन प्रतिशत के बीच उनके संचालन के लिए न्यूनतम एक प्रतिशत प्रति मिनट की रैंप दर क्षमता प्राप्त करेंगी।
- विनियमों का शिथिलीकरण प्राधिकरण, मामला दर मामला आधार पर, प्राधिकरण को निर्दिष्ट मामले के संबंध में लेखबध्द किए जाने वाले कारणों के लिए और आदेश द्वारा इन विनियमों के किसी उपबंध कों शिथिल कर सकेगा।

राकेश गोयल, सचिव

[विज्ञापन-III/4/असा./588/2022-23]

### CENTRAL ELECTRICITY AUTHORITY

#### NOTIFICATION

New Delhi, the 25th January, 2023

CEA-TH-17-13/4/2022-TETD Division.—Whereas the draft of the Central Electricity Authority (Flexible Operation of Coal based Thermal Power Generating Units) Regulations, 2022 was published in six newspaper dailies, as required by sub-section (3) of Section 177 of the Electricity Act, 2003 (36 of 2003) read with sub-rule (2) of rule 3 of the Electricity (Procedure for Previous Publication) Rules, 2005 for inviting objections and suggestions from all persons likely to be affected thereby, before the expiry of the period of forty-six days, from the date on which the copies of the newspaper containing the said draft regulations were made available to the public;

And whereas copies of the said newspapers containing the public notices and the said draft regulations on the website of the Central Electricity Authority were made available to the public on the 12th July, 2022;

And whereas the objections and suggestions received from the public on the said draft regulations were considered by the Central Electricity Authority;

Now, therefore, in pursuance of clause (e) of sub-section (2) of Section 177 of the Electricity Act, 2003 read with clause (b) of Section 73 of the said Act, the Central Electricity Authority hereby makes the following regulations, namely:

- Short title and commencement.- (1) These regulations may be called the Central Electricity Authority (Flexible Operation of Coal based Thermal Power Generating Units) Regulations, 2023.
  - (2) They shall come into force on the date of their final publication in the Official Gazette.
- Definitions.- (1)In these regulations, unless the context otherwise requires,
  - (a) "Act" means the Electricity Act, 2003 (36 of 2003);
  - (b) "flexible operation" means the ability of coal based thermal power generating units to generate power at specified levels mentioned in these regulations, as per the requirement of the grid;
  - (c) "maximum continuous power rating" means maximum continuous output power expressed in Mega Watt at the generator terminals as guaranteed by the manufacturer of generating units at the rated parameters;
  - (d) "minimum power level" means the minimum output power expressed in percentage of maximum continuous power rating that the coal based thermal power generating unit can sustain continuously without oil support;
  - (e) "ramp rate" means the rate of change of output power, expressed in percentage of maximum continuous power rating, per minute.
  - (2) Words and expressions used herein and not defined but defined in the Act and the rules made thereunder shall have the meanings assigned to them in that Act and rules made thereunder.
- Applicability.- These regulations shall apply to all coal based thermal power generating units owned or under control of the Central Government, State Governments or owned by any private company, connected with the grid and to the load despatch centers.
- General requirements.- (1) The coal based thermal power generating units shall be designed or suitably retrofitted, if required, to comply with these regulations for full range of ambient and environmental conditions prevailing at the site.
  - (2) All equipment and systems installed shall comply with the provisions of statutes, regulations and safety codes, as applicable.

- 10
- Flexible operation of coal based thermal power generating units.- (1) The coal based thermal power generating units shall be capable of providing the flexible operation as per these regulations.
  - (2) The implementation of flexible operation of the coal based thermal power generating units shall be as per the phasing plan specified by the Authority from time to time.
  - (3) All load despatch centers shall schedule the coal based thermal power generating units, under their jurisdiction, considering the flexible operation capabilities as specified in these regulations.
- Minimum power level capabilities of coal based thermal power generating units for flexible operation.

  The coal based thermal power generating units shall have flexible operation capability with minimum power level of forty percent.

Provided that the generating units which are not capable of achieving minimum power level of fifty-five percent, shall achieve the same within one year of the notification of these regulations.

Provided further that the generating units which are not capable of achieving minimum power level of forty percent, shall achieve the same as per phasing plan mentioned in the sub-regulation (2) of regulation 5 of these regulations.

7. Ramp rates capabilities of coal based thermal power generating units for flexible operation.- (1) The coal based thermal power generating units shall have ramp rate capability of minimum three percent per minute for their operation between seventy percent to hundred percent of maximum continuous power rating and shall have ramp rate capability of minimum two percent per minute for their operation between fifty-five percent to seventy percent of maximum continuous power rating.

Provided that the generating units which are not capable to comply with this regulation, shall comply with the same within one year of the notification of these regulations.

- (2) The coal based thermal power generating units shall achieve ramp rate capability of minimum one percent per minute for their operation between forty percent to fifty-five percent of maximum continuous power rating as per phasing plan mentioned in the sub-regulation (2) of regulation 5 of these regulations.
- 8. **Relaxation of regulations.** The Authority may, by an order and for the reasons to be recorded in writing, relax any provision of these regulations in respect of the matter referred to the Authority, on case to case basis.

RAKESH GOYAL, Secy.
[ADVT.-III/4/Exty./588/2022-23]

Annexure B'



#### Through e-mail/Speed Post/Website of Ministry of Coal

File No. 103/1/2016/NA
Government of India
Ministry of Coal
O/o Nominated Authority
\*\*\*\*\*

F -Wing, Room No.120, Shastri Bhawan, New Delhi, Dated:11th April, 2023

#### OFFICE MEMORANDUM

Subject: Methodology to provide the coal block allottee PSUs of Power Sector with some flexibility in utilization of coal extracted from the coal mines allotted under the Coal Mines (Special Provisions) Act, 2015 for optimum utilization of coal mine for the same end uses in the public interest and to achieve cost efficiencies.

The undersigned is to refer to subject mentioned above and to state that a methodology has been formulated by the Ministry of Coal vide O.M. No. 13011/3/2017-CBA-2 dated 22.09.2017 & OM No. 110/7/2017/NA dated 05.02.2018 to provide the coal block allottee PSUs (Public Sector Undertaking Companies) of Power Sector with some flexibility in utilization of coal extracted from the coal mines allotted under the Coal Mines (Special Provision) Act, 2015 ["CM(SP) Act, 2015"] for optimum utilization of coal mine for the same end uses in the public interest and to achieve cost efficiencies.

- 2. Further, the Technical Committee during the deliberations while examining the proposal submitted in this regard has recommended modifications in the Methodology to fill the gaps, better clarity, and bring uniformity in the evaluation of proposals. Accordingly, the suggested modifications have been incorporated into this revised methodology.
- 3. Under the present methodology, arrangement between two allottee PSUs which have been allotted coal mines under the provisions of CM (SP) Act, 2015 or granted coal linkage(s) would be considered. The scope of such arrangement/ agreement may include transfer of coal by "the PSU" (referred as Party-1) to the "other PSU" (referred as Party-2) in lieu of coal or power generated from such coal. The arrangement/ agreement should be for optimum utilization of the coal mine, for the same end uses, in the public interest and to achieve cost efficiencies. The overall objective of such arrangement/ agreement should be to reduce the cost of power generated.
- 4. As stated under Para 2 (g) of the above mentioned O.M. dated 22.09.2017 & OM dated 05.02.2018, a Technical Committee under the Chairmanship of Adviser (Project), Ministry of Coal was constituted with members from CEA (Central Electricity Authority) Ministry of Power, CCO (Coal Controller's Organization), CMPDIL (Central Mine Planning & Design Institute Limited), Ministry of Railways (MoRly) and Nominated Authority (NA) to establish

a methodology for scrutiny and evaluation of applications for such arrangement. The General Principles of the methodology are as follows:

- Only participating PSU (Public Sector Undertaking) companies in the field of Power Generation will be eligible for such arrangement/ agreement.
- ii. A PSU company (hereinafter referred to as "the PSU" (or Party-1)) should have been allotted coal block(s)/ mine(s) under the provisions of CM (SP) Act, 2015 and "other PSU" (or Party-2) should have either been allotted coal mine(s)/block(s) or granted coal linkage(s) for same end uses. Both the participating PSUs should have their own enduse power plants.
- iii. To start with, this methodology has been formulated for PSUs having functional coal sources (block/ mine/ linkage).
- iv. Coal quantity that can be swapped under the arrangement shall be the quantity computed on GCV equivalence basis.
- v. End-Use Power Plants (EUPs) of participating PSUs should have their own railway siding(s) with unloading mechanism in place. In case the plants of either or both parties are coastal power plants, presence of railway siding on unloading side shall not be mandatory and loading & unloading side mechanism as available should be considered.
- vi. For ease of determination of cost efficiency, cost of Power Generation for this purpose is considered as actual cost incurred towards components defined under Energy Charge Rate (ECR) of Power Generation. ECR means cost component based on parameters viz. Station Heat Rate (SHR), Auxiliary Power Consumption (APC), coal Gross Calorific Value (GCV) (as received) & total coal cost (i.e.cost of coal & transportation cost of coal) inclusive of all taxes, royalties, cess etc.

NHR = SHR / (1 - APC/100)

 $ECR = [NHR \times (CC + CT)]/GCV$ 

Where,

NHR = Net Heat Rate (in kcal/kWh);

**SHR** = Station Heat Rate (in kcal/kWh);

**APC** = Auxiliary Power Consumption (in %);

**ECR** = Energy Charge Rate (in Rs./kWh)

GCV = Gross Calorific Value (in kcal/kg);

CC = Coal cost incl. all taxes, royalties, cess etc. (in Rs./kg);

**CT** = Transportation cost of coal (in Rs./kg).

vii. Cost of Coal in the computation of ECR in respect of mine shall be as per Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (Second Amendment) Regulations, 2021.

viii. Auxiliary Power Consumption for the purpose of computation of ECR shall be the Auxiliary Power Consumption percentage as approved by the Concerned Regulator.

ix. In case, a EUP is having more than one operational stage having separate tariff order or different standard operational norms, cost efficiency for each stage will be determined separately.

- x. A proposed arrangement/agreement will be said to be cost efficient when the overall cost of Power Generation (as defined for the purpose) of "the PSU" and "other PSU" in the proposed arrangement is lower than that of the same in the existing arrangement/system averaged over last 3 (three) concluded financial years (audited figures to be considered).
- xi. In case of power plant of "the PSU" where energy charge data for last 3 (three) years are not available **OR** where power plants are under construction **OR** where few units are in operation (e.g. Stage-I) while other units (e.g. Stage-II, Stage-III) are either under construction or envisaged as a part of future expansion **AND** if such units are having a coal supply arrangement from a coal mine/block/linkage, the same can also be transferred to the "other PSU" in the proposed arrangement/agreement provided, consent shall be obtained by "the PSU" from the appropriate Government.
- xii. Optimum utilization of coal mines in a proposed arrangement/agreement means the mining capacity shall not be reduced (post such arrangement) below the approved normative capacity as mentioned in the letter of coal block allocation and the approved mining plan of the coal block/ mine as the case may be.
- xiii. The Ministry of Railways would be intimated/ conveyed for the intention of transportation of coal at least one month in advance from the agreed date of execution of the proposed arrangement by the participating PSUs, and the Ministry of Railways would in turn convey their approval or otherwise within 15 days from the date of receipt of request. The Ministry of Railways should agree to transport coal as per the requirement given by the participating PSUs. However, in case there are some constraints in movement of rakes by the Ministry of Railways, an alternative plan would be made by the participating PSUs in consultation with the Ministry of Railways. The participating PSUs would ensure overall optimization of the cost while going for alternative plan.
- xiv. Techno-commercial feasibility for such an arrangement may be worked out beforehand subject to transmission system availability.
- xv. Before making an application to the Technical Committee, both the participating PSUs should categorically certify the following regarding the proposed arrangement/agreement:
  - a. Such arrangement shall result in optimum utilization of coal mine,
  - b. Such arrangement achieves cost efficiencies, and
  - c. Such arrangement is in public interest.
- 5. The Methodology for evaluation/examination of the proposal received in relation to Flexible Utilization of Coal as per Coal Mines (Special Provisions) Act, 2015 will be as under:
  - i. The proposal needs to be submitted by the two participating PSUs jointly in the aforesaid formats (as mentioned in **Annexure I** and **Annexure II** whichever is applicable) with an undertaking (as mentioned in **Annexure III**) duly filled in and authenticated by both the parties [i.e. "The PSU" (Party 1) & "Other PSU" (Party 2)] on each page of the document.
  - ii. The application for the proposed arrangement/agreement shall contain full justification, calculations and the basis of arriving at the objectives of the arrangement i.e. optimum utilization of associated coal mine, cost efficiency and public interest.

- iii. The relevant calculations showing the reduction in cost of generation before and after the proposed arrangement/ agreement should be worked out by considering the actual cost of generation (as defined for the purpose) for last 3 (three) concluding financial years based on operating parameters viz. Station Heat Rate (SHR) & APC and Coal GCV & total coal cost (i.e. coal cost + transportation cost) (inclusive of all taxes, royalties, cess etc.).
- iv. Normative coal requirement to be assessed on the basis of consumption norms stipulated by CEA from time to time i.e. the latest accepted consumption norms available at the time of submission of the proposal by the parties shall be considered.
- v. While evaluating the applications, if the Technical Committee requires some additional data/ information, the same shall be furnished by the applicants to the Technical Committee.
- vi. Any proposal not found in order as per specified format may get rejected by the Technical Committee.
- vii. The Technical Committee would submit its recommendations to the Nominated Authority of the Ministry of Coal (MoC) to take the suitable decision on the proposed arrangement/ agreement.
- 6. Accordingly, the Allottees of Coal Mines of Power Sectors under the CM (SP) Act' 2015, intending to enter into arrangements/agreements under the above provision, are requested to submit their proposals for such arrangements/agreements to Nominated Authority for consideration/approval of Competent Authority in line with above mentioned methodology.

My 11.4.23

[M. Nagaraju]
Additional Secretary and Nominated Authority

To,

All the Allottees of Coal Mines of Power Sector under the Coal Mines (Special Provisions) Act, 2015.

Copy to:-

- 1. Secretary, Ministry of Power
- 2. Chairperson, Central Electricity Authority
- 3. Chairman, Railway Board, Ministry of Railway
- 4. Chairperson, CERC
- 5. Additional Secretary , Ministry of Coal
- 6. Dir (NA) & Dir (Tech), Ministry of Coal
- 7. TD (NIC), Ministry of Coal- for uploading on the Website of Ministry of Coal





# THE SINGARENI COLLIERIES COMPANY LIMITED

(A Government Company)

2 X 600 MW SINGARENI THERMAL POWER PLANT

Pegadapalli (V), Jaipur (M)-504216, Mancherial (Dist), T.S.

Ref : STPP/COAL/2023/46/169

Date: 29.03.2023

**GENERAL MANAGER** MARKETING HYDERABAD

Sub: Signing of supplementary MoU-II - Reg.

With reference to the above subject, please find enclosed herewith duly signed supplementary MoU-II copy of the pricing structure of coal for the FY-2023-24 between SCCL and STPP.

This is for information and for record please.

Encl: A/a

#### SUPPLEMENTARY MEMORANDUM OF UNDERSTANDING-II

As per clause No. 11 of the MoU dated 16.4.2021 entered between M/s STPP and M/s. SCCL, the Annexure-1 specifying the pricing structure as per Clause No.3.0 applicable for the FY 2022-23, shall be read as follows:

Annexure-1

## PRICING STRUCTURE FOR THE FY 2023-24

S. N	Type of customer	Mine	Quantity	Price
		Normal	Up to 75 % Agreed Quantity	20 % over and above notified basic price of power for all grades of coal
1	Bridge Linkage	Cost Plus Mine/Blended CHP/Washery		Notified basic price of the Mine/Blended / CHP/ washed coal or 20% over and above notified basic price of the power whichever is higher
		Normal	Beyond 75 % Agreed Quantity	30% over and above notified basic price of Power Sector.
Ma		Cost Plus Mine/Blended CHP/Washery	Beyond 75 % Agreed Quantity	Notified basic price of the Mine/Blended CHP / washed coal or 30% over notified basic price of the power whichever is higher
	Non - Bridge Linkage	Normal	Upto MOU Quantity	30 % over and above notified basic price of power for all grades of coal
	/MOU customer	Cost Plus Mine/Blended CHP/Washery	Upto MOU Quantity	Notified basic price of the Mine/Blended CHP / washed coal or 30% over and above notified basic price of the power whichever is higher

The other terms and conditions of MoU dt.16.4.2021 remain unchanged.



THROUGH PARTIES AUTHORISED REPRSENTATIVES HAVE SET THEIR HANDS ON THE

For and on behalf of Seller

(SCCL)

GM (Marketing)

(K. SURYANARAYANA)

For and on behalf of Purchaser (STPP)

(DVS Surganavayana Raju)
Gu (ELW), STPP

Witness:

Witness:

(P.SURENDER RAJU) DGM (Marketing)

(T-500 HAKAR 29/3/23 ALM(FUA) (STP4)

# MEMORANDUM OF UNDERSTANDING

### BETWEEN

Maharashtra State Power Generation Company Limited (MAHAGENCO)

and

Singareni Collieries Company Limited

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FOR SUPPLY OF COAL FOR THE PERIOD 01.04.2022 TO 31.03.2025

# SUPPLEMENTARY MEMORANDUM OF UNDERSTANDING -II

As per clause No. 20.0 of the MoU dated 27.04.2022 entered between M/s MAHAGENCO and M/s. SCCL, the Annexure-1 specifying the pricing structure as per Clause No.3.0 applicable for the FY 2023-24, shall be read as follows:

Annexure-1

## PRICING STRUCTURE FOR THE FY 2023-24

S. No	Type of customer	Mine	Quantity	Price
	Bridge Linkage	Normal	Up to 75 % Agreed Quantity	20 % over and above notified basic price of power for all grades of coal
1		Cost Plus Mine/Blended CHP/Washery	Up to 75 % Agreed Quantity	Notified basic price of the Mine/Blended / CHP/ washed coal or 20% over and above notified basic price of the power whichever is higher
		Normal	Beyond 75 % Agreed Quantity	30% over and above notified basic price of Power Sector.
ş		Cost Plus Mine/Blended CHP/Washery	Beyond 75 % Agreed Quantity	Notified basic price of the Mine/Blended CHP / washed coal or 30% over and above notified basic price of the power, whichever is higher
	Non - Bridge Linkage /MOU customer	Normal	Upto MOU Quantity	30 % over and above notified basic price of power for all grades of coal
		Cost Plus Mine/Blended CHP/Washery	Upto MQU Quantity	Notified basic price of the Mine/Blended CHP / washed coal or 30% over and above notified basic price of the power, whichever is higher

The other terms and conditions of MoU dt.27.4.2022 remain unchanged.

G.M. (Mktg.) SCCL., Hyderabad Korek

Sy. Chief Engl. cerrs (1995) Mahaganco, Nagyus

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IN WITNESS WHEREOF THE PARTIES THROUGH THEIR AUTHORISED REPRSENTATIVES HAVE SET THEIR HANDS ON THE

For and on behalf of Seller (SCCL)

bonney.

(K. SURYANARAYANA)
GM (Marketing)
G.M. (Mktg.)
SCCL., Hyderabad

Witness:

STATE OF SCHOOL SCHOOL STATE OF SCHOOL SC

(P.SURENDER RAJU) DGM (Marketing) For and on behalf of Purchaser (MAHAGENCO)

(Vijey Garange)

Dv. Chief Engineer-III (774. Mahaganon, Nagpor

Witness:

K. D. Duryavanoh.
SE. ((cal)

