



**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/2023-24/330

Dt: 27.10.2023

To,  
The Secretary,  
Telangana State Electricity Regulatory Commission,  
5<sup>th</sup> Floor, Singareni Bhavan,  
Red Hills, Hyderabad – 500 004

Sir,

**Sub:** SCCL – Reply to the Hon'ble TSERC additional information-2 sought 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:** Your email dated 26.10.2023 regarding additional information-2.

The reply to the Hon'ble TSERC additional information-2 sought 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.

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 additional information-2

**SCCL Reply to the Hon'ble TSERC additional Information-2 requirements on the filings of Business Plan and Capital Investment Plan for the period FY 2024-25 to FY 2028-29**

**I. Business Plan for FY 2024-25 to FY 2028-29**

1. Regulation 7.2 of the Regulation No. 1 of 2019 stipulate, amongst others, submission of (i) Compliance status to environmental norms, and (ii) Saving in operating costs. SCCL has not submitted the same in its Business Plan. In this regard:

- a. SCCL to submit the (i) Compliance status to environmental norms, and (ii) Saving in operating costs in compliance to Regulation 7.2 of the Regulation No. 1 of 2019.
- b. SCCL to submit the design parameters of SO<sub>x</sub>, NO<sub>x</sub>, Mercury and Opacity.
- c. SCCL to submit the reasons for the actual levels of SO<sub>x</sub>, NO<sub>x</sub>, Mercury and Opacity being higher than the stipulated norms, as applicable.

**Reply:** It is to humbly submit that

- a) Ministry of Environment, Forest and Climate Change (MOEF &CC) has issued notification no: S.O.3305(E) titled 'Environmental (Protection) Amendment rules, 2015 dated 7.12.2015. The said notification has brought out amendments to Schedule - I of Environment (Protection) Rules, 1986 for emission norms applicable to thermal power stations.
- b) Both the units of STPP have been commissioned in calendar year 2016. Accordingly, following emission norms which are applicable to the thermal power plant TPPs (Units) installed between 1<sup>st</sup> January 2004 and 1<sup>st</sup> January 2017 as per the amendment notification will also be applicable to STPP units.

<b>POLLUTANTS</b>	<b>BEFORE AMENDMENT</b>	<b>AFTER AMENDMENT</b>	<b>STPP design parameters</b>
Particulate Matter (PM)	100 mg/Nm <sup>3</sup>	50 mg/Nm <sup>3</sup>	50 mg/Nm <sup>3</sup>
Mercury (Hg)	0.03 mg/Nm <sup>3</sup>	0.03 mg/Nm <sup>3</sup>	0.03 mg/Nm <sup>3</sup>
Sulphur Dioxide (SO <sub>2</sub> )	600 mg/Nm <sup>3</sup>	200 mg/Nm <sup>3</sup>	No prescribed values
Oxides of Nitrogen	NOT SPECIFIED	450 mg/Nm <sup>3</sup>	750 mg/Nm <sup>3</sup>

- c) Currently STPP, SCCL is in compliance with the normative emission limits with respect to particulate matter (PM) and mercury (Hg). As the design values are more than the norms specified by MOEF &CC for Sox and Nox, for complying



SOx emission norms FGD works is taken up at STPP and In-furnace modifications for NOx mitigation is planned.

- d) The approval for FGD for SOx mitigation and furnace modification for NOx were already given by the Hon'ble Commission vide its order dated 28.08.2020 in O.P.Nos.4 and 5 of 2019, 8 and 9 of 2020.
- e) Further, regarding the savings in operational cost for the proposed capital investment plan it is to humbly submit the following table of approved O&M expenditures for generating stations owned by the State and also Central generating stations in the State of Telangana.

<b>Comparison of O&amp;M expenses of TSGENCO thermal power plant, STPP in Midterm review orders and NTPC ramagundam approved O&amp;M as per CERC 2019-24 norms</b>							
Station	Capacity	FY 2019-20		FY 2020-21		FY 2021-22	
		Approved (Rs.Crores)	Per MW cost (Lakh/MW)	Approved (Rs.Crores)	Per MW cost (Lakh/MW)	Approved (Rs.Crores)	Per MW cost (Lakh/MW)
KTPS-V	2x250	159.42	31.88	162.43	32.49	183.53	36.71
KTPS-VI	500	159.42	31.88	162.43	32.49	183.17	36.63
KTPS-VII	800	136.29	17.04	443.3	55.41	388.93	48.62
RTS-B	62.5	75.57	120.91	81.66	130.66	86.71	138.74
KTPP-I	500	145.11	29.02	142.24	28.45	155.32	31.06
KTPP-II	600	161.5	26.92	162.32	27.05	175.59	29.27
<b>STPP</b>	<b>2x600</b>	<b>191.30</b>	<b>15.94</b>	<b>188.59</b>	<b>15.72</b>	<b>202.30</b>	<b>16.86</b>
NTPC ramagundam	4x500	450.20	22.51	466.00	23.30	482.40	24.12
NTPC ramagundam	3x200	197.76	32.96	204.72	34.12	211.86	35.31

- f) From the above table it can be seen that the operational cost of STPP in comparison with generating stations owned by the State and also Central generating stations is very less.
- g) In view of the above, Hon'ble Commission is requested to allow the expenditure for the proposed capital investment plan.
2. SCCL to submit the scheduled dates of various milestones associated with mine development and actual date of achievements thereof for Naini Coal Block.

**Reply:** It is to humbly submit that the details of the milestones associated with mine development and actual date of achievements of Naini coal mine are provided as **annexure-A.**



## II. Capital Investment Plan for FY 2024-25 to FY 2028-29

3. SCCL to segregate the Capital Investment Plan, separately into ongoing projects that will spill over into the Period from FY 2024-25 to FY 2028-29, and new projects that will commence in the Control Period but may be completed within or beyond it.

**Reply:** It is to humbly submit the details of proposed revised Capital Investment Plan for the period from FY 2024-25 to FY 2028-29

### Summary of total revised Capital Investment Plan of 2 x 600 MW STPP

(Amounts in Crores)

S no.	Description	Proposed Cost and Capitalisation Schedule based on Milestones for completion					
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total capital expenditure
1	Flue gas de-sulphurisation system (FGD)	696.00	40.00	0.00	0.00	0.00	736.00
2	In-furnace modifications for Nox mitigation	0.00	20.00	20.00	0.00	0.00	40.00
3	Operation & Maintenance modules	32.00	36.00	0.00	0.00	0.00	68.00
4	Railway works	25.00	80.00	135.00	0.00	0.00	240.00
5	civil Works	1.00	1.50	1.50	1.00	1.00	6.00
6	Implementation of flexible operation scheme as per CEA	20.77	0.00	0.00	0.00	0.00	20.77
	<b>TOTAL</b>	<b>774.77</b>	<b>177.50</b>	<b>156.50</b>	<b>1.00</b>	<b>1.00</b>	<b>1110.77</b>

### Summary of revised ongoing projects Capital Investment Plan of 2 x 600 MW STPP

(Amounts in Crores)

S no.	Description	Proposed <u>ongoing projects</u> Cost and Capitalisation Schedule based on Milestones for completion					
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Total capital expenditure
1	Flue gas de-sulphurisation system (FGD)	696.00	40.00	0.00	0.00	0.00	736.00
2	Railway works (Overhead Electrification (OHE) )	25.00	0.00	0.00	0.00	0.00	25.00
3	Civil Works	1.00	0.50	0.00	0.00	0.00	1.50
	<b>TOTAL</b>	<b>722.00</b>	<b>40.50</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>762.50</b>

**Summary of revised new projects Capital Investment Plan of 2 x 600 MW STPP**

**(Amounts  
in Crores)**

S no.	Description	Proposed on new projects Cost and Capitalisation Schedule based on Milestones for completion					
		FY 2024- 25	FY 2025- 26	FY 2026- 27	FY 2027- 28	FY 2028- 29	Total capital expenditure
1	In-furnace modifications for Nox mitigation	0.00	20.00	20.00	0.00	0.00	40.00
2	Operation & Maintenance modules	32.00	36.00	0.00	0.00	0.00	68.00
3	Railway works ( S&T, Wagon tipplers)	0.00	80.00	135.00	0.00	0.00	215.00
4	Civil Works	0.00	1.00	1.50	1.00	1.00	4.50
5	Implementation of flexible operation scheme as per CEA	20.77	0	0	0	0	20.77
	<b>TOTAL</b>	<b>52.77</b>	<b>137.00</b>	<b>156.50</b>	<b>1.00</b>	<b>1.00</b>	<b>348.27</b>

4. SCCL to submit the justification for each item of the Capital Investment Plan under the relevant provisions of the Regulation No. 1 of 2019 along with supporting documents to substantiate the same.

**Reply:** It is to humbly submit that the justification for each item of the Capital Investment Plan under the relevant provisions of the Regulation No. 1 of 2019 along with supporting documents to substantiate the same are provided as **annexure-B**.

5. SCCL to submit the current milestone-wise physical and financial progress of the FGD system.

**Reply:** It is to humbly submit the details of STPP FGD financial and physical progress as on Sept-2023 in the table below:

Sl no	Milestone activities	Schedule start date	Schedule finish date	Physical progress	PO amount (Rs.Cr)	Total billed amount (Rs.Cr)
1	Civil works	09-05-22	09-01-24	95% foundation works completed. Super structure works of ECR-1 & 2, Gypsum building works are in progress.	184.57	124.48



2	Main Equipment supply	06-07-22	07-12-23	Orders placed for 80% of the material. Supply of equipment is under progress.	400.27	96.04
3	Erection of chimney flue cans	09-05-22	09-01-24	80% fabrication work completed.	19.90	1.22
4	Equipment erection	09-11-22	09-06-24	Erection of booster fan, Slurry recirculation pumps, ducts and tanks works are in progress.	61.68	0.00
5	Others	-	-	Others include Mandatory spares, type test charges, Freight & insurance, safety aspects amount, training and AMC charges	30.09	2.36
<b>Total</b>					<b>696.50</b>	<b>224.10</b>

**Naini Coal mine, milestones associated with mine development and actual date of achievements**

S.No.	Coal Mine	Allottee	Allocated block area(ha)	Clearances vested	Milestones applicable as per CMDPA/Allotment Agreement	Date of grant of the vested clearances	Area for which clearances have been vested (in ha)	Remarks (Any area excluded/included from Clearance)	
1	NAINI	SCCL	912.799	Prospecting License	13.12.2015	11.05.2016	912.799		
2				Completion of Exploration and preparation of Geological report(GR)	13.06.2017	14.05.2018			
3				Mining Lease Application	13.09.2017	31.12.2018			
4				Submission of Mining Plan	13.12.2017	14.05.2018			
5				Mining Plan Approval	13.05.2018	08.04.2019			
6				Previous Approval Application	13.06.2018	NA			
7				Previous Approval	13.07.2018	NA			
8				Forest Clearance Application	13.05.2018	27.12.2017			
9				Forest Clearance	13.03.2019	12.10.2022			
10				Environmental Clearance Application	13.05.2018	19.04.2019			
11				Environmental Clearance	13.03.2019	01.12.2021			
12				Grant of Mining lease	13.06.2019	26.06.2020			
13				Land Acquisition (To reach Rated Capacity)	13.12.2020	UNDER PROGRESS			Payment of land compensation for 80% of forest Land completed
14				Opening of Escrow Account	13.01.2021	05.09.2019			
15				Application for Opening Permission	13.01.2021	18.05.2022			
16				Grant of Opening Permission	13.02.2021	19.10.2022			
17				Schedule of Production/Reaching RatedCapacity					Commencement of Mining operation: within two months from transfer of Forest Land by the State Govt. of Odisha

Amexuse - A

## Summary of revised Capital Investment Plan of 2 x 600 MW STPP

(Amounts in Crores)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
S no.	Description	Proposed Cost <sup>1</sup> and Capitalisation Schedule based on Milestones for completion <sup>2</sup>					Total capital expenditure	Purpose of the investment.	Benefit of the proposal	Relevant regulation no of TS 01 of 2019.
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29				
1	Flue gas de-sulphurisation system (FGD)	696	40	0	0	0	736	Approval for FGD for SOx mitigation and furnace modification for NOx were already given by the Hon'ble Commission vide its order dated 28.08.2020 in O.P.Nos.4 and 5 of 2019, 8 and 9 of 2020. MOEF &CC has issued notification bringing out amendments to Schedule - I of Environment (Protection) Rules, 1986 for emission norms applicable to thermal power stations. To comply with the emission limits as per amended notification for SOx mitigation, FGD system installation and for NOx mitigation, In-furnace modifications works are to be taken up immediately.	Avoidance of 2x 600 MW Plant closure by MoEF/CPCB	7.19.1.(I), 7.19.1.(e) and 3.10.3
2	In-furnace modifications for Nox mitigation	0	20	20	0	0	40		Avoidance of 2 x600 MW Plant closure by MoEF/CPCB	
3	Operation & Maintenance modules									
3.a	LP rotor	0	36	0	0	0	36	It is utmost important to keep necessary capital spares available for successful execution of generation plan. LP Rotor and Exciter assembly are major constituents of turbine generator assembly used for generation of electricity. The manufacturer requires a high lead time of around one year to supply a new one or at least four months time for refurbishment. Accordingly, it is planned to purchase LP rotor and excited assembly which would cater the need of both the units effectively.	Avoidance of forced shut down of any of the units for 6-8 months.	7.19.1(c) and 7.19.1(k)
3.b	Exciter assembly	32	0	0	0	0	32			
	Sub Total	32	36	0	0	0	68			
4	Railway works									
4.a	Overhead Electrification (OHE) works	25	0	0	0	0	25	South central Railway authorities vi de letter dated 15.07.2021 have advised once again to arrange for overhead electrification system (OHE) along with necessary signalling and telecommunication (S&T) works to ensure safe running of railway wagons, which will in turn reduce the Coal transportation cost	1. Reduce the Coal transportation cost, Avoidance of unsafe railway operation leading to accident.	7.19.1(e)
4.b	Signalling & Telecommunication (S&T) works including civil works	0	65	0	0	0	65		2. Railway is slowly converting all rail engines from diesel mode to electric mode.	7.19.1(e)

Annexure - B

(H)



## Summary of revised Capital Investment Plan of 2 x 600 MW STPP

(Amounts in Crores)										
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
S no.	Description	Proposed Cost <sup>1</sup> and Capitalisation Schedule based on Milestones for completion <sup>2</sup>					Total capital expenditure	Purpose of the investment.	Benefit of the proposal	Relevant regulation no of TS 01 of 2019.
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29				
4.c	Installation of 2 Numbers wagon tippler and laying track lines for wagon tippler including consultancy service to NTPC.	135	15	0	0	0	150	1. There is only one track-hopper at STPP and unless 5 rakes coal is unloaded in a day, running both the units at full load becomes critical. 2. PCOM, SCR during his visit to STPP opined that there should be an alternate arrangement for unloading coal at STPP. he advises to take-up construction of at-least one wagon tippler so that in case of exigencies and to sustain power plant operation coal can also be brought through BOXN rakes from main line. 3. 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 (and considering possibility of opening up of BOBRN doors leading to disruption of track-lines on main lines).	To facilitate unloading of rakes from BOXN wagon from Naini coal mines.	7.19.1(h)
<b>Sub Total</b>		<b>160.00</b>	<b>80.00</b>	<b>0.00</b>	<b>0.00</b>		<b>240</b>			
5	<b>Civil works others</b>									
5.a	Construction of shed for lube oil barrels, RCC pit for hazardous waste	1	0	0	0	0	1	The facility is required to be provided as per Factories Act 1948.	Statutory requirement	7.19.1(e)
5.b	Ash trucks parking yards at ash weighbridge near main gate	0	0.5	0.5	0	0	1	This work is required to be taken up to avoid stuck up of trucks at plant gate during entering or exiting plant premise.	Will result in hassle free ,quick ,safe and systematic movement of trucks.	7.19.1(k) and 26.4
5.c	CC flooring around HCSD silo area	0	0	0	0.5	0	0.5	The plant soil is of black cotton type which are clayey in nature. The vehicle movements during monsoon season over this black soil is very difficult due to its sticky nature. Accordingly, CC flooring around HCSD silo area is required to maintain smooth movement of vehicles even in rainy season.		7.19.1(k) and 26.4
5.d	CC Roads around Stacker Reclaimer	0	0	0	0	1	1	The plant soil is of black cotton type which are clayey in nature. The vehicle movements during monsoon season over this black soil is very difficult due to its sticky nature. Accordingly, roads around stacker reclaimer is required to maintain smooth movement of vehicles even in rainy season.		7.19.1(k) and 26.4

(3)

## Summary of revised Capital Investment Plan of 2 x 600 MW STPP

(Amounts in Crores)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
S no.	Description	Proposed Cost <sup>1</sup> and Capitalisation Schedule based on Milestones for completion <sup>2</sup>					Total capital expenditure	Purpose of the investment.	Benefit of the proposal	Relevant regulation no of TS 01 of 2019.
		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29				
5.e	RCC drain along fly ash transport road	0	0	0.5	0.5	0	1	The RCC drain will prevent stagnation of storm water inside the compound wall of STPP.	Will ensure proper drainage which otherwise can impede movement of vehicles and equipment.	<b>7.19.1(k) and 26.4</b>
5.f	Chambers and dewatering pumps in main plant area	0	0.5	0.5	0	0	1	To avoid water stagnation inside the main plant area specially during rainy season.		<b>7.19.1(k) and 26.4</b>
5.g	Rain harvesting structures	0	0.5	0	0	0	0.5	As per MoEF guidelines, the rain harvesting structure has to be constructed.	This will provide compliance to statutory guide lines of MoEF.	<b>7.19.1.(e)</b>
	<b>Sub total</b>	<b>1.00</b>	<b>1.50</b>	<b>1.50</b>	<b>1.00</b>	<b>1.00</b>	<b>6.00</b>			
6	<b>Implementation of flexible operation scheme as per CEA</b>	<b>20.77</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>20.77</b>	CEA recently notified the regulations through the Gazette, 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., on the issue of implementation of flexible operation by all power stations	Will result in flexible operation of the thermal units with increase in ramp rates	<b>7.19.1.(e)</b>
	<b>TOTAL</b>	<b>909.77</b>	<b>177.50</b>	<b>21.50</b>	<b>1.00</b>	<b>1.00</b>	<b>1110.77</b>			

**Notes:**

- 1 Cost of any proposal is arrived considering the best alternative available. Estimation is made by the expert group of engineers available to STPP. The costs in form of tariff impact considering the benefits of the investments as listed above seems to be very moderate (around 20 paisa/unit to 25 paisa/unit) and hence, these investments seem to be justified.
- 2 Achievement of Milestones for completion is the basis of proposed capitalisation. Physical targets of a proposal in a particular year can be computed as fraction of total capitalisation proposed.
- 3 Capital Structure and financing Plan with sources of investment may be interpreted interchangeably. All the proposed capitalisation shall be planned with a capital structure 70:30 in Debt and equity respectively.

(5)





# भारत का राजपत्र The Gazette of India

सी.जी.-डी.एल.-अ.-31012023-243299  
CG-DL-E-31012023-243299

असाधारण  
EXTRAORDINARY

भाग III—खण्ड 4  
PART III—Section 4

प्राधिकार से प्रकाशित  
PUBLISHED BY AUTHORITY

सं. 61]  
No. 61]

नई दिल्ली, सोमवार, जनवरी 30, 2023/माघ 10, 1944  
NEW DELHI, MONDAY, JANUARY 30, 2023/MAGHA 10, 1944

## केंद्रीय विद्युत प्राधिकरण अधिसूचना

नई दिल्ली, 25 जनवरी, 2023

सं. केविप्रा-टीएच-17-13/4/2022-टीईटीडी प्रभाग.—विद्युत (पूर्व प्रकाशन के लिए प्रक्रिया) नियम, 2005 के नियम (3) के उप-नियम (2) के साथ पठित विद्युत अधिनियम, 2003 (2003 का 36) की धारा 177 की उप-धारा (3) द्वारा यथा अपेक्षित केंद्रीय विद्युत प्राधिकरण (कोयला आधारित ताप विद्युत उत्पादन इकाइयों का लचीला संचालन) विनियम, 2022 का प्रारूप को छह दैनिक समाचार पत्रों में प्रकाशित किया गया था, जिसमें उक्त प्रारूप विनियमों में अंतर्विष्ट समाचार पत्र की प्रतियां जनता को उपलब्ध कराई गईं तारीख से 46 दिनों की अवधि के समाप्त होने से पूर्व इसके द्वारा प्रभावित होने वाले सभी संभावित व्यक्तियों से आक्षेप और सुझाव मांगे गए थे;

और केंद्रीय विद्युत प्राधिकरण की वेबसाइट पर सार्वजनिक सूचनाओं वाले उक्त समाचार पत्रों और उक्त प्रारूप विनियमों की प्रतियां जनता को 12 जुलाई, 2022 को उपलब्ध करा दी गई थीं;

और उक्त प्रारूप विनियमों पर जनता से प्राप्त आक्षेपों और सुझावों पर केन्द्रीय विद्युत प्राधिकरण द्वारा विचार कर लिया गया था;

अतः अब विद्युत अधिनियम, 2003 की धारा 73 के खंड (ख) के साथ पठित धारा 177 की उप-धारा (2) के खंड (ड), के अनुसरण में, केंद्रीय विद्युत प्राधिकरण निम्नलिखित विनियम बनाता है, अर्थात्:-

1. संक्षिप्त नाम और प्रारंभ- (1) इन विनियमों का संक्षिप्त नाम केंद्रीय विद्युत प्राधिकरण (कोयला आधारित ताप विद्युत उत्पादन इकाइयों का लचीला संचालन) विनियम, 2023 है।

(2) ये विनियम राजपत्र में उनके अंतिम प्रकाशन की तारीख से लागू होंगे।



2. **परिभाषाएं-** (1) इन विनियमों में, जब तक कि संदर्भ से अन्यथा अपेक्षित न हो,
- (क) "अधिनियम" से विद्युत अधिनियम, 2003 (2003 का 36) अभिप्रेत है;
- (ख) "लचीला संचालन" से कोयला आधारित ताप विद्युत उत्पादन इकाइयों की ग्रिड की आवश्यकता के अनुसार इन विनियमों में उल्लिखित निर्दिष्ट स्तरों पर विद्युत उत्पन्न करने की क्षमता अभिप्रेत है;
- (ग) "अधिकतम निरंतर विद्युत रेटिंग" से जनरेटर टर्मिनलों पर मेगा वाट में व्यक्त अधिकतम निरंतर विद्युत उत्पादन, रेटेड मापदंडों पर उत्पादन इकाइयों के विनिर्माता द्वारा गारंटीकृत है; अभिप्रेत है
- (घ) "न्यूनतम विद्युत स्तर" से अधिकतम निरंतर विद्युत रेटिंग के प्रतिशत में व्यक्त न्यूनतम विद्युत उत्पादन, जिसे कोयला आधारित ताप विद्युत उत्पादन इकाई बिना तेल सहायता के लगातार बनाए रख सकती है; अभिप्रेत है
- (ङ) "रैंप दर" से अधिकतम निरंतर विद्युत रेटिंग के प्रतिशत में विद्युत उत्पादन के परिवर्तन की प्रति मिनट में व्यक्त दर अभिप्रेत है।
- (2) उन शब्दों और पदों के जो इसमें प्रयुक्त और परिभाषित नहीं हैं किंतु अधिनियम और उसके अधीन बनाए गए नियमों में परिभाषित हैं, वही अर्थ होंगे जो उस अधिनियम और उसके अधीन बनाए गए नियमों में हैं।
3. **लागू होना** - ये विनियम केंद्रीय सरकार, राज्य सरकारों के स्वामित्व या नियंत्रण में या ग्रिड से जुड़ी किसी भी प्राइवेट कंपनी के स्वामित्व वाली सभी कोयला आधारित ताप विद्युत उत्पादन इकाइयों और भार प्रेषण केंद्रों पर लागू होंगे।
4. **साधरण अपेक्षाएँ** - (1) कोयला आधारित ताप विद्युत उत्पादन इकाइयों को उस स्थान पर प्रचलित परिवेशी और पर्यावरणीय परिस्थितियों की पूरी श्रृंखला के लिए इन विनियमों का अनुपालन करने के लिए, यदि अपेक्षित हो, डिजाइन या उपयुक्त रूप से रेट्रोफिट किया जाएगा।
- (2) स्थापित सभी उपकरण और प्रणालियाँ, यथा लागू, विनियमों और सुरक्षा कोडों के उपबंधों का पालन करेंगी।
5. **कोयला आधारित ताप विद्युत उत्पादन इकाइयों का लचीला संचालन-** (1) कोयला आधारित ताप विद्युत उत्पादन इकाइयां इन विनियमों के अनुसार लचीला संचालन प्रदान करने में सक्षम होंगी।
- (2) कोयला आधारित ताप विद्युत उत्पादन इकाइयों के लचीले संचालन का कार्यान्वयन समय-समय पर प्राधिकरण द्वारा विनिर्दिष्ट चरणबद्ध योजना के अनुसार होगा।
- (3) सभी भार प्रेषण केंद्र अपने अधिकार क्षेत्र के अधीन कोयला आधारित ताप विद्युत उत्पादन इकाइयों को, इन विनियमों में विनिर्दिष्ट लचीले संचालन क्षमताओं पर विचार करते हुए, शेड्यूल करेंगे।
6. **लचीले संचालन के लिए कोयला आधारित ताप विद्युत उत्पादन इकाइयों की न्यूनतम विद्युत स्तर की क्षमता-** कोयला आधारित ताप विद्युत उत्पादन इकाइयों में चालीस प्रतिशत के न्यूनतम विद्युत स्तर का लचीला संचालन क्षमता होगा।
- परंतु उत्पादन इकाइयां जो पचपन प्रतिशत के न्यूनतम विद्युत स्तर को प्राप्त करने में सक्षम नहीं हैं, उन्हें इन विनियमों की अधिसूचना के एक वर्ष के भीतर यह सक्षमता प्राप्त करनी होगी।
- परंतु यह और कि उत्पादन इकाइयां जो चालीस प्रतिशत के न्यूनतम विद्युत स्तर को प्राप्त करने में सक्षम नहीं हैं, उन्हें इन विनियमों के विनियम 5 के उप-विनियम (2) में उल्लिखित चरणबद्ध योजना के अनुसार यह सक्षमता प्राप्त करनी होगी।
7. **लचीला संचालन के लिए कोयला आधारित ताप विद्युत उत्पादन इकाइयों की रैंप दर क्षमताएं-** (1) कोयला आधारित ताप विद्युत उत्पादन इकाइयों में अधिकतम निरंतर विद्युत रेटिंग के सत्तर प्रतिशत से सौ प्रतिशत के बीच उनके संचालन के लिए न्यूनतम तीन प्रतिशत प्रति मिनट की रैंप दर क्षमता होगी और अधिकतम निरंतर विद्युत रेटिंग के पचपन प्रतिशत से सत्तर प्रतिशत के बीच उनके संचालन के लिए न्यूनतम दो प्रतिशत प्रति मिनट की रैंप दर क्षमता होगी।
- परंतु उत्पादन इकाइयां जो इस विनियम का अनुपालन करने में सक्षम नहीं हैं, इन विनियमों की अधिसूचना के एक वर्ष के भीतर इसका अनुपालन करेंगी।



- (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।
8. **विनियमों का शिथिलीकरण** - प्राधिकरण, मामला दर मामला आधार पर, प्राधिकरण को निर्दिष्ट मामले के संबंध में लेखबद्ध किए जाने वाले कारणों के लिए और आदेश द्वारा इन विनियमों के किसी उपबंध को 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 12<sup>th</sup> 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:

1. **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.
2. **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.
3. **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.
4. **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.



5. **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.
6. **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]



FAX NO. :

16 Jul. 2021 11:11 P 1



दक्षिण मध्य रेलवे  
SOUTH CENTRAL RAILWAY

मंडल रेल प्रबंधक कार्यालय  
Office of the Divl. Rly. Manager  
सिकंदराबाद मंडल / Secunderabad Division संचालन  
भवन/Sanchalan Bhavan  
सिकंदराबाद /SECUNDERABAD-500 025  
☎:Rly 86199,DOT:040-27830449

संख्या/No.सी. C/T/143/STPP MCI/18

दिनांक/Date: 15.07.2021

The Chairman and Managing Director  
Singareni Collieries Company Limited  
Singareni Bhavan, Red Hills,  
Khairatabad, Lakdikapool,  
Hyderabad - 500004



विषय/Sub: Electrification of Singareni Thermal Power Plant (STPP) siding  
of M/s. SCCL taking off from Manchiryal Station.

- संदर्भ/Ref: 1. DPR of STPP Siding of M/s SCCL submitted in the month of July, 2018.
- 2. Sr.DOM/SC Lr.No.C/T/143/STPP MCI/18 dated 14.07.2021 addressed to Executive Director (Coal Movement), SCCL, Hyderabad.

STPP Siding of M/s SCCL is taking off from Manchiryal Station which is located on the HDN 'A' trunk route in Balharshah - Kazipet Section of Secunderabad Division. STPP Siding was commissioned in the month of August 2018 with Diesel Traction, as OHE works were not taken up at that time but it was assured that the electrification of this Siding will be done shortly. As per the DPR submitted vide Reference (1), it was mentioned that the electrified traction will be utilised in the siding for handling of rakes (11<sup>th</sup> chapter of DPR submitted by RITES; Consultants appointed by M/s SCCL).

Though the Siding is in operation for the last three (3) years, the work of electrification of the siding is yet to be started. The section is a completely electrified section and as per Railway Board policy all the new sidings in the electrified section are to be commissioned with electrification. In the electrified section, the availability of diesel powers and trained crew is also difficult and this is causing impediments to regular train operation. To cater for the requirement of STPP Siding, we are compelled to maintain two Diesel Multiple Units exclusively which is unviable due to less availability of diesel loco and trained crew. Presently, five (5) rakes of coal are being handled per day in STPP Siding, for which frequent movement is being done in this siding. As already elaborated, keeping separate diesel loco is now becoming difficult at Manchiryal Station and it is essential to electrify STPP Siding on priority to reduce the detentions of rolling stock, crew and to improve wagon turn-round and mobility of trains.

It is requested that electrification work of STPP Siding from CCC to STPP (around 15 Kms. distance) may be taken up and completed at the earliest as per the approved DPR for efficient train operations in the Siding.

Thanking you,

Yours sincerely,

*Handwritten signature*

*Handwritten signature*  
15.07.2021

*Handwritten note: Rail file*



**The Singareni Collieries Company Limited**  
**(2x600 MW Thermal Power Project)**

**OP No. 25 of 2023-Filing of Capital Investment Plan for FY 2024-25 to FY 2028-29**

**OP No. 26 of 2023-Filing of Business Plan for FY 2024-25 to FY 2028-29**

*Additional information requirement*

**I. Business Plan for FY 2024-25 to FY 2028-29**

1. Regulation 7.2 of the Regulation No. 1 of 2019 stipulate, amongst others, submission of (i) Compliance status to environmental norms, and (ii) Saving in operating costs. SCCL has not submitted the same in its Business Plan. In this regard:
  - a. SCCL to submit the (i) Compliance status to environmental norms, and (ii) Saving in operating costs in compliance to Regulation 7.2 of the Regulation No. 1 of 2019.
  - b. SCCL to submit the design parameters of SOx, NOx, Mercury and Opacity.
  - c. SCCL to submit the reasons for the actual levels of SOx, NOx, Mercury and Opacity being higher than the stipulated norms, as applicable.
2. SCCL to submit the scheduled dates of various milestones associated with mine development and actual date of achievements thereof for Naini Coal Block.

**II. Capital Investment Plan for FY 2024-25 to FY 2028-29**

3. SCCL to segregate the Capital Investment Plan, separately into ongoing projects that will spill over into the Period from FY 2024-25 to FY 2028-29, and new projects that will commence in the Control Period but may be completed within or beyond it.
4. SCCL to submit the justification for each item of the Capital Investment Plan under the relevant provisions of the Regulation No.1 of 2019 along with supporting documents to substantiate the same.
5. SCCL to submit the current milestone-wise physical and financial progress of the FGD system.