

**GOVERNMENT OF INDIA  
MINISTRY OF POWER  
LOK SABHA  
UNSTARRED QUESTION NO.2513  
ANSWERED ON 03.08.2023**

**COAL-FUELED THERMAL POWER PLANTS**

**2513. SHRI COSME FRANCISCO CAITANO SARDINHA:**

**Will the Minister of POWER  
be pleased to state:**

- (a) the number of major coal-fueled Thermal Power Plants (TPPs) operational in the country;**
- (b) the details of the number of TPPs proposed and under-construction during the last five years and the current year, year and State-wise;**
- (c) the details of installed and utilised capacity of these plants during the said period, year and State-wise;**
- (d) the details of the quantity of water being consumed by these plants, year and State-wise; and**
- (e) whether the Government proposes some technological interventions to reduce the water consumption by the coal-fueled TPPs and if so, the details thereof?**

**A N S W E R**

**THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY**

**(SHRI R.K. SINGH)**

**(a) : The number of major coal-fuelled Thermal Power Plants (TPPs) that are operational in the country is 180 numbers and same is enclosed in Annexure-I.**

**(b) to (d) : The details of numbers of TPPs proposed and under construction during the last five years and the current year, year and state wise is enclosed at Annexure-II and the details of installed and utilized capacity and quantity of water being used by these plants year and state wise is enclosed in Annexure-III.**

**(e) : Water is consumed in power generation from thermal power plants mainly for cooling purposes. Over the years, to reduce water consumption thermal power stations have taken considerable technology improvements and measures such as:**

- i. Use of closed cycle cooling water system with Cooling Towers to reduce water requirement for condenser & auxiliary cooling and operation at high level of Cycle of Concentration (COC) for circulating cooling water requirement.**
- ii. Installation of Ash Water Recirculation System (AWRS).**

- iii. Installation of Dry fly ash collection system/ High Concentration Slurry System (HCSS).**
- iv. Installation of wastewater treatment & Zero water discharge system.**
- v. Air Cooled Condenser system for reduction in cooling water requirement**
- vi. Adopting Zero Liquid Discharge & Rainwater Harvesting**
- vii. Use of entire cooling tower blow down for various plant usages**
- viii. Closed loop system for various systems such as coal handling plant, ash handling plant, service water where the effluents are treated and recycled back for use**
- ix. Reuse of Sewage Treatment Plant (STP) treated water.**

\*\*\*\*\*

**ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 2513  
ANSWERED IN THE LOK SABHA ON 03.08.2023**

\*\*\*\*\*

**The number of major coal-fuelled Thermal Power Plants (TPPs) that are operational in the country**

| Sl. No. | State          | Station Name              | Monitored Capacity as on 30.06.2023 CAP |
|---------|----------------|---------------------------|---|
| 1       | Andhra Pradesh | DAMODARAM SANJEEVAIAH TPS | 2400                                    |
| 2       |                | Dr. N.TATA RAO TPS        | 1760                                    |
| 3       |                | PAINAMPURAM TPP           | 1320                                    |
| 4       |                | RAYALASEEMA TPS           | 1650                                    |
| 5       |                | SGPL TPP                  | 1320                                    |
| 6       |                | SIMHADRI                  | 2000                                    |
| 7       |                | SIMHAPURI TPS             | 600                                     |
| 8       |                | THAMMINAPATNAM TPS        | 300                                     |
| 9       |                | VIZAG TPP                 | 1040                                    |
| 10      | Assam          | BONGAIGAON TPP            | 750                                     |
| 11      | Bihar          | BARAUNI TPS               | 710                                     |
| 12      |                | BARH STPS                 | 1980                                    |
| 13      |                | KAHALGAON TPS             | 2340                                    |
| 14      |                | MUZAFFARPUR TPS           | 390                                     |
| 15      |                | NABINAGAR STPP            | 1980                                    |
| 16      |                | NABINAGAR TPP             | 1000                                    |
| 17      | Chhattisgarh   | AKALTARA TPS              | 1800                                    |
| 18      |                | AVANTHA BHANDAR           | 600                                     |
| 19      |                | BALCO TPS                 | 600                                     |
| 20      |                | BANDAKHAR TPP             | 300                                     |
| 21      |                | BARADARHA TPS             | 1200                                    |
| 22      |                | BHILAI TPS                | 500                                     |
| 23      |                | BINJKOTE TPP              | 600                                     |
| 24      |                | CHAKABURA TPP             | 30                                      |
| 25      |                | DSPM TPS                  | 500                                     |
| 26      |                | KASAIPALLI TPP            | 270                                     |
| 27      |                | KATGHORA TPP              | 35                                      |
| 28      |                | KORBA STPS                | 2600                                    |
| 29      |                | KORBA-WEST TPS            | 1340                                    |
| 30      |                | LARA TPP                  | 1600                                    |
| 31      |                | MARWA TPS                 | 1000                                    |
| 32      |                | NAWAPARA TPP              | 600                                     |
| 33      |                | OP JINDAL TPS             | 1000                                    |
| 34      |                | PATHADI TPP               | 600                                     |
| 35      |                | RAIKHEDA TPP              | 1370                                    |
| 36      |                | RATIJA TPS                | 100                                     |
| 37      |                | SALORA TPP                | 135                                     |
| 38      |                | SIPAT STPS                | 2980                                    |
| 39      |                | SVPL TPP                  | 63                                      |
| 40      |                | SWASTIK KORBA TPP         | 25                                      |
| 41      |                | TAMNAR TPP                | 2400                                    |
| 42      |                | UCHPINDA TPP              | 1440                                    |
| 43      | Gujarat        | GANDHI NAGAR TPS          | 630                                     |
| 44      |                | MUNDRA TPS-I & II         | 2640                                    |
| 45      |                | MUNDRA TPS-III            | 1980                                    |

|     |                       |                                     |             |
|-----|-----------------------|-------------------------------------|-------------|
| 46  |                       | <b>MUNDRA UMTTP</b>                 | <b>4000</b> |
| 47  |                       | <b>SABARMATI (D-F STATIONS)</b>     | <b>362</b>  |
| 48  |                       | <b>SALAYA TPP</b>                   | <b>1200</b> |
| 49  |                       | <b>SIKKA REP. TPS</b>               | <b>500</b>  |
| 50  |                       | <b>UKAI TPS</b>                     | <b>1110</b> |
| 51  |                       | <b>WANAKBORI TPS</b>                | <b>2270</b> |
| 52  | <b>Haryana</b>        | <b>INDIRA GANDHI STPP</b>           | <b>1500</b> |
| 53  |                       | <b>MAHATMA GANDHI TPS</b>           | <b>1320</b> |
| 54  |                       | <b>PANIPAT TPS</b>                  | <b>710</b>  |
| 55  |                       | <b>RAJIV GANDHI TPS</b>             | <b>1200</b> |
| 56  |                       | <b>YAMUNA NAGAR TPS</b>             | <b>600</b>  |
| 57  | <b>Jharkhand</b>      | <b>BOKARO TPS `A` EXP</b>           | <b>500</b>  |
| 58  |                       | <b>CHANDRAPURA(DVC) TPS</b>         | <b>500</b>  |
| 59  |                       | <b>JOJOBBERA TPS</b>                | <b>240</b>  |
| 60  |                       | <b>KODARMA TPP</b>                  | <b>1000</b> |
| 61  |                       | <b>MAHADEV PRASAD STPP</b>          | <b>540</b>  |
| 62  |                       | <b>MAITHON RB TPP</b>               | <b>1050</b> |
| 63  |                       | <b>NORTH KARANPURA TPP</b>          | <b>660</b>  |
| 64  |                       | <b>TENUGHAT TPS</b>                 | <b>420</b>  |
| 65  | <b>Karnataka</b>      | <b>BELLARY TPS</b>                  | <b>1700</b> |
| 66  |                       | <b>KUDGI STPP</b>                   | <b>2400</b> |
| 67  |                       | <b>RAICHUR TPS</b>                  | <b>1720</b> |
| 68  |                       | <b>TORANGALLU TPS(SBU-I)</b>        | <b>260</b>  |
| 69  |                       | <b>TORANGALLU TPS(SBU-II)</b>       | <b>600</b>  |
| 70  |                       | <b>UDUPI TPP</b>                    | <b>1200</b> |
| 71  |                       | <b>YERMARUS TPP</b>                 | <b>1600</b> |
| 72  | <b>Madhya Pradesh</b> | <b>AMARKANTAK EXT TPS</b>           | <b>210</b>  |
| 73  |                       | <b>ANUPPUR TPP</b>                  | <b>1200</b> |
| 74  |                       | <b>BINA TPS</b>                     | <b>500</b>  |
| 75  |                       | <b>GADARWARA TPP</b>                | <b>1600</b> |
| 76  |                       | <b>KHARGONE STPP</b>                | <b>1320</b> |
| 77  |                       | <b>MAHAN TPP</b>                    | <b>1200</b> |
| 78  |                       | <b>NIGRI TPP</b>                    | <b>1320</b> |
| 79  |                       | <b>NIWARI TPP</b>                   | <b>90</b>   |
| 80  |                       | <b>SANJAY GANDHI TPS</b>            | <b>1340</b> |
| 81  |                       | <b>SASAN UMTTP</b>                  | <b>3960</b> |
| 82  |                       | <b>SATPURA TPS</b>                  | <b>1330</b> |
| 83  |                       | <b>SEIONI TPP</b>                   | <b>600</b>  |
| 84  |                       | <b>SHREE SINGAJI TPP</b>            | <b>2520</b> |
| 85  |                       | <b>VINDHYACHAL STPS</b>             | <b>4760</b> |
| 86  | <b>Maharashtra</b>    | <b>AMRAVATI TPS</b>                 | <b>1350</b> |
| 87  |                       | <b>BELA TPS</b>                     | <b>270</b>  |
| 88  |                       | <b>BHUSAWAL TPS</b>                 | <b>1210</b> |
| 89  |                       | <b>BUTIBORI TPP</b>                 | <b>600</b>  |
| 90  |                       | <b>CHANDRAPUR(MAHARASHTRA) STPS</b> | <b>2920</b> |
| 91  |                       | <b>DAHANU TPS</b>                   | <b>500</b>  |
| 92  |                       | <b>DHARIWAL TPP</b>                 | <b>600</b>  |
| 93  |                       | <b>GEPL TPP Ph-I</b>                | <b>120</b>  |
| 94  |                       | <b>GMR WARORA TPS</b>               | <b>600</b>  |
| 95  |                       | <b>JSW RATNAGIRI TPP</b>            | <b>300</b>  |
| 96  |                       | <b>KHAPARKHEDA TPS</b>              | <b>1340</b> |
| 97  |                       | <b>KORADI TPS</b>                   | <b>2190</b> |
| 98  |                       | <b>MAUDA TPS</b>                    | <b>2320</b> |
| 99  |                       | <b>MIHAN TPS</b>                    | <b>246</b>  |
| 100 |                       | <b>NASIK (P) TPS</b>                | <b>1350</b> |

|     |                      |                                 |             |
|-----|----------------------|---------------------------------|-------------|
| 101 |                      | <b>NASIK TPS</b>                | <b>630</b>  |
| 102 |                      | <b>PARAS TPS</b>                | <b>500</b>  |
| 103 |                      | <b>PARLI TPS</b>                | <b>750</b>  |
| 104 |                      | <b>SHIRPUR TPP</b>              | <b>150</b>  |
| 105 |                      | <b>SOLAPUR STPS</b>             | <b>1320</b> |
| 106 |                      | <b>TIRORA TPS</b>               | <b>3300</b> |
| 107 |                      | <b>TROMBAY TPS</b>              | <b>750</b>  |
| 108 |                      | <b>WARDHA WARORA TPP</b>        | <b>540</b>  |
| 109 | <b>Odisha</b>        | <b>DARLIPALI STPS</b>           | <b>1600</b> |
| 110 |                      | <b>DERANG TPP</b>               | <b>1200</b> |
| 111 |                      | <b>IB VALLEY TPS</b>            | <b>1740</b> |
| 112 |                      | <b>KAMALANGA TPS</b>            | <b>1050</b> |
| 113 |                      | <b>TALCHER STPS</b>             | <b>3000</b> |
| 114 |                      | <b>UTKAL TPP (IND BARATH)</b>   | <b>350</b>  |
| 115 |                      | <b>VEDANTA TPP</b>              | <b>600</b>  |
| 116 | <b>Punjab</b>        | <b>GH TPS (LEH.MOH.)</b>        | <b>920</b>  |
| 117 |                      | <b>GOINDWAL SAHIB TPP</b>       | <b>540</b>  |
| 118 |                      | <b>RAJPURA TPP</b>              | <b>1400</b> |
| 119 |                      | <b>ROPAR TPS</b>                | <b>840</b>  |
| 120 |                      | <b>TALWANDI SABO TPP</b>        | <b>1980</b> |
| 121 | <b>Rajasthan</b>     | <b>CHHABRA-I PH-1 TPP</b>       | <b>500</b>  |
| 122 |                      | <b>CHHABRA-I PH-2 TPP</b>       | <b>500</b>  |
| 123 |                      | <b>CHHABRA-II TPP</b>           | <b>1320</b> |
| 124 |                      | <b>KALISINDH TPS</b>            | <b>1200</b> |
| 125 |                      | <b>KAWAI TPS</b>                | <b>1320</b> |
| 126 |                      | <b>KOTA TPS</b>                 | <b>1240</b> |
| 127 |                      | <b>SURATGARH STPS</b>           | <b>1320</b> |
| 128 |                      | <b>SURATGARH TPS</b>            | <b>1500</b> |
| 129 | <b>Tamil Nadu</b>    | <b>ITPCL TPP</b>                | <b>1200</b> |
| 130 |                      | <b>METTUR TPS</b>               | <b>840</b>  |
| 131 |                      | <b>METTUR TPS - II</b>          | <b>600</b>  |
| 132 |                      | <b>MUTHIARA TPP</b>             | <b>1200</b> |
| 133 |                      | <b>NORTH CHENNAI TPS</b>        | <b>1830</b> |
| 134 |                      | <b>NTPL TUTICORIN TPP</b>       | <b>1000</b> |
| 135 |                      | <b>TUTICORIN (P) TPP</b>        | <b>300</b>  |
| 136 |                      | <b>TUTICORIN TPP ST-IV</b>      | <b>525</b>  |
| 137 |                      | <b>TUTICORIN TPS</b>            | <b>1050</b> |
| 138 |                      | <b>VALLUR TPP</b>               | <b>1500</b> |
| 139 | <b>Telangana</b>     | <b>BHADRADRI TPP</b>            | <b>1080</b> |
| 140 |                      | <b>KAKATIYA TPS</b>             | <b>1100</b> |
| 141 |                      | <b>KOTHAGUDEM TPS (NEW)</b>     | <b>1000</b> |
| 142 |                      | <b>KOTHAGUDEM TPS (STAGE-7)</b> | <b>800</b>  |
| 143 |                      | <b>RAMAGUNDEM STPS</b>          | <b>2600</b> |
| 144 |                      | <b>RAMAGUNDEM-B TPS</b>         | <b>62.5</b> |
| 145 |                      | <b>SINGARENI TPP</b>            | <b>1200</b> |
| 146 | <b>Uttar Pradesh</b> | <b>ANPARA C TPS</b>             | <b>1200</b> |
| 147 |                      | <b>ANPARA TPS</b>               | <b>2630</b> |
| 148 |                      | <b>BARKHERA TPS</b>             | <b>90</b>   |
| 149 |                      | <b>DADRI (NCTPP)</b>            | <b>1820</b> |
| 150 |                      | <b>HARDUAGANJ TPS</b>           | <b>1265</b> |
| 151 |                      | <b>KHAMBARKHERA TPS</b>         | <b>90</b>   |
| 152 |                      | <b>KUNDARKI TPS</b>             | <b>90</b>   |
| 153 |                      | <b>LALITPUR TPS</b>             | <b>1980</b> |
| 154 |                      | <b>MAQSOODPUR TPS</b>           | <b>90</b>   |

|     |             |                    |                 |
|-----|-------------|--------------------|-----------------|
| 155 |             | MEJA STPP          | 1320            |
| 156 |             | OBRA TPS           | 1000            |
| 157 |             | PARICHHA TPS       | 1140            |
| 158 |             | PRAYAGRAJ TPP      | 1980            |
| 159 |             | RIHAND STPS        | 3000            |
| 160 |             | ROSA TPP Ph-I      | 1200            |
| 161 |             | SINGRAULI STPS     | 2000            |
| 162 |             | TANDA TPS          | 1760            |
| 163 |             | UNCHAHAR TPS       | 1550            |
| 164 |             | UTRAULA TPS        | 90              |
| 165 | West Bengal | BAKRESWAR TPS      | 1050            |
| 166 |             | BANDEL TPS         | 270             |
| 167 |             | BUDGE BUDGE TPS    | 750             |
| 168 |             | D.P.L. TPS         | 550             |
| 169 |             | DISHERGARH TPP     | 12              |
| 170 |             | DURGAPUR STEEL TPS | 1000            |
| 171 |             | FARAKKA STPS       | 2100            |
| 172 |             | HALDIA TPP         | 600             |
| 173 |             | HIRANMAYE TPP      | 300             |
| 174 |             | KOLAGHAT TPS       | 840             |
| 175 |             | MEJIA TPS          | 2340            |
| 176 |             | RAGHUNATHPUR TPP   | 1200            |
| 177 |             | SAGARDIGHI TPS     | 1600            |
| 178 |             | SANTALDIH TPS      | 500             |
| 179 |             | SOUTHERN REPL. TPS | 135             |
| 180 |             | TITAGARH TPS       | 240             |
|     |             | <b>Grand Total</b> | <b>205235.5</b> |

\*\*\*\*\*

**ANNEXURE-II**

**ANNEXURE REFERRED IN REPLY TO PARTS (b) TO (d) OF UNSTARRED QUESTION NO. 2513 ANSWERED IN THE LOK SABHA ON 03.08.2023**

\*\*\*\*\*

**The details of numbers of coal-based TPPs constructed/ under construction/ Planned during the last five years and the current year, year and state wise:**

| Sl. No | State          | Project Name               | Financial Year | Sector | Implementing Agency         | Unit No. | Targeted Capacity (MW) | Actual Date of Commissioning | Capacity Achieved (MW) |
|--------|----------------|----------------------------|----------------|--------|-----------------------------|----------|------------------------|------------------------------|------------------------|
| 1      | Assam          | Bongaigaon TPP             | FY 18-19       | CS     | NTPC                        | U-3      | 250                    | 26.03.2019                   | 250                    |
| 2      | Bihar          | Nabi Nagar TPP             | FY 18-19       | CS     | BRBCL (JV of NTPC & Rly)    | U-3      | 250                    | 26.02.2019                   | 250                    |
| 3      | Bihar          | Nabi Nagar STPP            | FY 18-19       | CS     | NPGCL (JV of NTPC & BSPGCL) | U-1      | 660                    | Under Construction           |                        |
| 4      | Chhattisgarh   | Uchpinda TPP               | FY 18-19       | PS     | R K M POWERGEN              | U-4      | -----                  | 20.03.2019                   | 360                    |
| 5      | Karnataka      | Yelahanka CCPP             | FY 18-19       | SS     | KPCL                        | GT+ST    | 370                    | Under Construction           | -                      |
| 6      | Maharashtra    | Solapur STPP               | FY 18-19       | CS     | NTPC                        | U-2      | -----                  | 29.03.2019                   | 660                    |
| 7      | Madhya Pradesh | Gadarwara TPP              | FY 18-19       | CS     | NTPC                        | U-1      | 800                    | 29.03.2019                   | 800                    |
| 8      | Madhya Pradesh | Shri Singhaji TPP, St-II   | FY 18-19       | SS     | MPPGCL                      | U-3      | 660                    | 18.11.2018                   | 660                    |
| 9      | Madhya Pradesh | Shri Singhaji TPP, St-II   | FY 18-19       | SS     | MPPGCL                      | U-4      | 660                    | 27.03.2019                   | 660                    |
| 10     | Madhya Pradesh | Mahan TPP                  | FY 18-19       | PS     | ESSAR                       | U-2      | -----                  | 07.10.2018                   | 600                    |
| 11     | Odisha         | Darlipalli STPP, St-I      | FY 18-19       | CS     | NTPC                        | U-1      | 800                    | Under Construction           | -                      |
| 12     | Odisha         | IbValley TPP               | FY 18-19       | SS     | OPGC                        | U-3      | 660                    | Under Construction           | -                      |
| 13     | Rajasthan      | Chhabra TPP Extn           | FY 18-19       | SS     | RRVUNL                      | U-6      | 660                    | 29.03.2019                   | 660                    |
| 14     | Rajasthan      | Suratgarh SCTPP            | FY 18-19       | SS     | RRVUNL                      | U-7      | 660                    | Under Construction           | -                      |
| 15     | Telangana      | Kothagudem TPS, St-VII     | FY 18-19       | SS     | TSGENCO                     | U-1      | 800                    | 26.12.2019                   | 800                    |
| 16     | West Bengal    | Dishergarh TPS             | FY 18-19       | PS     | IPCL                        | U-1      | -----                  | 27.03.2019                   | 12                     |
| 17     | Andhra Pradesh | Dr.Narla Tata Rao TPS St-V | FY 19-20       | SS     | APGENCO                     | U-8      | 800                    | Under Construction           | -                      |
| 18     | Bihar          | Nabi Nagar STPP            | FY 19-20       | CS     | NPGCL (JV of NTPC & BSPGCL) | U-1      | 660                    | 12.07.2019                   | 660                    |
| 19     | Chhattisgarh   | Lara STPP                  | FY 19-20       | CS     | NTPC                        | U-2      | 800                    | Under Construction           | -                      |
| 20     | Gujarat        | Wanakbori TPS Extn.        | FY 19-20       | SS     | GSECL                       | U-8      | 800                    | 12.10.2019                   | 800                    |
| 21     | Madhya Pradesh | Gadarwara STPP, St-I       | FY 19-20       | CS     | NTPC                        | U-2      | 800                    | Under Construction           | -                      |

|    |                |                                     |            |    |                              |     |       |                    |     |
|----|----------------|-------------------------------------|------------|----|------------------------------|-----|-------|--------------------|-----|
| 22 | Madhya Pradesh | Khargone STPP                       | FY 19-20   | CS | NTPC                         | U-1 | 660   | 29.09.2019         | 660 |
| 23 | Madhya Pradesh | Khargone STPP                       | FY 19-20   | CS | NTPC                         | U-2 | 660   | 24.03.2020         | 660 |
| 24 | Madhya Pradesh | Niwari TPP                          | FY 19-20   | PS | BLA Power Ltd                | U-2 | ----- | 06.06.2019         | 45  |
| 25 | Odisha         | Darlipali STPP, St-I                | FY 19-20   | CS | NTPC                         | U-1 | 800   | 30.12.2019         | 800 |
| 26 | Odisha         | Ib valley TPP                       | FY 19-20   | SS | OPGC                         | U-3 | 660   | 01.07.2019         | 660 |
| 27 | Odisha         | Ib valley TPP                       | FY 19-20   | SS | OPGC                         | U-4 | 660   | 17.08.2019         | 660 |
| 28 | Rajasthan      | Suratgarh SCTPP                     | FY 19-20   | SS | RRVUNL                       | U-7 | 660   | 15.03.2020         | 660 |
| 29 | Tamil Nadu     | Neyveli New TPP                     | FY 19-20   | CS | NLC                          | U-1 | 500   | 21.12.2019         | 500 |
| 30 | Tamil Nadu     | Neyveli New TPP                     | FY 19-20   | CS | NLC                          | U-2 | 500   | Under Construction | -   |
| 31 | Telangana      | Bhadradi TPP                        | FY 19-20   | SS | TSGENCO                      | U-1 | 270   | Under Construction | -   |
| 32 | Uttar Pradesh  | Tanda TPP, St - II                  | FY 19-20   | CS | NTPC                         | U-1 | 660   | 28.09.2019         | 660 |
| 33 | Andhra Pradesh | Sri DamodaramSanjeevaiah TPP, St-II | FY 2020-21 | SS | APPDCL                       | U-1 | 800   | Under Construction | -   |
| 34 | Bihar          | Barh STPP, St - I                   | FY 2020-21 | CS | NTPC                         | U-1 | 660   | Under Construction | -   |
| 35 | Bihar          | Nabi Nagar STPP                     | FY 2020-21 | CS | NPGCL (JV of NTPC & BSPGCL)  | U-2 | 660   | 31.03.2021         | 660 |
| 36 | Bihar          | Nabi Nagar TPP                      | FY 2020-21 | CS | BRBCL (JV of NTPC & Railway) | U-4 | 250   | Under Construction | -   |
| 37 | Chhattisgarh   | Lara STPP                           | FY 2020-21 | CS | NTPC                         | U-2 | 800   | 12.07.2020         | 800 |
| 38 | Madhya Pradesh | Gadarwara STPP                      | FY 2020-21 | CS | NTPC                         | U-2 | 800   | 16.02.2021         | 800 |
| 39 | Odisha         | Darlipalli STPP, St-I               | FY 2020-21 | CS | NTPC                         | U-2 | 800   | Under Construction | -   |
| 40 | Rajasthan      | Suratgarh SCTPP                     | FY 2020-21 | SS | RRVUNL                       | U-8 | 660   | Under Construction | -   |
| 41 | Tamil Nadu     | Neyveli New TPP                     | FY 2020-21 | CS | NLC                          | U-2 | 500   | 03.02.2021         | 500 |
| 42 | Tamil Nadu     | North Chennai TPP, St-III           | FY 2020-21 | SS | TANGEDCO                     | U-1 | 800   | Under Construction | -   |
| 43 | Tamil Nadu     | Tuticorin TPP, St- IV               | FY 2020-21 | PS | SEPC Power P. Ltd            | U-1 | 525   | Under Construction | -   |
| 44 | Telangana      | Bhadradi TPP                        | FY 2020-21 | SS | TSGENCO                      | U-1 | 270   | 05.06.2020         | 270 |
| 45 | Telangana      | Bhadradi TPP                        | FY 2020-21 | SS | TSGENCO                      | U-2 | 270   | 07.12.2020         | 270 |
| 46 | Telangana      | Bhadradi TPP                        | FY 2020-21 | SS | TSGENCO                      | U-3 | 270   | 26.03.2021         | 270 |



|    |                |                                      |            |    |                               |     |     |                    |     |
|----|----------------|--------------------------------------|------------|----|-------------------------------|-----|-----|--------------------|-----|
| 47 | Uttar Pradesh  | Meja STPP                            | FY 2020-21 | CS | MUNPL (JV of NTPC & UPRVUNL)  | U-2 | 660 | 12.01.2021         | 660 |
| 48 | Uttar Pradesh  | Tanda TPP St- II                     | FY 2020-21 | CS | NTPC                          | U-6 | 660 | 31.03.2021         | 660 |
| 49 | Bihar          | Barh STPP, St-I                      | FY 2021-22 | CS | NTPC                          | U-1 | 660 | 30.10.2021         | 660 |
| 50 | Bihar          | Nabi Nagar TPP                       | FY 2021-22 | CS | BRBCL (JV of NTPC & Railways) | U-4 | 250 | 10.11.2021         | 250 |
| 51 | Bihar          | Nabi Nagar STPP                      | FY 2021-22 | CS | NPGCL (JV of NTPC & BSPGCL)   | U-3 | 660 | 06.03.2022         | 660 |
| 52 | Bihar          | Barh STPP, St-I                      | FY 2021-22 | CS | NTPC                          | U-2 | 660 | Under Construction | -   |
| 53 | Jharkhand      | North Karanpura STPP                 | FY 2021-22 | CS | NTPC                          | U-1 | 660 | Under Construction | -   |
| 54 | Odisha         | Darlipalli STPP, St-I                | FY 2021-22 | CS | NTPC                          | U-2 | 800 | 21.07.2021         | 800 |
| 55 | Odisha         | Rourkela TPP-II Expansion            | FY 2021-22 | CS | NSPCL (JV of NTPC & SAIL)     | U-1 | 250 | Under Construction | -   |
| 56 | Rajasthan      | Suratgarh SCTPP                      | FY 2021-22 | SS | RRVUNL                        | U-8 | 660 | 06.10.2021         | 660 |
| 57 | Tamil Nadu     | Tuticorin TPP, St-IV                 | FY 2021-22 | PS | SEPC                          | U-1 | 525 | 30.11.2021         | 525 |
| 58 | Telangana      | Telangana STPP, St- I                | FY 2021-22 | CS | NTPC                          | U-1 | 800 | Under Construction | -   |
| 59 | Telangana      | Bhadradi TPP                         | FY 2021-22 | SS | TSGENCO                       | U-4 | 270 | 09.01.2022         | 270 |
| 60 | Uttar Pradesh  | Ghatampur TPP                        | FY 2021-22 | CS | NUPPL (JV of NLC & UPRVUNL)   | U-1 | 660 | Under Construction | -   |
| 61 | Uttar Pradesh  | Harduaganj TPS, Exp-II               | FY 2021-22 | SS | UPRVUNL                       | U-1 | 660 | 29.01.2022         | 660 |
| 62 | Andhra Pradesh | Sri Damodaram Sanjeevaiah TPP, St-II | FY 2022-23 | SS | APPDCL                        | U-1 | 800 | 09.03.2023         | 800 |
| 63 | Jharkhand      | North Karanpura STPP                 | FY 2022-23 | CS | NTPC                          | U-1 | 660 | 18.01.2023         | 660 |
| 64 | Telangana      | Telangana STPP, St- I                | FY 2022-23 | CS | NTPC                          | U-2 | 800 | Under Construction | -   |

\*\*\*\*\*

## ANNEXURE-III

## ANNEXURE REFERRED IN REPLY TO PARTS (b) TO (d) OF UNSTARRED QUESTION NO. 2513 ANSWERED IN THE LOK SABHA ON 03.08.2023

\*\*\*\*\*

| The details of Coal Fuelled TPPs utilized capacity commissioned during the last five (5) years along with water consumption (m3/MWh): |                |                          |        |                             |          |                        |                               |                        |                   |                            |                   |                            |                   |                            |                   |                            |                   |                            |
|---|----------------|--------------------------|--------|-----------------------------|----------|------------------------|-------------------------------|------------------------|-------------------|----------------------------|-------------------|----------------------------|-------------------|----------------------------|-------------------|----------------------------|-------------------|----------------------------|
| Sl. No  | State          | Project Name             | Sector | Implementing Agency         | Unit No. | Targeted Capacity (MW) | Actual Date of Commission-ing | Capacity Achieved (MW) | 2018-19           |                            | 2019-20           |                            | 2020-21           |                            | 2021-22           |                            | 2022-23           |                            |
|   |                |                          |        |                             |          |                        |                               |                        | Generation in MUs | Water Consumption (m3/MWh) | Generation in MUs | Water Consumption (m3/MWh) | Generation in MUs | Water Consumption (m3/MWh) | Generation in MUs | Water Consumption (m3/MWh) | Generation in MUs | Water Consumption (m3/MWh) |
| FY 2018-19  |                |                          |        |                             |          |                        |                               |                        |                   |                            |                   |                            |                   |                            |                   |                            |                   |                            |
| 1   | Assam          | Bongaigaon TPP           | CS     | NTPC                        | U-3      | 250                    | 26.03.2019                    | 250                    | 1.88              | \$                         | 1279.38           | 3.08                       | 745.39            | 2.77                       | 1456.66           | 2.67                       | 1627.78           | \$                         |
| 2   | Bihar          | Nabi Nagar TPP           | CS     | BRBCL (JV of NTPC & Rly)    | U-3      | 250                    | 26.02.2019                    | 250                    | 101.9             | \$                         | 1740.15           | \$                         | 1368.67           | 2.57                       | 1749.26           | 2.71                       | 1545.33           | \$                         |
| 3   | Chhattisgarh   | Uchpinda TPP             | PS     | R K M POWERGEN              | U-4      | -----                  | 20.03.2019                    | 360                    | 35.3              | \$                         | 0                 | \$                         | 365.8             | \$                         | 1092.77           | 2.24                       | 705.23            | 2.2                        |
| 4   | Maharashtra    | Solapur STPP             | CS     | NTPC                        | U-2      | -----                  | 29.03.2019                    | 660                    | 0                 | \$                         | 212.94            | 8.21                       | 1614.27           | \$                         | 2565.74           | 2.97                       | 2847.37           | \$                         |
| 5   | Madhya Pradesh | Gadarwara TPP            | CS     | NTPC                        | U-1      | 800                    | 29.03.2019                    | 800                    | 0                 | \$                         | 1076.12           | \$                         | 3931.85           | 3.44                       | 3916.78           | 2.98                       | 4743.03           | \$                         |
| 6   | Madhya Pradesh | Shri Singhaji TPP, St-II | SS     | MPPGCL                      | U-3      | 660                    | 18.11.2018                    | 660                    | 1559.11           | \$                         | 2165.16           | \$                         | 281.44            | 4.71                       | 2671.98           | 4.51                       | 2937.25           | \$                         |
| 7   | Madhya Pradesh | Shri Singhaji TPP, St-II | SS     | MPPGCL                      | U-4      | 660                    | 27.03.2019                    | 660                    | 39.23             | \$                         | 2201.39           | \$                         | 571.44            | 4.71                       | 2030.64           | 4.46                       | 3474.21           | \$                         |
| 8   | Madhya Pradesh | Mahan TPP                | PS     | ESSAR                       | U-2      | -----                  | 07.10.2018                    | 600                    | 375.03            | \$                         | 2268.46           | \$                         | 1121.04           | 2.43                       | 1619.83           | 2.74                       | 1979.06           | \$                         |
| 9   | Rajasthan      | Chhabra TPP Extn         | SS     | RRVUNL                      | U-6      | 660                    | 29.03.2019                    | 660                    | 42.22             | \$                         | 3673.66           | \$                         | 3977.2            | 2.22                       | 3207.94           | \$                         | 3614.9            | \$                         |
| 10  | Telangana      | Kothagudem TPS, St-VII   | SS     | TSGENCO                     | U-1      | 800                    | 26.12.2019                    | 800                    | 1666.74           | \$                         | 3578.51           | \$                         | 6109.56           | 3.07                       | 5856.82           | \$                         | 4211.26           | \$                         |
| 11  | West Bengal    | Dishergarh TPS           | PS     | IPCL                        | U-1      | -----                  | 27.03.2019                    | 12                     | 0                 | \$                         | 0                 | \$                         | 0                 | \$                         | 0                 | \$                         | 43.5              | \$                         |
| Sub total (2018-19)   |                |                          |        |                             |          | 4,080.00               |                               | 5,712.00               |                   |                            |                   |                            |                   |                            |                   |                            |                   |                            |
| FY 2019-20  |                |                          |        |                             |          |                        |                               |                        |                   |                            |                   |                            |                   |                            |                   |                            |                   |                            |
| 1   | Bihar          | Nabi Nagar STPP          | CS     | NPGCL (JV of NTPC & BSPGCL) | U-1      | 660                    | 12.07.2019                    | 660                    | 0                 | \$                         | 2616.7            | \$                         | 4734.79           | 2.57                       | 4747.8            | 2.45                       | 3973.88           | \$                         |
| 2   | Gujarat        | Wanakbori TPS Extn.      | SS     | GSECL                       | U-8      | 800                    | 12.10.2019                    | 800                    | 0                 | \$                         | 533.99            | 3.91                       | 3392.68           | 3.94                       | 4561.6            | 1.79                       | 4148.65           | \$                         |
| 3   | Madhya Pradesh | Khargone STPP            | CS     | NTPC                        | 1        | 660                    | 29.09.2019                    | 660                    | 0                 | \$                         | 882.35            | \$                         | 2279.02           | \$                         | 3211.63           | 2.94                       | 3243.73           | \$                         |
| 4   | Madhya Pradesh | Khargone STPP            | CS     | NTPC                        | 2        | 660                    | 24.03.2020                    | 660                    | 0                 | \$                         | 76.76             | \$                         | 2061.11           | \$                         | 3132.34           | 2.94                       | 2386.72           | \$                         |
| 5   | Madhya Pradesh | Niwari TPP               | PS     | BLA Power Ltd               | 2        | -----                  | 06.06.2019                    | 45                     | 0                 | \$                         | 2.48              | \$                         | 0.17              | \$                         | 15.39             | \$                         | 248.87            | \$                         |
| 6   | Odisha         | Darlipali STPP, St-I     | CS     | NTPC                        | 1        | 800                    | 30.12.2019                    | 800                    | 0                 | \$                         | 421.11            | \$                         | 4775.89           | 2.97                       | 5577.48           | 2.99                       | 5146.37           | \$                         |
| 7   | Odisha         | Ib valley TPP            | SS     | OPGC                        | 3        | 660                    | 01.07.2019                    | 660                    | 0                 | \$                         | 2069.3            | \$                         | 2364.69           | \$                         | 3281.21           | \$                         | 4573.53           | \$                         |

|                       |                |                                      |    |                               |     |           |            |           |   |      |         |    |         |      |         |      |         |         |    |
|-----------------------|----------------|--------------------------------------|----|-------------------------------|-----|-----------|------------|-----------|---|------|---------|----|---------|------|---------|------|---------|---------|----|
| 8                     | Odisha         | Ib valley TPP                        | SS | OPGC                          | 4   | 660       | 17.08.2019 | 660       | 0 | \$   | 1782.98 | \$ | 3602.76 | \$   | 3962.36 | \$   | 4357.39 | \$      |    |
| 9                     | Rajasthan      | Suratgarh SCTPP                      | SS | RRVUNL                        | 7   | 660       | 15.03.2020 | 660       | 0 | 0.49 | 0       | \$ | 1454.18 | 3.8  | 3185.06 | 4.48 | 1572.1  | 4.5     |    |
| 10                    | Tamil Nadu     | Neyveli New TPP                      | CS | NLC                           | 1   | 500       | 21.12.2019 | 500       | 0 | \$   | 547.87  | \$ | 2927.65 | \$   | 3264.69 | 2.42 | 3609.18 | \$      |    |
| 11                    | Uttar Pradesh  | Tanda TPP, St - II                   | CS | NTPC                          | 1   | 660       | 28.09.2019 | 660       | 0 | \$   | 1899.08 | \$ | 4171.98 | 3.72 | 3870.51 | 3.26 | 4376.68 | \$      |    |
| Sub total (2019-20)   |                |                                      |    |                               |     | 6,720.00  |            | 6,765.00  |   |      |         |    |         |      |         |      |         |         |    |
| FY 2020-21            |                |                                      |    |                               |     |           |            |           |   |      |         |    |         |      |         |      |         |         |    |
| 1                     | Bihar          | Nabi Nagar STPP                      | CS | NPGCL (JV of NTPC & BSPGCL)   | U-2 | 660       | 31.03.2021 | 660       | 0 | \$   | 0       | \$ | 0       | \$   | 3326.46 | \$   | 4973.66 | \$      |    |
| 2                     | Chhattisgarh   | Lara STPP                            | CS | NTPC                          | U-2 | 800       | 12.07.2020 | 800       | 0 | \$   | 0       | \$ | 2330.91 | 3.36 | 5866.67 | 3.37 | 5868.68 | \$      |    |
| 3                     | Madhya Pradesh | Gadarwara STPP                       | CS | NTPC                          | U-2 | 800       | 16.02.2021 | 800       | 0 | \$   | 0       | \$ | 565.15  | 3.44 | 4048.89 | 2.98 | 4647.91 | \$      |    |
| 4                     | Tamil Nadu     | Neyveli New TPP                      | CS | NLC                           | U-2 | 500       | 03.02.2021 | 500       | 0 | \$   | 0       | \$ | 422.19  | 2.42 | 2913.24 | \$   | 3547.01 | \$      |    |
| 5                     | Telangana      | Bhadradi TPP                         | SS | TSGENCO                       | U-1 | 270       | 05.06.2020 | 270       | 0 | \$   | 0       | \$ | 1215.8  | \$   | 3123.63 | 3    | 2347.44 | 3.93    |    |
| 6                     | Telangana      | Bhadradi TPP                         | SS | TSGENCO                       | U-2 | 270       | 07.12.2020 | 270       | 0 | \$   | 0       | \$ | 436.35  | \$   | 970.43  | 3    | 1291.52 | 3.93    |    |
| 7                     | Telangana      | Bhadradi TPP                         | SS | TSGENCO                       | U-3 | 270       | 26.03.2021 | 270       | 0 | \$   | 0       | \$ | 18.6    | \$   | 886.3   | 3    | 1234.71 | 3.93    |    |
| 8                     | Uttar Pradesh  | Meja STPP                            | CS | MUNPL (JV of NTPC & UPRVUNL)  | U-2 | 660       | 12.01.2021 | 660       | 0 | \$   | \$      | \$ | \$      | \$   | \$      | \$   | \$      | 3091.26 | \$ |
| 9                     | Uttar Pradesh  | Tanda TPP St- II                     | CS | NTPC                          | U-6 | 660       | 31.03.2021 | 660       | 0 | \$   | 0       | \$ | 0       | 3.72 | 3289.01 | 3.26 | 3960.48 | \$      |    |
| Sub total (2020-21)   |                |                                      |    |                               |     | 4,890.00  |            | 4,890.00  |   |      |         |    |         |      |         |      |         |         |    |
| FY 2021-22            |                |                                      |    |                               |     |           |            |           |   |      |         |    |         |      |         |      |         |         |    |
| 1                     | Bihar          | Barh STPP, St-I                      | CS | NTPC                          | U-1 | 660       | 30.10.2021 | 660       | 0 | \$   | 0       | \$ | 0       | \$   | 1369.29 | 2.83 | 4063.97 | \$      |    |
| 2                     | Bihar          | Nabi Nagar TPP                       | CS | BRBCL (JV of NTPC & Railways) | U-4 | 250       | 10.11.2021 | 250       | 0 | \$   | 0       | \$ | 0       | \$   | 534.46  | \$   | 1904.48 | \$      |    |
| 3                     | Bihar          | Nabi Nagar STPP                      | CS | NPGCL (JV of NTPC & BSPGCL)   | U-3 | 660       | 06.03.2022 | 660       | 0 | \$   | 0       | \$ | 0       | \$   | 63.95   | 2.45 | 3977.13 | \$      |    |
| 4                     | Odisha         | Darlipalli STPP, St-I                | CS | NTPC                          | U-2 | 800       | 21.07.2021 | 800       | 0 | \$   | 0       | \$ | 0       | \$   | 3551.94 | \$   | 6171.2  | \$      |    |
| 5                     | Rajasthan      | Suratgarh SCTPP                      | SS | RRVUNL                        | U-8 | 660       | 06.10.2021 | 660       | 0 | \$   | 0       | \$ | 0       | \$   | 1289.13 | 4.48 | 3111.78 | 4.5     |    |
| 6                     | Tamil Nadu     | Tuticorin TPP, St-IV                 | PS | SEPC                          | U-1 | 525       | 30.11.2021 | 525       | 0 | \$   | 0       | \$ | 0       | \$   | 0       | \$   | 922.46  | \$      |    |
| 7                     | Telangana      | Bhadradi TPP                         | SS | TSGENCO                       | U-4 | 270       | 09.01.2022 | 270       | 0 | \$   | 0       | \$ | 0       | \$   | 118.13  | 3    | 1263.2  | 3.93    |    |
| 8                     | Uttar Pradesh  | Harduaganj TPS, Exp-II               | SS | UPRVUNL                       | U-1 | 660       | 29.01.2022 | 660       | 0 | \$   | 0       | \$ | 0       | \$   | 136.01  | \$   | 3124.95 | \$      |    |
| Sub Total (2021-22)   |                |                                      |    |                               |     | 4,485     |            | 4,485     |   |      |         |    |         |      |         |      |         |         |    |
| FY 2022-23            |                |                                      |    |                               |     |           |            |           |   |      |         |    |         |      |         |      |         |         |    |
| 1                     | Andhra Pradesh | Sri Damodaram Sanjeevaiah TPP, St-II | SS | APPDCL                        | U-3 | 800       | 09.03.2023 | 800       | 0 | \$   | 0       | \$ | 0       | \$   | 0       | \$   | 0       | 3.04    |    |
| 2                     | Jharkhand      | North Karanpura STPP                 | CS | NTPC                          | U-1 | 660       | 18.01.2023 | 660       | 0 | \$   | 0       | \$ | 0       | \$   | 0       | \$   | 499.32  | \$      |    |
| Sub Total (2022-23)   |                |                                      |    |                               |     | 1,460     |            | 1,460     |   |      |         |    |         |      |         |      |         |         |    |
| Grand Total (2018-23) |                |                                      |    |                               |     | 21,635.00 |            | 23,312.00 |   |      |         |    |         |      |         |      |         |         |    |

**Note:**

1. \$ Data is not available.
2. Water Consumption (m3/MWh) data for the year 2018-19, 2019-20 and 2020-21 is available only station wise (not unit wise)

\*\*\*\*\*

