

Annexure-I

**Pro-forma for furnishing Actual annual performance/operational data for the coal/lignite based thermal generating stations for the 5-year period
from 2012-13 to 2016-17**

| Sl.No. | Particulars | Units | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | Basis of Information/ Methodology/ Remarks |
|---------|---|-----------|---|---------|---------|---------|---------|---|
| 1 | Name of Company | | NTPC Ltd. | | | | | |
| 2 | Name of Station/ Pit head or Non- Pit head | | Feroz Gandhi Unchahar Thermal Power Station Stage-I (Non Pit-Head) | | | | | |
| 3 | Installed Capacity and Configuration | MW | 2 X 210 = 420 MW | | | | | |
| 4 | Rated Steam Parameters (Also state the type of Steam turbine and Boiler) | | SH Steam Parameters : 155 Ksc/ 540 Deg C RH Steam Parameters : 36.1 / 540 DegC | | | | | |
| 5 | Type of BFP | | Electrical Driven | | | | | |
| 6 | Circulating water system | | Open cycle for certain period / Closed Cycle | | | | | |
| 7 | Any other Site specific feature | | | | | | | |
| 8 | Fuels : | | | | | | | |
| 8.1 | Primary Fuel : | | Coal/ Lignite | | | | | For the Station (1050 MW) Requirement has been worked out at 90% PLF |
| 8.1.1 | Annual Allocation or/and Requirement | | Annual allocation through FSA dated 15.07.2009 with CCL for Unchahar- I to III - 3.9 MMT Annual allocation through modified FSA dated 24.12.2013 with BCCL for Unchahar- I to III - 1.5 MMT Allocation through MOU dated 22.07.2014 with NCL - 3.0 MMT Annual Requirement : 6.62 | | | | | |
| 8.1.2 | Sources of supply/ procurement along with contracted quantity and grade of coal | | BCCL, CCL, NCL, ECL | | | | | For the Station (1050 MW) |
| | | | 5.70 | 5.70 | 5.70 | 5.70 | 5.40 | |
| | | | CCL: G7 - G7-G11, W-IV/ Beneficiated coal BCCL: G5-G12, W-III/ V | | | | | |
| 8.1.2.1 | FSA | LOA | 5.97 | 5.11 | 4.68 | 5.22 | 4.48 | |
| | | MoU | 0.00 | 0.18 | 0.49 | 0.02 | 0.00 | |
| 8.1.2.2 | Imported | MMT | 0.217 | 0.13 | 0.00 | 0.10 | 0.00 | |
| 8.1.2.3 | Spot Market/e-auction | MMT | 0.036 | 0.07 | 0.05 | 0.00 | 0.00 | |
| 8.1.3 | Transportation Distance of the station from the sources of supply | KM | BCCL: Min. 599 Km (Khanudih-Kharkharee), Max. 674 Km (Damagoria) CCL: Min. 593 Km (K.D (Old) Siding), Max. 667 Km (North Ramgarh Colly Sdng, Chainpur) | | | | | |
| 8.1.4 | Mode of Transport | | Rail | | | | | |
| 8.1.5 | Maximum Station capability to stock primary fuel | Days & MT | 30 / 0.6 | | | | | |
| 8.1.6 | Maximum stock maintained for primary fuel | MT | 209648 | 267572 | 376000 | 947638 | 962307 | |

| | | | | | | | | | |
|--------|---|--------------------------|-----------|---------|---------|---------|---|---------|---------------------------|
| 8.1.7 | Minimum Stock maintained for primary fuel | | MT | 0 | 0 | 0 | 574950 | 384000 | |
| 8.1.8 | Average stock maintained for primary fuel | | MT | 86104 | 121424 | 145015 | 795797 | 518463 | |
| 8.2 | Secondary Fuel : | | | | | | | | |
| 8.2.1 | Annual Allocation/ Requirement | | KL | | | | 4139.1 | | |
| 8.2.2 | Sources of supply | | | | | | IOCL Bongaingaon/ Mathura Refinery/ Vishakha Patnam | | |
| 8.2.3 | Transportation Distance of the station from the sources of supply | | KM | | | | 1150/440/2000 | | |
| 8.2.4 | Mode of Transport | | | | | | Rail | | |
| 8.2.5 | Maximum Station capability to stock secondary fuels | | KL | | | | 12000 | | |
| 8.2.6 | Maximum Stock of secondary oil actually maintained | | KL | | | | 2295 | | For the Station (1050 MW) |
| 8.2.7 | Minimum Stock of secondary oil actually maintained | | KL | | | | 1000 LDO, 1300 HFO | | |
| 8.2.8 | Average Stock of secondary oil actually maintained | | KL | | | | 1500 | | |
| 9 | Cost of Spares : | | | | | | | | |
| 9.1 | Cost of Spares capitalized in the books of accounts | | Rs. Lakhs | 836.43 | 1360.00 | 1157.98 | 1198.72 | 2066.52 | For the station 1050 MW |
| 9.2 | Cost of spares included in capital cost for the purpose of tariff | | Rs. Lakhs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 10 | Generation : | | | | | | | | |
| 10.1 | -Actual Gross Generation at generator terminals | | MU | 3410 | 3233 | 3064 | 2863 | 2689 | |
| 10.2 | -Actual Net Generation Ex-bus | | MU | 3125 | 2947 | 2787 | 2594 | 2426 | |
| 10.3 | -Scheduled Generation Ex-bus | | MU | 3136 | 2997 | 2931 | 2808 | 2572 | |
| 11 | Average Declared Capacity (DC) | | MW | 378 | 381 | 365 | 374 | 346 | |
| 12 | Actual Auxiliary Energy Consumption excluding colony consumption | | MU | 271.76 | 273.45 | 255.25 | 241.53 | 246.65 | |
| 13 | Actual Energy supplied to Colony from the station | | MU | 14.92 | 14.73 | 15.74 | 17.56 | 18.63 | For the station 1050 MW |
| 14 | Primary Fuel : | | | | | | | | |
| 14.1 | Consumption : | | MT | | | | | | |
| 14.1.1 | Domestic coal | From linked mines | MT | 2258509 | 2142074 | 2029316 | 1876849 | 1849033 | |
| | | Non-linked mines | MT | | | | | | |
| 14.1.2 | Imported coal | | MT | 97631 | 57057 | 3300 | 45332 | 0 | |
| 14.1.3 | Spot market/e-auction coal | | MT | 0 | 0 | 0 | 0 | 0 | |
| 14.2 | Gross Calorific Value (GCV) : | | | | | | | | |
| 14.2.1 | Domestic Coal | (As Billed) (Eq. Basis) | kCal/kg | 3871 | 4539 | 5075 | 5285 | 4450 | |
| | | (As Received) (TM Basis) | kCal/kg | -- | -- | -- | 3894 | 3681 | |

| | | | | | | | | |
|----------|---|----------------------------|--|--------------------------------|--------|--------|--------|--------|
| | | (As Fired) (TM Basis) | kCal/kg | | | | | |
| 14.2.2 | Imported Coal | (As Billed) (ADB) | kCal/kg | 6268 | 6192 | 5580 | 5660 | N/A |
| | | (As Received) | kCal/kg | 5652 | 5588 | | 5028 | 0 |
| 14.2.3 | Spot market/e-auction coal | (As Billed) | kCal/kg | 5032 | 6285 | 6216 | N/A | N/A |
| | | (As Received) | kCal/kg | | | | | |
| 14.2.4 | Weighted Average Gross Calorific value | (As Billed) | kCal/kg | 4046 | 4621 | 5105 | 5307 | 4450 |
| 14.2.5 | Weighted Average Gross Calorific value | (As Received) | kCal/kg | -- | -- | 3637 | 3930 | 3681 |
| 14.2.6 | Weighted Average Gross Calorific value | (As Fired) | kCal/kg | 3476 | 3550 | | | |
| 14.3 | Price of coal : | | | | | | | |
| 14.3.1 | Weighted Average Landed price of Domestic coal | | Rs/ MT | 3181.7 | 3391.0 | 3649.4 | 3569.2 | 3901.6 |
| 14.3.2 | Weighted Average Landed Price of Imported coal | | Rs/ MT | 8289.7 | 7667.1 | 7043.7 | 6333.3 | 0.0 |
| 14.3.3 | Weighted Average Landed Price of Spot market/e-auction | | Rs/ MT | 0.0 | 6386.0 | 6284.1 | 0.0 | 0.0 |
| 14.3.4 | Weighted Average Landed Price of all the Coals | | Rs/ MT | 3364.8 | 3532.0 | 3676.5 | 3621.5 | 3901.6 |
| 14.4 | Blending : | | % and MT (of the total coal consumed) | 3.63 | 1.96 | 0.01 | 0.62 | 0.00 |
| | | | | 43050 | 20072 | 66 | 5400 | 0 |
| 14.4.1 | Blending ratio of imported coal with domestic coal | | Equivalent to domestic coal | | | | | |
| 14.4.2 | Proportion of e-auction coal in the blending | | | | | | | |
| 14.5 | Actual Average Coal stock maintained | | MT | 86104 | 121424 | 145015 | 795797 | 518463 |
| | | | Days | 4.02 | 5.67 | 6.77 | 37.15 | 24.20 |
| 14.5 | Actual Transit & Handling Losses for coal/Lignite | | | | | | | |
| 14.5.1 | Pit- Head Station | | | | | | | |
| 14.5.1.1 | Transit loss from linked mines | | % | | | | | |
| 14.5.1.2 | Transit loss from non-linked mines including e-auction coal | | % | | | | | |
| 14.5.1.3 | Transit loss of imported coal | | % | | | | | |
| 14.5.2 | Non-Pit Head station | | | | | | | |
| 14.5.2.1 | Transit loss from linked mines (MGR/ Rail) | | MT % | 0.77 to 0.79 (quarterly basis) | | | | |
| 14.5.2.2 | Transit loss from non-linked mines including e-auction coal mines. | | | 0.77 to 0.79 (quarterly basis) | | | | |
| 14.5.2.3 | Transit loss of imported coal | | | 0.17 to 0.2 (quarterly basis) | | | | |
| 15 | Secondary Fuel Oil : (If more than one fuel used then give details of all the fuels | | | | | | | |

| | | | | | | | | | |
|--------|---|-----|-----------|--|----------|----------|----------|----------|---------------------------|
| 15.1 | Consumption | HFO | KL | 82 | 310 | 63 | 300 | 23 | For the Station (1050 MW) |
| | | LDO | KL | 609 | 388 | 261 | 67 | 30 | |
| 15.2 | Weighted Average Gross Calorific value (As received) | HFO | Kcal/Ltr | 9990 | 9990 | 9990 | 9990 | 9773 | |
| | | LDO | Kcal/Ltr | 9990 | 9990 | 9416 | 9428 | 9470 | |
| 15.3 | Weighted Average Price | HFO | Rs/KL | 55517 | 55790 | 56544 | 39468 | 36717 | |
| | | LDO | Rs/KL | 71526 | 76893 | 69071 | 50464 | 53178 | |
| 15.4 | Actual Average Stock maintained | | KL | 1500 | 1500 | 1500 | 1500 | 1500 | |
| 16 | Weighted average duration of outages(unit-wise) | | | | | | | | |
| 16.1 | Planned Outages | | Days | 13.44 | 15.63 | 19.83 | 19.70 | 14.81 | |
| 16.2 | Forced Outages | | Days | 4.01 | 2.29 | 2.72 | 2.47 | 4.57 | |
| 16.3 | Number of tripping | | Nos | 8 | 5 | 7 | 8 | 3 | |
| 16.4 | Number of start-ups: | | Nos | 15 | 11 | 12 | 12 | 8 | |
| 16.4.1 | Cold Start-up | | Nos | 5 | 4 | 4 | 1 | 4 | |
| 16.4.2 | Warm Start-up | | Nos | 5 | 3 | 3 | 4 | 2 | |
| 16.4.3 | Hot start-up | | Nos | 5 | 4 | 5 | 7 | 2 | |
| 17 | NOx , SOx ,and other particulate matter emission in : | | | | | | | | |
| 17.1 | Design value of emission control equipment | | mg/Nm3 | ESP design dust outlet Conc. = 200 (after R&M) | | | | | |
| 17.2 | Actual emission (Stage-I) | SPM | mg/Nm3 | 141.75 | 140.98 | 143.43 | 142.71 | 145.05 | |
| | | SOX | mg/Nm3 | 730.13 | 743.03 | 741.72 | 720.89 | 689.44 | |
| | | NOX | mg/Nm3 | 305.84 | 298.12 | 302.50 | 292.80 | 290.48 | |
| 19 | Detail of Ash utilization % of fly ash produced | | % | 62.49 | 63.78 | 70.75 | 101.72 | 126.08 | |
| 19.1 | Conversion of value added product | | % | 52.22 | 58.54 | 69.01 | 69.45 | 70.19 | |
| 19.2 | For making roads & embarkment | | % | 0.20 | 0.31 | 1.47 | 3.23 | 26.53 | |
| 19.3 | Land filling | | % | 1.36 | 1.08 | 0.21 | 5.59 | 1.45 | |
| 19.4 | Used in plant site in one or other form or used in some other | | % | 8.71 | 3.85 | 0.05 | 23.45 | 27.91 | |
| 19.5 | Any other use , Please specify | | % | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 20 | Cost of spares actually consumed | | Rs. Lakhs | 4336.68 | 4899.53 | 3535.00 | 5138.88 | 3675.35 | |
| 21 | Average stock of spares | | Rs. Lakhs | 10051.31 | 10484.16 | 10438.61 | 10565.40 | 11054.56 | |
| 22 | Number of employees deployed in O&M | | | | | | | | |
| 22.1 | - Executives | | | 416 | 421 | 404 | 410 | 421 | |
| 22.2 | - Non Executives | | | 625 | 599 | 560 | 509 | 466 | |
| 22.3 | - Corporate office | | | | | | | | |
| 23 | Man-MW ratio | | | 0.99 | 0.97 | 0.92 | 0.88 | 0.84 | |

Note: Allocation of stations attached at Appendix-I
Man-MW ratio computed excluding Corporate Employees
Average Coal stock computed based on monthly closing stock

Annexure-I

**Pro-forma for furnishing Actual annual performance/operational data for the coal/lignite based thermal generating stations for the 5-year period
from 2012-13 to 2016-17**

| Sl.No. | Particulars | Units | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | Basis of Information/ Methodology/ Remarks |
|---------|---|-----------|---|---------|---------|---------|---------|--|
| 1 | Name of Company | | NTPC Ltd. | | | | | For the Station (1050 MW) Requirement has been worked out at 90% PLF |
| 2 | Name of Station/ Pit head or Non- Pit head | | Feroz Gandhi Unchahar Thermal Power Station Stage-II (Non Pit-Head) | | | | | |
| 3 | Installed Capacity and Configuration | MW | 2 X 210 = 420 MW | | | | | |
| 4 | Rated Steam Parameters (Also state the type of Steam turbine and Boiler) | | SH Outlet Pr :154.6 Kg/Cm2, Temp :540 Deg C Reheater Outlet Pr : 35.8 Kg/Cm2, Temp : 540 Deg C | | | | | |
| 5 | Type of BFP | | Electrical Driven | | | | | |
| 6 | Circulating water system | | Closed Cycle | | | | | |
| 7 | Any other Site specific feature | | | | | | | |
| 8 | Fuels : | | | | | | | |
| 8.1 | Primary Fuel : | | Coal/ Lignite | | | | | |
| 8.1.1 | Annual Allocation or/and Requirement | | Annual allocation through FSA dated 15.07.2009 with CCL for Unchahar- I to III - 3.9 MMT Annual allocation through modified FSA dated 24.12.2013 with BCCL for Unchahar- I to III - 1.5 MMT Allocation through MOU dated 22.07.2014 with NCL - 3.0 MMT Annual Requirement : 6.62 | | | | | |
| 8.1.2 | Sources of supply/ procurement along with contracted quantity and grade of coal | | BCCL, CCL, NCL, ECL | | | | | |
| | | | 5.70 | 5.70 | 5.70 | 5.70 | 5.40 | |
| | | | CCL: G7 - G7-G11, W-IV/ Beneficiated coal BCCL: G5-G12, W-III/ V | | | | | |
| 8.1.2.1 | FSA | LOA | 5.97 | 5.11 | 4.68 | 5.22 | 4.48 | For the Station (1050 MW) |
| | | MoU | 0.00 | 0.18 | 0.49 | 0.02 | 0.00 | |
| 8.1.2.2 | Imported | MMT | 0.217 | 0.13 | 0.00 | 0.10 | 0.00 | |
| 8.1.2.3 | Spot Market/e-auction | MMT | 0.036 | 0.07 | 0.05 | 0.00 | 0.00 | |
| 8.1.3 | Transportation Distance of the station from the sources of supply | KM | BCCL: Min. 599 Km (Khanudih-Kharkharee), Max. 674 Km (Damagoria) CCL: Min. 593 Km (K.D (Old) Siding), Max. 667 Km (North Ramgarh Colly Sdng, Chainpur) | | | | | |
| 8.1.4 | Mode of Transport | | Rail | | | | | |
| 8.1.5 | Maximum Station capability to stock primary fuel | Days & MT | 30 / 0.6 | | | | | |
| 8.1.6 | Maximum stock maintained for primary fuel | MT | 209648 | 267572 | 376000 | 947638 | 962307 | |
| 8.1.7 | Minimum Stock maintained for primary fuel | MT | 0 | 0 | 0 | 574950 | 384000 | |
| 8.1.8 | Average stock maintained for primary fuel | MT | 86104 | 121424 | 145015 | 795797 | 518463 | |
| 8.2 | Secondary Fuel : | | | | | | | |

| | | | | | | | | |
|-----------|---|-----------------------------|-----------|---|---------|---------|---------|---------------------------|
| 8.2.1 | Annual Allocation/ Requirement | | KL | 4139.1 | | | | |
| 8.2.2 | Sources of supply | | | IOCL Bongaingaon/ Mathura Refinery/ Vishakha Patnam | | | | |
| 8.2.3 | Transportation Distance of the station from the sources of supply | | KM | 1150/440/2000 | | | | |
| 8.2.4 | Mode of Transport | | | Rail | | | | |
| 8.2.5 | Maximum Station capability to stock secondary fuels | | KL | 12000 | | | | |
| 8.2.6 | Maximum Stock of secondary oil actually maintained | | KL | 2295 | | | | |
| 8.2.7 | Minimum Stock of secondary oil actually maintained | | KL | 1000 LDO, 1300 HFO | | | | For the Station (1050 MW) |
| 8.2.8 | Average Stock of secondary oil actually maintained | | KL | 1500 | | | | |
| 9 | Cost of Spares : | | | | | | | |
| 9.1 | Cost of Spares capitalized in the books of accounts | | Rs. Lakhs | 836.43 | 1360.00 | 1157.98 | 1198.72 | 2066.52 |
| 9.2 | Cost of spares included in capital cost for the purpose of tariff | | Rs. Lakhs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10 | Generation : | | | | | | | |
| 10.1 | -Actual Gross Generation at generator terminals | | MU | 3404 | 3168 | 2961 | 2830 | 2831 |
| 10.2 | -Actual Net Generation Ex-bus | | MU | 3110 | 2875 | 2681 | 2556 | 2569 |
| 10.3 | -Scheduled Generation Ex-bus | | MU | 3106 | 2901 | 2786 | 2754 | 2753 |
| 11 | Average Declared Capacity (DC) | | MW | 382 | 383 | 367 | 386 | 382 |
| 12 | Actual Auxiliary Energy Consumption excluding colony consumption | | MU | 309.61 | 308.12 | 290.76 | 285.42 | 254.87 |
| 13 | Actual Energy supplied to Colony from the station | | MU | 14.92 | 14.73 | 15.74 | 17.56 | 18.63 |
| 14 | Primary Fuel : | | | | | | | |
| 14.1 | Consumption : | | MT | | | | | |
| 14.1.1 | Domestic coal | From linked mines | MT | 2277135 | 2094494 | 1955355 | 1833175 | 1930754 |
| | | Non-linked mines | MT | | | | | |
| 14.1.2 | Imported coal | | MT | 80423 | 53528 | 134 | 49000 | 0 |
| 14.1.3 | Spot market/e-auction coal | | MT | 0 | 0 | 0 | 0 | 0 |
| 14.2 | Gross Calorific Value (GCV) : | | | | | | | |
| 14.2.1 | Domestic Coal | (As Billed) (Eq. Basis) | kCal/kg | 3871 | 4539 | 5075 | 5285 | 4450 |
| | | (As Received) (TM Basis) | kCal/kg | NA | NA | NA | 3894 | 3681 |
| | | (As Fired) (TM Basis) | kCal/kg | | | | | |

| | | | | | | | | | |
|----------|--|--|-----------------------------|--------------------------------|--------|--------|--------|--------|-------------------------|
| 14.2.2 | Imported Coal | (As Billed) (ADB) | kCal/kg | 6268 | 6192 | 5580 | 5660 | N/A | |
| | | (As Received) | kCal/kg | 5652 | 5588 | | 5028 | 0 | |
| 14.2.3 | Spot market/e-auction coal | (As Billed) | kCal/kg | 5032 | 6285 | 6216 | N/A | N/A | |
| | | (As Received) | kCal/kg | | | | | | |
| 14.2.4 | Weighted Average Gross Calorific value (As Billed) | | kCal/kg | 4046 | 4621 | 5105 | 5307 | 4450 | |
| 14.2.5 | Weighted Average Gross Calorific value (As Received) | | kCal/kg | --- | --- | 3652 | 3930 | 3681 | |
| 14.2.6 | Weighted Average Gross Calorific value (As Fired) | | kCal/kg | 3467 | 3555 | --- | --- | --- | |
| 14.3 | Price of coal : | | | | | | | | |
| 14.3.1 | Weighted Average Landed price of Domestic coal | | Rs/ MT | 3181.7 | 3391.0 | 3649.4 | 3569.2 | 3901.6 | |
| 14.3.2 | Weighted Average Landed Price of Imported coal | | Rs/ MT | 8289.7 | 7667.1 | 7043.7 | 6333.3 | 0.0 | |
| 14.3.3 | Weighted Average Landed Price of Spot market/e-auction coal | | Rs/ MT | 0.0 | 6386.0 | 6284.1 | 0.0 | 0.0 | |
| 14.3.4 | Weighted Average Landed Price of all the Coals | | Rs/ MT | 3364.8 | 3532.0 | 3676.5 | 3621.5 | 3901.6 | |
| 14.4 | Blending : | % and MT (of the total coal consumed) | | 3.41 | 2.49 | 0.01 | 2.60 | 0.00 | |
| | | | | 80423 | 53528 | 134 | 49000 | 0 | |
| 14.4.1 | Blending ratio of imported coal with domestic coal | | Equivalent to domestic coal | | | | | | |
| 14.4.2 | Proportion of e-auction coal in the blending | | | | | | | | |
| 14.5 | Actual Average Coal stock maintained | | MT | 86104 | 121424 | 145015 | 795797 | 518463 | |
| | | | Days | 4.02 | 5.67 | 6.77 | 37.15 | 24.20 | |
| 14.5 | Actual Transit & Handling Losses for coal/Lignite | | | | | | | | |
| 14.5.1 | Pit- Head Station | | | | | | | | |
| 14.5.1.1 | Transit loss from linked mines | | % | | | | | | |
| 14.5.1.2 | Transit loss from non-linked mines including e-auction coal | | % | | | | | | |
| 14.5.1.3 | Transit loss of imported coal | | % | | | | | | |
| 14.5.2 | Non-Pit Head station | | | | | | | | |
| 14.5.2.1 | Transit loss from linked mines (MGR/ Rail) | | MT % | 0.77 to 0.79 (quarterly basis) | | | | | For the Station 1050 MW |
| 14.5.2.2 | Transit loss from non-linked mines including e-auction coal mines. | | | 0.77 to 0.79 (quarterly basis) | | | | | |
| 14.5.2.3 | Transit loss of imported coal | | | 0.17 to 0.2 (quarterly basis) | | | | | |

| | | | | | | | | |
|-----------|---|-----|-----------|--|----------|----------|----------|----------|
| 15 | Secondary Fuel Oil : (If more than one fuel used then give details of all the fuels | | | | | | | |
| 15.1 | Consumption | HFO | KL | 288 | 113 | 615 | 362 | 83 |
| | | LDO | KL | 502 | 1034 | 749 | 219 | 404 |
| 15.2 | Weighted Average Gross Calorific value (As received) | HFO | Kcal/Ltr | 9990 | 9990 | 9990 | 9990 | 9773 |
| | | LDO | Kcal/Ltr | 9990 | 9990 | 9416 | 9428 | 9470 |
| 15.3 | Weighted Average Price | HFO | Rs/KL | 55517 | 55790 | 56544 | 39468 | 36717 |
| | | LDO | Rs/KL | 71526 | 76893 | 69071 | 50464 | 53178 |
| 15.4 | Actual Average Stock maintained | | KL | 1500 | 1500 | 1500 | 1500 | 1500 |
| 16 | Weighted average duration of outages(unit-wise details): | | | | | | | |
| 16.1 | Planned Outages | | Days | 13.51 | 13.19 | 11.62 | 12.17 | 16.09 |
| 16.2 | Forced Outages | | Days | 0.58 | 4.45 | 4.07 | 2.32 | 1.77 |
| 16.3 | Number of tripping | | Nos | 8 | 5 | 7 | 8 | 3 |
| 16.4 | Number of start-ups: | | Nos | 15 | 11 | 12 | 12 | 8 |
| 16.4.1 | Cold Start-up | | Nos | 5 | 4 | 4 | 1 | 4 |
| 16.4.2 | Warm Start-up | | Nos | 5 | 3 | 3 | 4 | 2 |
| 16.4.3 | Hot start-up | | Nos | 5 | 4 | 5 | 7 | 2 |
| 17 | NOx , SOx ,and other particulate matter emission in : | | | | | | | |
| 17.1 | Design value of emission control equipment | | mg/Nm3 | ESP design dust outlet Conc. = 150 (R&M Awarded) | | | | |
| 17.2 | Actual emission (Stage-I) | SPM | mg/Nm3 | 82.89 | 91.16 | 108.66 | 101.75 | 106.94 |
| | | SOX | mg/Nm3 | 734.44 | 720.34 | 706.44 | 722.44 | 687.54 |
| | | NOX | mg/Nm3 | 301.98 | 287.06 | 289.13 | 306.29 | 293.21 |
| 19 | Detail of Ash utilization % of fly ash produced | | % | 62.49 | 63.78 | 70.75 | 101.72 | 126.08 |
| 19.1 | Conversion of value added product | | % | 52.22 | 58.54 | 69.01 | 69.45 | 70.19 |
| 19.2 | For making roads & embarkment | | % | 0.20 | 0.31 | 1.47 | 3.23 | 26.53 |
| 19.3 | Land filling | | % | 1.36 | 1.08 | 0.21 | 5.59 | 1.45 |
| 19.4 | Used in plant site in one or other form or used in some other | | % | 8.71 | 3.85 | 0.05 | 23.45 | 27.91 |
| 19.5 | Any other use , Please specify | | % | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 20 | Cost of spares actually consumed | | Rs. Lakhs | 4336.68 | 4899.53 | 3535.00 | 5138.88 | 3675.35 |
| 21 | Average stock of spares | | Rs. Lakhs | 10051.31 | 10484.16 | 10438.61 | 10565.40 | 11054.56 |
| 22 | Number of employees deployed in O&M | | | | | | | |
| 22.1 | - Executives | | | 416 | 421 | 404 | 410 | 421 |
| 22.2 | - Non Executives | | | 625 | 599 | 560 | 509 | 466 |
| 22.3 | - Corporate office | | | | | | | |
| 23 | Man-MW ratio | | | 0.99 | 0.97 | 0.92 | 0.88 | 0.84 |

For the Station 1050 MW

For the station 1050 MW

As on last day of FY

Note: Allocation of stations attached at Appendix-I
 Man-MW ratio computed excluding Corporate Employees
 Average Coal stock computed based on monthly closing stock

Annexure-I

Pro-forma for furnishing Actual annual performance/operational data for the coal/lignite based thermal generating stations for the 5-year period from 2012-13 to 2016-17

| Sl.No. | Particulars | Units | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | Basis of Information/ Methodology/ Remarks | |
|---------|---|------------|---|---------|---------|---------|---------|---|------|
| 1 | Name of Company | | NTPC Ltd. | | | | | | |
| 2 | Name of Station/ Pit head or Non- Pit head | | Feroz Gandhi Unchahar Thermal Power Station Stage-III (Non Pit-Head) | | | | | | |
| 3 | Installed Capacity and Configuration | MW | 1 X 210 = 210 MW | | | | | | |
| 4 | Rated Steam Parameters (Also state the type of Steam turbine and Boiler) | | SH Outlet Pr :155 Kg/Cm2, Temp :540 Deg C Reheater Outlet Pr : 35.64 Kg/Cm2, Temp : 540 Deg C | | | | | | |
| 5 | Type of BFP | | Electrical Driven | | | | | | |
| 6 | Circulating water system | | Closed Cycle | | | | | | |
| 7 | Any other Site specific feature | | | | | | | | |
| 8 | Fuels : | | | | | | | | |
| 8.1 | Primary Fuel : | | Coal/ Lignite | | | | | | |
| 8.1.1 | Annual Allocation or/and Requirement | | Annual allocation through FSA dated 15.07.2009 with CCL for Unchahar- I to III - 3.9 MMT Annual allocation through modified FSA dated 24.12.2013 with BCCL for Unchahar- I to III - 1.5 MMT Allocation through MOU dated 22.07.2014 with NCL - 3.0 MMT Annual Requirement : 6.62 | | | | | | |
| 8.1.2 | Sources of supply/ procurement along with contracted quantity and grade of coal | | BCCL, CCL, NCL, ECL | | | | | For the Station (1050 MW) Requirement has been worked out at 90% PLF | |
| | | | 5.70 | 5.70 | 5.70 | 5.70 | 5.40 | | |
| | | | CCL: G7 - G7-G11, W-IV/ Beneficiated coal/BCCL: G5-G12, W-III/ V | | | | | | |
| 8.1.2.1 | FSA | LOA MoU | MMT | 5.97 | 5.11 | 4.68 | 5.22 | | 4.48 |
| 8.1.2.2 | Imported | | MMT | 0.00 | 0.18 | 0.49 | 0.02 | | 0.00 |
| 8.1.2.3 | Spot Market/e-auction | | MMT | 0.217 | 0.13 | 0.00 | 0.10 | | 0.00 |
| 8.1.2.3 | Spot Market/e-auction | | MMT | 0.036 | 0.07 | 0.05 | 0.00 | 0.00 | |
| 8.1.3 | Transportation Distance of the station from the sources of supply | KM | BCCL: Min. 599 Km (Khanudih-Kharkharee), Max. 674 Km (Damagoria) CCL: Min. 593 Km (K.D (Old) Siding), Max. 667 Km (North Ramgarh Colly Sdng, Chainpur) | | | | | For the Station (1050 MW) | |
| 8.1.4 | Mode of Transport | | Rail | | | | | | |
| 8.1.5 | Maximum Station capability to stock primary fuel | Days & MT | 30 / 0.6 | | | | | | |
| 8.1.6 | Maximum stock maintained for primary fuel | MT | 209648 | 267572 | 376000 | 947638 | 962307 | | |
| 8.1.7 | Minimum Stock maintained for primary fuel | MT | 0 | 0 | 0 | 574950 | 384000 | | |
| 8.1.8 | Average stock maintained for primary fuel | MT | 86104 | 121424 | 145015 | 795797 | 518463 | | |
| 8.2 | Secondary Fuel : | | | | | | | | |

| Sl.No. | Particulars | | Units | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | Basis of Information/ Methodology/ Remarks |
|-------------|---|-----------------------------|-----------|---|---------|---------|---------|---------|---|
| 8.2.1 | Annual Allocation/ Requirement | | KL | 4139.1 | | | | | |
| 8.2.2 | Sources of supply | | | IOCL Bongaingaon/ Mathura Refinery/ Vishakha Patnam | | | | | |
| 8.2.3 | Transportation Distance of the station from the sources of supply | | KM | 1150/440/2000 | | | | | |
| 8.2.4 | Mode of Transport | | | Rail | | | | | |
| 8.2.5 | Maximum Station capability to stock secondary fuels | | KL | 12000 | | | | | For the Station (1050 MW) |
| 8.2.6 | Maximum Stock of secondary oil actually maintained | | KL | 2295 | | | | | |
| 8.2.7 | Minimum Stock of secondary oil actually maintained | | KL | 1000 LDO, 1300 HFO | | | | | |
| 8.2.8 | Average Stock of secondary oil actually maintained | | KL | 1500 | | | | | |
| 9 | Cost of Spares : | | | | | | | | |
| 9.1 | Cost of Spares capitalized in the books of accounts | | Rs. Lakhs | 836.43 | 1360.00 | 1157.98 | 1198.72 | 2066.52 | For the station 1050 MW |
| 9.2 | Cost of spares included in capital cost for the purpose of tariff | | Rs. Lakhs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 10 | Generation : | | | | | | | | |
| 10.1 | -Actual Gross Generation at generator terminals | | MU | 1714 | 1512 | 1596 | 1320 | 1474 | |
| 10.2 | -Actual Net Generation Ex-bus | | MU | 1577 | 1382 | 1456 | 1202 | 1339 | |
| 10.3 | -Scheduled Generation Ex-bus | | MU | 1568 | 1389 | 1503 | 1292 | 1442 | |
| 11 | Average Declared Capacity (DC) | | MW | 191 | 186 | 196 | 183 | 201 | |
| 12 | Actual Auxiliary Energy Consumption excluding colony consumption | | MU | 128.18 | 119.85 | 127.36 | 108.16 | 130.08 | |
| 13 | Actual Energy supplied to Colony from the station | | MU | 14.92 | 14.73 | 15.74 | 17.56 | 18.63 | For the station 1050 MW |
| 14 | Primary Fuel : | | | | | | | | |
| 14.1 | Consumption : | | MT | | | | | | |
| 14.1.1 | Domestic coal | From linked mines | MT | 1142559 | 1004466 | 1052320 | 871605 | 1001171 | |
| | | Non-linked mines | MT | | | | | | |
| 14.1.2 | Imported coal | | MT | 43050 | 20072 | 66 | 5400 | 0 | |
| 14.1.3 | Spot market/e-auction coal | | MT | 0 | 0 | 0 | 0 | 0 | |
| 14.2 | Gross Calorific Value (GCV) : | | | | | | | | |
| 14.2.1 | Domestic Coal | (As Billed) (Eq. Basis) | kCal/kg | 3871 | 4539 | 5075 | 5285 | 4450 | |
| | | (As Received) (TM Basis) | kCal/kg | NA | NA | NA | 3894 | 3681 | |
| | | (As Fired) (TM Basis) | kCal/kg | | | | | | |
| 14.2.2 | Imported Coal | (As Billed) (ADB) | kCal/kg | 6268 | 6192 | 5580 | 5660 | N/A | |
| | | (As Received) (TM Basis) | kCal/kg | 5652 | 5588 | | 5028 | 0 | |

| Sl.No. | Particulars | | Units | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | Basis of Information/ Methodology/ Remarks |
|----------|--|-------------------------------------|--|--------------------------------|---------|---------|---------|---------|---|
| 14.2.3 | Spot market/e-auction coal | | (As Billed) kCal/kg | 5032 | 6285 | 6216 | N/A | N/A | |
| | | | (As Received) kCal/kg | | | | | | |
| 14.2.4 | Weighted Average | Gross Calorific value (As Billed) | kCal/kg | 4046 | 4621 | 5105 | 5307 | 4450 | |
| 14.2.5 | Weighted Average | Gross Calorific value (As Received) | kCal/kg | --- | --- | 3655 | 3930 | 3681 | |
| 14.2.6 | Weighted Average | Gross Calorific value (As Fired) | kCal/kg | 3465 | 3549 | | | | |
| 14.3 | Price of coal : | | | | | | | | |
| 14.3.1 | Weighted Average Landed price of Domestic coal | | Rs/ MT | 3181.66 | 3391.03 | 3649.41 | 3569.16 | 3901.64 | |
| 14.3.2 | Weighted Average Landed Price of Imported coal | | Rs/ MT | 8289.67 | 7667.07 | 7043.70 | 6333.35 | 0.00 | |
| 14.3.3 | Weighted Average Landed Price of Spot market/e-auction | | Rs/ MT | 0.00 | 6385.99 | 6284.15 | 0.00 | 0.00 | |
| 14.3.4 | Weighted Average Landed Price of all the Coals | | Rs/ MT | 3364.77 | 3532.03 | 3676.45 | 3621.46 | 3901.64 | |
| 14.4 | Blending : | | % and MT (of the total coal consumed) | 3.41 | 2.49 | 0.01 | 2.60 | 0.00 | |
| | | | | 80423 | 53528 | 134 | 49000 | 0 | |
| 14.4.1 | Blending ratio of imported coal with domestic coal | | Equivalent to domestic coal | | | | | | |
| 14.4.2 | Proportion of e-auction coal in the blending | | | | | | | | |
| 14.5 | Actual Average Coal stock maintained | | MT | 86104 | 121424 | 145015 | 795797 | 518463 | |
| | | | Days | 4.02 | 5.67 | 6.77 | 37.15 | 24.20 | |
| 14.5 | Actual Transit & Handling Losses for coal/Lignite | | | | | | | | |
| 14.5.1 | Pit- Head Station | | | | | | | | |
| 14.5.1.1 | Transit loss from linked mines | | % | | | | | | |
| 14.5.1.2 | Transit loss from non-linked mines including e-auction coal | | % | | | | | | |
| 14.5.1.3 | Transit loss of imported coal | | % | | | | | | |
| 14.5.2 | Non-Pit Head station | | | | | | | | |
| 14.5.2.1 | Transit loss from linked mines (MGR/ Rail) | | MT | 0.77 to 0.79 (quarterly basis) | | | | | |
| | | | % | | | | | | |
| 14.5.2.2 | Transit loss from non-linked mines including e-auction coal mines. | | | 0.77 to 0.79 (quarterly basis) | | | | | |
| 14.5.2.3 | Transit loss of imported coal | | | 0.17 to 0.2 (quarterly basis) | | | | | |

| SI.No. | Particulars | Units | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | Basis of Information/ Methodology/ Remarks | |
|-----------|---|-----------------|-------------------------------------|----------|----------|----------|----------|---|--|
| 15 | Secondary Fuel Oil : (If more than one fuel used then give details of all the fuels separately) | | | | | | | | |
| 15.1 | Consumption | HFO KL | 288 | 113 | 615 | 362 | 83 | For 1050 MW Station | |
| | | LDO KL | 502 | 1034 | 749 | 219 | 404 | | |
| 15.2 | Weighted Average Gross Calorific value (As received) | HFO Kcal/Ltr | 9990 | 9990 | 9990 | 9990 | 9773 | | |
| | | LDO Kcal/Ltr | 9990 | 9990 | 9416 | 9428 | 9470 | | |
| 15.3 | Weighted Average Price | HFO Rs/KL | 55517 | 55790 | 56544 | 39468 | 36717 | | |
| | | LDO Rs/KL | 71526 | 76893 | 69071 | 50464 | 53178 | | |
| 15.4 | Actual Average Stock maintained | KL | 1500 | 1500 | 1500 | 1500 | 1500 | | |
| 16 | Weighted average duration of outages(unit-wise details): | | | | | | | | |
| 16.1 | Planned Outages | Days | 2.64 | 23.32 | 0.00 | 33.11 | 0.00 | | |
| 16.2 | Forced Outages | Days | 11.24 | 4.12 | 3.05 | 0.94 | 0.14 | | |
| 16.3 | Number of tripping | Nos | 5 | 6 | 2 | 5 | 3 | | |
| 16.4 | Number of start-ups: | Nos | 11 | 8 | 5 | 6 | 2 | | |
| 16.4.1 | Cold Start-up | Nos | 5 | 2 | 2 | 1 | 0 | | |
| 16.4.2 | Warm Start-up | Nos | 1 | 0 | 2 | 0 | 0 | | |
| 16.4.3 | Hot start-up | Nos | 5 | 6 | 1 | 5 | 2 | | |
| 17 | NOx , SOx ,and other particulate matter emission in : | | | | | | | | |
| 17.1 | Design value of emission control equipment | mg/Nm3 | ESP design dust outlet Conc. = 73.5 | | | | | | |
| 17.2 | Actual emission (Stage-I) | SPM mg/Nm3 | 37.00 | 47.00 | 40.08 | 38.00 | 47.63 | | |
| | | SOX mg/Nm3 | 736.21 | 737.83 | 739.42 | 791.75 | 764.33 | | |
| | | NOX mg/Nm3 | 298.67 | 297.38 | 276.00 | 289.58 | 294.79 | | |
| 19 | Detail of Ash utilization % of fly ash produced | % | 62.49 | 63.78 | 70.75 | 101.72 | 126.08 | | |
| 19.1 | Conversion of value added product | % | 52.22 | 58.54 | 69.01 | 69.45 | 70.19 | For 1050 MW Station | |
| 19.2 | For making roads & embankment | % | 0.20 | 0.31 | 1.47 | 3.23 | 26.53 | | |
| 19.3 | Land filling | % | 1.36 | 1.08 | 0.21 | 5.59 | 1.45 | | |
| 19.4 | Used in plant site in one or other form or used in some other | % | 8.71 | 3.85 | 0.05 | 23.45 | 27.91 | | |
| 19.5 | Any other use , Please specify | % | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| 20 | Cost of spares actually consumed | Rs. Lakhs | 4336.68 | 4899.53 | 3535.00 | 5138.88 | 3675.35 | For the station 1050 MW | |
| 21 | Average stock of spares | Rs. Lakhs | 10051.31 | 10484.16 | 10438.61 | 10565.40 | 11054.56 | | |
| 22 | Number of employees deployed in O&M | | | | | | | As on last day of FY | |
| 22.1 | - Executives | | 416 | 421 | 404 | 410 | 421 | | |
| 22.2 | - Non Executives | | 625 | 599 | 560 | 509 | 466 | | |
| 22.3 | - Corporate office | | | | | | | | |
| 23 | Man-MW ratio | | 0.99 | 0.97 | 0.92 | 0.88 | 0.84 | | |

Note: Allocation of stations attached at Appendix-I
Man-MW ratio computed excluding Corporate Employees
Average Coal stock computed based on monthly closing stock

Annexure- VI (A)

DETAILS OF OPERATION AND MAINTENANCE EXPENSES

Name of the Company: NTPC Ltd.
Name of the Power Station: Feroz Gandhi Unchahar Thermal Power Station (1050 MW)

(Rs. Lakhs)

| Sl. No. | Items | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
|---------|---|-----------------|-----------------|-----------------|-----------------|-----------------|
| 1 | Consumption of stores & spares | 4336.68 | 4899.53 | 3535.00 | 5138.88 | 3675.35 |
| 2 | Repair & Maintenance | 3304.18 | 3270.52 | 3492.89 | 4341.48 | 3710.67 |
| 3 | Insurance | 302.65 | 320.69 | 363.26 | 304.02 | 291.71 |
| 4 | Security | 1303.57 | 1559.34 | 1757.07 | 1844.59 | 2158.98 |
| 5 | Water Charges | 359.19 | 358.83 | 350.23 | 399.85 | 1445.27 |
| 6 | Administrative Expenses | | | | | |
| 6.1 | Rent | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6.2 | Electricity charges | 497.48 | 581.26 | 584.84 | 589.89 | 629.82 |
| 6.3 | Travelling & Conveyance | 541.43 | 586.81 | 549.20 | 533.83 | 555.47 |
| 6.4 | Communication Expenses | 93.87 | 83.99 | 90.68 | 115.55 | 124.45 |
| 6.5 | Advertising | 7.11 | 13.68 | 31.11 | 7.53 | 9.06 |
| 6.6 | Foundation Laying & Inaugration | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6.7 | Donation | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6.8 | Entertainment | 18.63 | 16.11 | 28.57 | 33.50 | 29.95 |
| 6.9 | Filing fee | 42.00 | 46.20 | 46.20 | 46.20 | 46.20 |
| | Subtotal (Administrative Expenses) | 1200.52 | 1328.06 | 1330.60 | 1326.50 | 1394.95 |
| 7.0 | Employee Cost | | | | | |
| 7.1.1 | Salaries, Wages & Allowances | 10810.92 | 10836.16 | 10972.27 | 10407.11 | 11926.68 |
| 7.1.2 | Pension | 64.98 | 2837.16 | 1005.99 | 1050.03 | 1015.93 |
| 7.1.3 | Gratuity | 424.33 | 176.30 | -74.14 | -48.53 | 2353.38 |
| 7.1.4 | Provident Fund | 823.39 | 949.03 | 955.71 | 980.13 | 1018.02 |
| 7.1.5 | Leave Encashment | 1424.81 | 1565.14 | 1436.99 | 1493.93 | 2079.20 |
| 7.2 | Staff welfare expenses | | | | | |
| 7.2.1 | -Medical expenses on superannuated employees | 9.21 | 8.54 | 7.62 | 28.78 | 0.00 |
| 7.2.2 | -Medical expenses on regular employees & others | 720.63 | 646.25 | 751.45 | 1082.26 | 391.35 |
| 7.2.3 | -Uniform/Livries & safety equipment | 73.29 | 225.59 | 194.07 | 186.66 | 240.63 |
| 7.2.4 | -Canteen expenses | 139.78 | 147.25 | 156.34 | 169.16 | 178.44 |
| 7.2.5 | -Other staff welfare expenses | 127.96 | 145.00 | 171.99 | 180.97 | 201.52 |
| | Subtotal (Staff welfare Expenses) | 1070.88 | 1172.63 | 1281.47 | 1647.83 | 1011.94 |
| 7.3 | Productivity linked Incentive | 539.73 | 471.73 | 249.84 | 170.83 | 1.67 |
| 7.4 | Expenditure on VRS | 0.00 | 0.00 | 88.43 | 0.00 | 0.00 |
| 7.5 | Ex-gratia | 343.92 | 335.29 | 547.93 | 321.84 | 291.74 |
| 7.6 | Performance Related Pay (PRP) | 628.54 | 380.17 | 640.33 | 893.95 | 1117.09 |
| | Sub Total (Employee Cost) | 16131.49 | 18723.60 | 17104.84 | 16917.12 | 20815.65 |
| 8 | Loss of Store | 0.07 | 1.05 | 0.00 | 0.36 | 0.37 |
| 9 | Provisions | 40.98 | 0.48 | 6.79 | 0.34 | 17.28 |
| 10 | Prior Period Expenses | 0.00 | 35.65 | 18.26 | 0.00 | 0.00 |
| 11 | Corporate Office expenses allocation | 2701.46 | 2724.47 | 2938.98 | 3022.24 | 3088.28 |
| 12 | Others | | | | | |
| 12.1 | Rates & Taxes | 2.87 | 10.86 | 1.20 | 2.26 | 4.49 |
| 12.2 | Water cess | 133.50 | 132.13 | 113.75 | 119.81 | 109.35 |
| 12.3 | Training & recruitment expenses | 54.44 | 40.51 | 27.16 | 45.79 | 52.12 |
| 12.4 | Tender Expenses | 51.78 | 90.14 | 124.09 | 102.83 | 117.35 |
| 12.5 | Guest house expenses | 32.32 | 41.25 | 39.73 | 45.60 | 62.73 |

(Rs. Lakhs)

| Sl. No. | Items | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
|---------|--------------------------------|-----------------|-----------------------------------|-----------------|-----------------|-----------------|
| 12.6 | Education expenses | 28.24 | 28.21 | 101.97 | 2.32 | 0.00 |
| 12.7 | Community Development Expenses | 360.28 | 365.47 | 202.37 | 427.15 | 442.80 |
| 12.8 | Ash utilisation expenses | 12.29 | 0.00 | -13.90 | -76.67 | -69.77 |
| 12.9 | Books & Periodicals | 2.47 | 1.61 | 2.77 | 3.02 | 1.25 |
| 12.10 | Professional Charges | 58.98 | 23.79 | 33.89 | 86.31 | 102.26 |
| 12.11 | Legal expenses | 19.22 | 13.52 | 28.40 | 6.41 | 10.30 |
| 12.12 | EDP Hire & other charges | 32.09 | 45.46 | 43.99 | 59.23 | 51.59 |
| 12.13 | Printing & Stationery | 39.44 | 52.20 | 43.06 | 65.00 | 79.63 |
| 12.14 | Misc Expenses | 527.27 | 948.70 | 587.59 | 1803.85 | 569.89 |
| | Sub Total (Others) | 1355.19 | 1793.84 | 1336.08 | 2692.90 | 1533.98 |
| 13 | (Total 1 to 12) | 31035.98 | 35016.04 | 32233.99 | 35988.30 | 38132.48 |
| 14 | Revenue / Recoveries | -457.15 | -501.29 | -700.60 | -605.33 | -726.85 |
| 15 | Net Expenses | 30578.83 | 34514.75 | 31533.39 | 35382.97 | 37405.64 |
| 16 | Capital spares consumed | 163.70 | 378.21 | 283.70 | 868.88 | 434.15 |
| | Total O&M Cost | 30742.53 | 34892.96 | 31817.09 | 36251.84 | 37839.79 |
| | No. of Emp. Applied for VRS | 6 | No. VRS scheme was in operational | | | |

Annexure-VI (D)

Details of capital Spares

Name of Company : NTPC Limited

Name of Power station : Feroz Gandhi Unchahar Thermal Power Station (1050 MW)

In Rs.

| Sl. No. | ITEM | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
|---------|--|----------------|----------------|----------------|----------------|----------------|
| (A) | Details of capital spares in Opening stock | 1,03,34,60,350 | 1,10,07,32,851 | 1,19,89,12,262 | 1,28,63,40,260 | 1,31,93,24,569 |
| (B) | Details of capital spares procured during the year | 8,36,42,558 | 13,60,00,094 | 11,57,97,953 | 11,98,72,139 | 20,66,51,736 |
| (C) | Details of capital spares consumed during the year | (1,63,70,057) | (3,78,20,683) | (2,83,69,954) | (8,68,87,830) | (4,34,14,827) |
| (D) | Details of capital spares closing at the end of the year | 1,10,07,32,851 | 1,19,89,12,262 | 1,28,63,40,260 | 1,31,93,24,569 | 1,48,25,61,478 |

Note: Details of spares being provided in soft copy as voluminous

Annexure-XIX

| Name of the Utility: NTPC Ltd | | | | | | | | | | | | | | |
|---|--|-------------------------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Name of the Generating Station: Feroz Gandhi Unchahar Thermal Power Station Stage-I | | | | | | | | | | | | | | |
| Station/ Stage/ Unit: 2 X 210 MW (Stage-I) | | | | | | | | | | | | | | |
| Fuel Type (Coal/ Lignite/ Gas/ Liquid Fuel/ Nuclear/ Hydro): Coal | | | | | | | | | | | | | | |
| Capacity of Plant (MW): 420 MW | | | | | | | | | | | | | | |
| COD : 13.02.1992 (date of Takeover) | | | | | | | | | | | | | | |
| | | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
| 1 | Plant Availability Factor (PAF) (%) | 91.49 | 96.54 | 100.35 | 94.80 | 91.77 | 98.55 | 99.51 | 94.47 | 98.79 | 99.63 | 95.55 | 98.08 | 90.51 |
| 2 | Plant Load Factors (PLF) (%) | 90.86 | 96.26 | 99.65 | 94.67 | 91.17 | 97.37 | 94.38 | 89.25 | 92.67 | 87.87 | 83.29 | 77.60 | 73.07 |
| 3 | Scheduled Energy (MU) | 3028.06 | 3211.18 | 3324.10 | 3177.87 | 3054.00 | 3278.00 | 3154.00 | 2999.00 | 3136.00 | 2997.00 | 2931.00 | 2808.00 | 2580.00 |
| 4 | Scheduled Generation (MU) | 3028.06 | 3211.18 | 3324.10 | 3177.87 | 3054.00 | 3278.00 | 3154.00 | 2999.00 | 3136.00 | 2997.00 | 2931.00 | 2808.00 | 2580.00 |
| 5 | Actual Generation (MU) | 3067.40 | 3253.94 | 3359.62 | 3197.92 | 3081.08 | 3298.18 | 3190.19 | 3017.52 | 3124.88 | 2947.06 | 2787.47 | 2594.36 | 2426.42 |
| 6 | Quantum of coal consumption (MT) | 2282600 | 2398955 | 2456367 | 2335401 | 2152972 | 2247645 | 2363494 | 2370712 | 2356140 | 2199130 | 2032616 | 1922182 | 1849033 |
| 7 | Value of coal (Rs. Lakh) | | | | | 41294 | 50707 | 57253 | 66050 | 79279 | 77674 | 74728 | 69611 | 72143 |
| 8 | Specific Coal Consumption (kg/kwh) | 0.68 | 0.68 | 0.67 | 0.67 | 0.64 | 0.63 | 0.68 | 0.72 | 0.69 | 0.68 | 0.66 | 0.67 | 0.69 |
| 9 | Gross Calorific Value of Coal (Kcal/ Kg) | 3590.00 | 3587.00 | 3607.00 | 3584.00 | 3716.00 | 3805.00 | 3539.00 | 3348.00 | 3476.00 | 3550.00 | 3637.26 | 3622.17 | 3584.03 |
| 10 | Heat Contribution of Coal (Kcal/ kwh) | 2451.34 | 2429.82 | 2416.69 | 2396.48 | 2393.28 | 2387.20 | 2408.72 | 2410.51 | 2402.05 | 2414.95 | 2412.58 | 2431.87 | 2464.93 |
| 11 | Cost Of Specific Coal Consumption (Rs./Kwh) – Finally admitted by CERC (Ex Bus) \$ | | | | | | | | | | | | | |
| 12 | Quantum of Oil Consumption (Lit.) | 2126.05 | 1558.53 | 440.30 | 1201.20 | 1383.99 | 667.27 | 1634.71 | 3511.88 | 1968.10 | 1229.45 | 1448.91 | 834.88 | 755.47 |
| 13 | Value of Oil (Rs. lakh) | | | | | | | | | | | | | |
| 14 | Gross calorific value of oil (kcal/lit) | 9986 | 9990 | 9990 | 9990 | 9990 | 9990 | 9990 | 9990 | 9990 | 9990 | 9600 | 9901 | 9669 |
| 15 | Specific Oil Consumption (ml/ kwh) | 0.64 | 0.44 | 0.12 | 0.34 | 0.41 | 0.19 | 0.47 | 1.07 | 0.58 | 0.38 | 0.47 | 0.29 | 0.28 |
| 16 | Cost Of Specific Oil Consumption (Rs./Kwh) – Finally admitted by CERC (Ex Bus) \$ | | | | | | | | | | | | | |
| 17 | Heat Contribution of Oil (Kcal/ kwh) | | | | | | | | | | | | | |
| 18 | Station Heat Rate (kcal/kwh) | 2458.00 | 2434.22 | 2417.89 | 2399.92 | 2397.42 | 2389.06 | 2413.42 | 2421.17 | 2407.82 | 2418.75 | 2417.12 | 2434.76 | 2467.65 |
| 19 | Auxiliary Energy Consumption (%) | 8.15 | 8.01 | 8.30 | 8.44 | 7.83 | 7.71 | 7.89 | 8.14 | 8.14 | 8.61 | 8.59 | 8.86 | 9.18 |
| 20 | Debt at the end of the year (Rs. Cr) | 0 | 0 | 0.00 | 0.00 | 1.31 | 24.90 | 20.56 | 22.09 | 16.81 | 11.46 | 5.86 | 0.26 | 0.00 |
| 21 | Equity (Rs. Cr - (Average) # | 472.6598 | 472.619 | 472.55 | 474.08 | 478.58 | 480.52 | 479.66 | 480.53 | 480.93 | 479.98 | 479.59 | 479.59 | 479.59 |
| 22 | Working Capital (Rs. Cr) – finally admitted by CERC | 142.397 | 139.9787 | 141.54 | 143.55 | 145.37 | 224.44 | 226.18 | 228.67 | 230.58 | 233.37 | 69.68 | 72.45 | 76.38 |
| 23 | Capital cost (Rs. Cr) – finally admitted by CERC (Average) # | 945.2423 | 945.1063 | 944.88 | 949.98 | 964.99 | 971.54 | 968.68 | 971.57 | 972.89 | 969.74 | 968.44 | 968.44 | 968.44 |
| 24 | Capacity Charges/ Annual Fixed Cost (AFC) in Rs. Cr | 158.6041 | 160.011 | 162.04 | 164.77 | 168.42 | 230.79 | 233.84 | 238.21 | 244.06 | 251.98 | 273.47 | 282.36 | 291.39 |
| | (a) Return on equity – post tax (admitted by CERC) for 2004-09 & pre tax (admitted by CERC) for 2009-17 \$ | | | | | | | | | | | | | |
| | Absolute value (in Rs. Cr) | 66.1724 | 66.1667 | 66.16 | 66.37 | 67.00 | 112.83 | 111.33 | 110.25 | 110.34 | 112.70 | 94.05 | 94.50 | 94.50 |
| | Rate (%) | 14.000% | 14.000% | 14.000% | 14.000% | 14.000% | 23.481% | 23.210% | 22.944% | 22.944% | 23.481% | 19.610% | 19.705% | 19.705% |
| | (b) Interest on Loan | | | | | | | | | | | | | |
| | Absolute value (in Rs Cr) | 0.1178 | - | - | - | 0.02 | 0.69 | 0.42 | 0.53 | 0.65 | 0.62 | 0.50 | 0.20 | 0.01 |
| | Rate (%) – Weighted Average Rate | 5.8521% | 5.8516% | 7.6809% | 5.6088% | 2.4888% | 2.5563% | 1.8440% | 2.5075% | 3.3535% | 4.4197% | 5.7757% | 6.6858% | 8.3714% |
| | (c) Depreciation (finally allowed by CERC) | | | | | | | | | | | | | |
| | Absolute value (in Rs Cr) | 33.2106 | 10.3178 | 10.32 | 10.74 | 12.14 | 4.15 | 4.38 | 4.77 | 5.28 | 5.36 | 5.60 | 5.60 | 5.60 |
| | Rate (%) | Spread over useful life | | | | | | | | | | | | |
| | (d) Interest on working Capital | | | | | | | | | | | | | |
| | Absolute value (in Rs Cr) | 14.5957 | 14.3478 | 14.51 | 14.71 | 14.90 | 27.49 | 27.71 | 28.01 | 28.25 | 28.59 | 39.20 | 39.64 | 40.01 |

| | | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
|----|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|
| | Rate (%) | 10.250% | 10.250% | 10.250% | 10.250% | 10.250% | 12.250% | 12.250% | 12.250% | 12.250% | 12.250% | 13.500% | 13.500% | 13.500% |
| | (e) Operation and maintenance cost (finally admitted by CERC) | | | | | | | | | | | | | |
| | Absolute value (in Rs Cr) | 43.68 | 45.444 | 47.25 | 49.14 | 51.11 | 76.44 | 80.81 | 85.43 | 90.34 | 95.51 | 100.38 | 106.68 | 113.40 |
| | Water charges (finally admitted by CERC) (in Rs Cr) # | | | | | | | | | | | 2.24 | 2.24 | 2.24 |
| | Rate (%) | | | | | | | | | | | | | |
| | Normative O&M Expenses (in Rs Lakh/MW) # | 10.4 | 10.82 | 11.25 | 11.70 | 12.17 | 18 | 19.24 | 20.34 | 21.51 | 22.74 | 23.90 | 25.40 | 27.00 |
| | (f) Compensation Allowances (in Rs Cr) | | | | | | 2.73 | 2.73 | 2.73 | 2.73 | 2.73 | | | |
| 25 | AFC (Rs. Kwh) | 0.591 | 0.596 | 0.603 | 0.614 | 0.627 | 0.811 | 0.822 | 0.837 | 0.858 | 0.885 | 0.984 | 1.016 | 1.049 |
| 26 | Energy Charge (Rs./Kwh) | 1.114 | 1.181 | 1.297 | 1.334 | 1.562 | 1.672 | 1.876 | 2.282 | 2.639 | 2.727 | 2.796 | 2.702 | 2.928 |
| 27 | Total tariff (Rs. Kwh) | 1.704 | 1.777 | 1.900 | 1.947 | 2.189 | 2.483 | 2.697 | 3.119 | 3.497 | 3.613 | 3.780 | 3.718 | 3.976 |
| 28 | Revenue realisation before tax (Rs. Crore) | | | | | | | | | | | | | |
| 29 | Revenue realisation after tax (Rs. Crore) | | | | | | | | | | | | | |
| 30 | Profit/ loss (Rs. Crore)* | 224.57 | 190.22 | 220.01 | 317.89 | 282.57 | 466.47 | 466.19 | 408.29 | 728.26 | 462.33 | 322.13 | 318.64 | 403.41 |
| 31 | DSM Generation (MU) | 39.343 | 42.761 | 35.518 | 20.054 | 27.079 | 20.179 | 36.188 | 18.524 | -11.121 | -49.945 | -143.529 | -213.636 | -153.582 |
| 32 | DSM Rate (Ps/Kwh) | | | | | | | | | | | | | |
| 33 | Revenue from DSM (Rs. Crore) | | | | -6.07 | -8.76 | -7.29 | -12.16 | -8.90 | -3.07 | 2.88 | 22.16 | 37.84 | 26.00 |

Note:

- 1 \$ "Ex-Bus" word is additionally inserted.
- 2 # "Average" word is additionally inserted.
- 3 \$ "for 2004-09 & pre tax (admitted by CERC) for 2009-17" word is additional inserted
- 4 # Additional Row 24(e) inserted
- 5 DSM Revenue (-)Received / (+) Paid
- 6 * For the whole station as an when the units were declared COD

Annexure-XIX

| Name of the Utility: NTPC Ltd | | | | | | | | | | | | | | |
|--|--|---------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------------------------|
| Name of the Generating Station: Feroz Gandhi Unchahar Thermal Power Station Stage-II | | | | | | | | | | | | | | |
| Station/ Stage/ Unit: 2 X 210 MW (Stage-II) | | | | | | | | | | | | | | |
| Fuel Type (Coal/ Lignite/ Gas/ Liquid Fuel/ Nuclear/ Hydro): Coal | | | | | | | | | | | | | | |
| Capacity of Plant (MW): 420 MW | | | | | | | | | | | | | | |
| COD : 01.01.2001 | | | | | | | | | | | | | | |
| | | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
| 1 | Plant Availability Factor (PAF) (%) | 93.05 | 94.77 | 92.93 | 100.10 | 98.41 | 95.81 | 100.36 | 93.23 | 100.07 | 100.22 | 96.02 | 101.12 | 100.00 |
| 2 | Plant Load Factors (PLF) (%) | 93.45 | 95.12 | 92.25 | 99.16 | 97.66 | 94.56 | 94.46 | 87.32 | 92.52 | 95.34 | 80.49 | 76.71 | 76.95 |
| 3 | Scheduled Energy (MU) | 3079.02 | 3147.88 | 3067.30 | 3336.04 | 3261.00 | 3168.00 | 3068.00 | 2887.00 | 3106.00 | 2902.00 | 2786.00 | 2753.00 | 2760.00 |
| 4 | Scheduled Generation (MU) | 3079.02 | 3147.88 | 3067.30 | 3336.04 | 3261.25 | 3168.00 | 3068.00 | 2887.00 | 3106.00 | 2902.00 | 2786.00 | 2753.00 | 2760.00 |
| 5 | Actual Generation (MU) | 3125.18 | 3190.06 | 3104.07 | 3355.24 | 3288.60 | 3193.09 | 3161.00 | 2940.67 | 3109.86 | 2875.23 | 2681.21 | 2555.72 | 2569.42 |
| 6 | Quantum of coal consumption (MT) | 2307491 | 2335648 | 2240141 | 2420843 | 2307116 | 2199479 | 2329966 | 2308259 | 2357558 | 2148022 | 1955489 | 1882175 | 1930754 |
| 7 | Value of coal (Rs. Lakh) | | | | | 44250 | 49620 | 56441 | 64310 | 79326 | 75869 | 71893 | 68162 | 75331 |
| 8 | Specific Coal Consumption (kg/kwh) | 0.67 | 0.67 | 0.66 | 0.66 | 0.64 | 0.63 | 0.67 | 0.72 | 0.69 | 0.68 | 0.66 | 0.67 | 0.68 |
| 9 | Gross Calorific Value of Coal (Kcal/ Kg) | 3638.00 | 3631.00 | 3636.00 | 3618.00 | 3706.00 | 3766.00 | 3574.00 | 3364.00 | 3467.00 | 3555.00 | 3651.73 | 3651.94 | 3586.11 |
| 10 | Heat Contribution of Coal (Kcal/ kwh) | 2441.58 | 2423.22 | 2399.80 | 2394.26 | 2379.66 | 2380.95 | 2396.08 | 2410.51 | 2401.13 | 2410.07 | 2411.43 | 2428.91 | 2445.67 |
| 11 | Cost Of Specific Coal Consumption (Rs./Kwh) – Finally admitted by CERC (Ex Bus) \$ | | | | | | | | | | | | | |
| 12 | Quantum of Oil Consumption (Lit.) | 800.91 | 989.85 | 1197.20 | 555.03 | 602.32 | 676.16 | 821.23 | 1521.71 | 794.17 | 1146.41 | 1364.33 | 580.35 | 486.11 |
| 13 | Value of Oil (Rs. lakh) | | | | | | | | | | | | | |
| 14 | Gross calorific value of oil (kcal/lit) | 9987 | 9990 | 9990 | 9990 | 9990 | 9990 | 9990 | 9990 | 9990 | 9990 | 9780 | 9775 | 9521 |
| 15 | Specific Oil Consumption (ml/ kwh) | 0.23 | 0.28 | 0.35 | 0.15 | 0.17 | 0.19 | 0.24 | 0.47 | 0.23 | 0.36 | 0.46 | 0.21 | 0.17 |
| 16 | Cost Of Specific Oil Consumption (Rs./Kwh) – Finally admitted by CERC (Ex Bus) \$ | | | | | | | | | | | | | |
| 17 | Heat Contribution of Oil (Kcal/ kwh) | | | | | | | | | | | | | |
| 18 | Station Heat Rate (kcal/kwh) | 2443.00 | 2426.05 | 2403.32 | 2395.77 | 2381.33 | 2382.90 | 2398.44 | 2415.23 | 2403.46 | 2413.68 | 2415.94 | 2430.91 | 2447.31 |
| 19 | Auxiliary Energy Consumption (%) | 8.99 | 8.74 | 8.27 | 8.28 | 8.47 | 8.22 | 9.05 | 8.71 | 8.64 | 9.25 | 9.24 | 9.42 | 9.00 |
| 20 | Debt at the end of the year (Rs. Cr) | 469.89 | 431.43 | 387.51 | 335.68 | 282.78 | 215.06 | 145.27 | 75.58 | 11.05 | 0.00 | 0.00 | 0.00 | 0.00 |
| 21 | Equity (Rs. Cr - (Average) # | 389.71 | 389.71 | 389.71 | 389.71 | 389.71 | 389.77 | 389.98 | 389.93 | 390.94 | 391.63 | 391.67 | 393.85 | 396.13 |
| 22 | Working Capital (Rs. Cr) – finally admitted by CERC | 144.29 | 145.38 | 146.56 | 148.63 | 149.79 | 238.00 | 239.44 | 241.63 | 243.24 | 239.84 | 292.20 | 295.68 | 298.67 |
| 23 | Capital cost (Rs. Cr) – finally admitted by CERC (Average) # | 1299.04 | 1299.04 | 1299.04 | 1299.04 | 1299.04 | 1299.22 | 1299.93 | 1299.75 | 1303.15 | 1305.45 | 1305.57 | 1312.83 | 1320.43 |
| 24 | Capacity Charges/ Annual Fixed Cost (AFC) in Rs. Cr | 177.10 | 176.46 | 173.83 | 173.00 | 186.70 | 279.49 | 280.72 | 283.20 | 287.31 | 258.11 | 253.78 | 262.73 | 271.68 |
| | (a) Return on equity – post tax (admitted by CERC) for 2004-09 & pre tax (admitted by CERC) for 2009-17 \$ | | | | | | | | | | | | | |
| | Absolute value (in Rs. Cr) | 54.5597 | 54.5597 | 54.56 | 54.56 | 54.56 | 91.52 | 90.51 | 89.46 | 89.70 | 91.96 | 76.81 | 77.61 | 78.06 |
| | Rate (%) | 14.000% | 14.000% | 14.000% | 14.000% | 14.000% | 23.481% | 23.210% | 22.944% | 22.944% | 23.481% | 19.610% | 19.705% | 19.705% |
| | (b) Interest on Loan | | | | | | | | | | | | | |
| | Absolute value (in Rs Cr) | 16.722 | 14.9432 | 13.28 | 11.22 | 8.95 | 6.16 | 3.55 | 1.91 | 0.72 | 0.14 | 0.00 | 0.00 | 0.00 |
| | Rate (%) – Weighted Average Rate | 0.03428 | 0.033158 | 3.2439% | 3.1030% | 2.8945% | 2.4761% | 1.9716% | 1.7286% | 1.6533% | 2.5268% | | | |
| | (c) Depreciation (finally allowed by CERC) | | | | | | | | | | | | | |
| | Absolute value (in Rs Cr) | 48.2438 | 48.2438 | 48.24 | 48.24 | 48.24 | 69.75 | 69.73 | 69.69 | 69.66 | 34.03 | 34.07 | 34.82 | 35.57 |
| | Rate (%) | 3.714% | 3.714% | 3.714% | 3.714% | 3.714% | | | | | | | | Spread over useful life |

| | | | | | | | | | | | | | | |
|---|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Name of the Utility: NTPC Ltd | | | | | | | | | | | | | | |
| Name of the Generating Station: Feroz Gandhi Unchahar Thermal Power Station Stage-II | | | | | | | | | | | | | | |
| Station/ Stage/ Unit: 2 X 210 MW (Stage-II) | | | | | | | | | | | | | | |
| Fuel Type (Coal/ Lignite/ Gas/ Liquid Fuel/ Nuclear/ Hydro): Coal | | | | | | | | | | | | | | |
| Capacity of Plant (MW): 420 MW | | | | | | | | | | | | | | |
| COD : 01.01.2001 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
| | (d) Interest on working Capital | 14.7899 | 14.9019 | 15.02 | 15.23 | 15.35 | 29.15 | 29.33 | 29.60 | 29.80 | 29.38 | 39.45 | 39.92 | 40.32 |
| | Absolute value (in Rs Cr) | 10.25% | 10.25% | 10.25% | 10.25% | 10.25% | 12.25% | 12.25% | 12.25% | 12.25% | 12.25% | 13.50% | 13.50% | 13.50% |
| | Rate (%) | | | | | | | | | | | | | |
| | (e) Operation and maintenance cost (finally admitted by CERC) | 43.68 | 45.444 | 47.25 | 49.14 | 51.11 | 76.44 | 80.81 | 85.43 | 90.34 | 95.51 | 100.38 | 106.68 | 113.40 |
| | Absolute value (in Rs Cr) | Not Applicable | | | | | | | | | | 2.24 | 2.24 | 2.24 |
| | Water charges (finally admitted by CERC) (in Rs Cr) # | | | | | | | | | | | | | |
| | Rate (%) | | | | | | | | | | | | | |
| | Normative O&M Expenses (in Rs Lakh/MW) # | 10.4 | 10.82 | 11.25 | 11.70 | 12.17 | 18 | 19.24 | 20.34 | 21.51 | 22.74 | 23.90 | 25.40 | 27.00 |
| | (f) Compensation Allowances (in Rs Cr) | | | | | | | 0.32 | 0.63 | 0.63 | 0.63 | 0.84 | 1.47 | 2.10 |
| 25 | AFC (Rs. Kwh) | 0.661 | 0.659 | 0.649 | 0.644 | 0.697 | 0.982 | 0.986 | 0.992 | 1.010 | 0.907 | 0.913 | 0.943 | 0.978 |
| 26 | Energy Charge (Rs./Kwh) | 1.720 | 1.760 | 1.900 | 1.920 | 2.200 | 2.660 | 2.910 | 2.270 | 2.650 | 2.710 | 2.730 | 2.690 | 2.910 |
| 27 | Total tariff (Rs. Kwh) | 2.381 | 2.419 | 2.549 | 2.564 | 2.897 | 3.642 | 3.896 | 3.262 | 3.660 | 3.617 | 3.643 | 3.633 | 3.888 |
| 28 | Revenue realisation before tax (Rs. Crore) | | | | | | | | | | | | | |
| 29 | Revenue realisation after tax (Rs. Crore) | | | | | | | | | | | | | |
| 30 | Profit/ loss (Rs. Crore)* | 224.57 | 190.22 | 220.01 | 317.89 | 282.57 | 466.47 | 466.19 | 408.29 | 728.26 | 462.33 | 322.13 | 318.64 | 403.41 |
| 31 | DSM Generation (MU) | 46.156 | 42.183 | 36.772 | 19.199 | 27.346 | 25.085 | 92.998 | 53.669 | 3.865 | -26.769 | -104.788 | -197.282 | -190.579 |
| 32 | DSM Rate (Ps/Kwh) | | | | | | | | | | | | | |
| 33 | Revenue from DSM (Rs. Crore) | | | | 11.3047 | -12.983 | -13.4853 | -33.1496 | 24.6692 | -6.1667 | -0.8557 | 16.1394 | 34.3466 | 31.1509 |

Note:

- 1 \$ "Ex-Bus" word is additionally inserted.
- 2 # "Average" word is additionally inserted.
- 3 \$ "for 2004-09 & pre tax (admitted by CERC) for 2009-17" word is additional inserted
- 4 # Additional Row 24(e) inserted
- 5 DSM Revenue (-)Received / (+) Paid
- 6 * For the whole station as an when the units were declared COD

Annexure-XIX

| Name of the Utility: NTPC Ltd | | | | | | | | | | | | | | |
|---|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Name of the Generating Station: Feroz Gandhi Unchahar Thermal Power Station Stage-III | | | | | | | | | | | | | | |
| Station/ Stage/ Unit: 1 X 210 MW (Stage-III) | | | | | | | | | | | | | | |
| Fuel Type (Coal/ Lignite/ Gas/ Liquid Fuel/ Nuclear/ Hydro): Coal | | | | | | | | | | | | | | |
| Capacity of Plant (MW): 210 MW | | | | | | | | | | | | | | |
| COD : 01.1.2007 | | | | | | | | | | | | | | |
| | | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
| 1 | Plant Availability Factor (PAF) (%) | | | 92.62 | 102.69 | 93.10 | 104.83 | 95.55 | 101.95 | 100.06 | 97.09 | 102.56 | 95.61 | 105.12 |
| 2 | Plant Load Factors (PLF) (%) | | | 53.99 | 100.79 | 91.60 | 102.78 | 88.72 | 95.70 | 93.17 | 82.20 | 86.75 | 71.57 | 80.10 |
| 3 | Scheduled Energy (MU) | | | 375.05 | 1710.43 | 1542.00 | 1730.00 | 1479.00 | 1599.00 | 1568.00 | 1388.00 | 1502.00 | 1292.00 | 1446.00 |
| 4 | Scheduled Generation (MU) | | | 375.05 | 1710.43 | 1541.06 | 1730.00 | 1479.00 | 1599.00 | 1568.00 | 1388.00 | 1502.00 | 1292.00 | 1446.00 |
| 5 | Actual Generation (MU) | | | 381.03 | 1731.93 | 1555.29 | 1745.17 | 1496.78 | 1620.42 | 1576.54 | 1512.63 | 1456.15 | 1202.10 | 1339.06 |
| 6 | Quantum of coal consumption (MT) | | | 272626 | 1231626 | 1077508 | 1190349 | 1091588 | 1266178 | 1185609 | 1024538 | 1052386 | 877004 | 1001171 |
| 7 | Value of coal (Rs. Lakh) | | | | | 20667 | 26854 | 26443 | 35277 | 39893 | 36187 | 38690 | 31760 | 39062 |
| 8 | Specific Coal Consumption (kg/kwh) | | | 0.67 | 0.66 | 0.64 | 0.63 | 0.67 | 0.72 | 0.69 | 0.68 | 0.66 | 0.66 | 0.68 |
| 9 | Gross Calorific Value of Coal (Kcal/ Kg) | | | 3575.00 | 3587.00 | 3713.00 | 3769.00 | 3569.00 | 3358.00 | 3466.00 | 3549.00 | 3655.00 | 3634.07 | 3593.26 |
| 10 | Heat Contribution of Coal (Kcal/ kwh) | | | 2395.23 | 2376.15 | 2374.33 | 2372.77 | 2386.98 | 2408.50 | 2397.48 | 2404.56 | 2410.35 | 2414.23 | 2441.39 |
| 11 | Cost Of Specific Coal Consumption (Rs./Kwh) – Finally admitted by CERC (Ex Bus) \$ | | | | | | | | | | | | | |
| 12 | Quantum of Oil Consumption (Lit.) | | | 411.86 | 381.87 | 366.59 | 223.22 | 351.32 | 1246.48 | 691.25 | 698.18 | 323.75 | 366.81 | 52.97 |
| 13 | Value of Oil (Rs. lakh) | | | | | | | | | | | | | |
| 14 | Gross calorific value of oil (kcal/lit) | | | 9990 | 9990 | 9990 | 9990 | 9990 | 9990 | 9990 | 9990 | 9623 | 9894 | 9604 |
| 15 | Specific Oil Consumption (ml/ kwh) | | | 1.01 | 0.21 | 0.22 | 0.12 | 0.22 | 0.71 | 0.40 | 0.46 | 0.20 | 0.28 | 0.04 |
| 16 | Cost Of Specific Oil Consumption (Rs./Kwh) – Finally admitted by CERC (Ex Bus) \$ | | | | | | | | | | | | | |
| 17 | Heat Contribution of Oil (Kcal/ kwh) | | | | | | | | | | | | | |
| 18 | Station Heat Rate (kcal/kwh) | | | 2405.34 | 2378.20 | 2376.50 | 2373.95 | 2389.13 | 2415.56 | 2401.51 | 2409.17 | 2412.30 | 2416.98 | 2441.74 |
| 19 | Auxiliary Energy Consumption (%) | | | 6.36 | 6.85 | 7.70 | 7.70 | 8.29 | 8.21 | 8.02 | 8.59 | 8.55 | 8.65 | 8.83 |
| 20 | Debt at the end of the year (Rs. Cr) | | | 571.49 | 569.38 | 533.70 | 469.79 | 426.19 | 382.87 | 337.76 | 293.37 | 248.58 | 205.60 | 159.90 |
| 21 | Equity (Rs. Cr - (Average) # | | | 245.24 | 255.98 | 266.78 | 259.88 | 260.84 | 261.53 | 261.90 | 262.10 | 262.47 | 263.18 | 263.74 |
| 22 | Working Capital (Rs. Cr) – finally admitted by CERC | | | 92.45 | 93.46 | 97.50 | 129.19 | 129.60 | 130.41 | 130.63 | 131.40 | 157.00 | 158.14 | 159.07 |
| 23 | Capital cost (Rs. Cr) – finally admitted by CERC (Average) # | | | 817.46 | 853.25 | 889.26 | 866.25 | 869.46 | 871.77 | 873.02 | 873.65 | 874.89 | 877.26 | 879.13 |
| 24 | Capacity Charges/ Annual Fixed Cost (AFC) in Rs. Cr | | | 149.12 | 151.06 | 171.04 | 202.79 | 201.50 | 201.05 | 199.57 | 199.80 | 191.84 | 192.44 | 193.21 |
| | (a) Return on equity – post tax (admitted by CERC) for 2004-09 & pre tax (admitted by CERC) for 2009-17 \$ | | | | | | | | | | | | | |
| | Absolute value (in Rs. Cr) | | | 34.33 | 35.84 | 37.35 | 61.02 | 60.54 | 60.01 | 60.09 | 61.54 | 51.47 | 51.86 | 51.97 |
| | Rate (%) | | | 14.000% | 14.000% | 14.000% | 23.481% | 23.210% | 22.944% | 22.944% | 23.481% | 19.610% | 19.705% | 19.705% |
| | (b) Interest on Loan | | | | | | | | | | | | | |
| | Absolute value (in Rs Cr) | | | 44.86 | 44.17 | 44.14 | 39.74 | 36.41 | 33.90 | 29.81 | 25.79 | 22.39 | 19.17 | 16.25 |
| | Rate (%) – Weighted Average Rate | | | 7.9030% | 7.7432% | 8.0031% | 8.0989% | 8.1269% | 8.3807% | 8.2729% | 8.1737% | 8.2612% | 8.4404% | 8.8929% |
| | (c) Depreciation (finally allowed by CERC) | | | | | | | | | | | | | |
| | Absolute value (in Rs Cr) | | | 36.36 | 35.50 | 52.70 | 44.75 | 45.04 | 45.21 | 45.27 | 45.38 | 45.48 | 45.60 | 45.70 |
| | Rate (%) | | | 3.56 | 3.56 | 3.56 | 5.17 | 5.18 | 5.19 | 5.18 | 5.19 | 5.20 | 5.20 | 5.20 |
| | (d) Interest on working Capital | | | | | | | | | | | | | |
| | Absolute value (in Rs Cr) | | | 9.48 | 9.58 | 9.99 | 15.83 | 15.88 | 15.97 | 16.00 | 16.10 | 21.19 | 21.35 | 21.47 |

| | | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
|----|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|
| | Rate (%) | | | 10.25% | 10.25% | 10.25% | 12.25% | 12.25% | 12.25% | 12.25% | 12.25% | 0.14 | 0.14 | 0.14 |
| | (e) Operation and maintenance cost (finally admitted by CERC) | | | | | | | | | | | | | |
| | Absolute value (in Rs Cr) | | | 23.63 | 24.57 | 25.56 | 38.22 | 40.40 | 42.71 | 45.17 | 47.75 | 50.19 | 53.34 | 56.70 |
| | Water charges (finally admitted by CERC) (in Rs Cr) # | | | | | | | | | | | 1.12 | 1.12 | 1.12 |
| | Rate (%) | | | | | | | | | | | | | |
| | Normative O&M Expenses (in Rs Lakh/MW) # | | | 11.25 | 11.70 | 12.17 | 18 | 19.24 | 20.34 | 21.51 | 22.74 | 23.90 | 25.40 | 27.00 |
| | (f) Compensation Allowances (in Rs Cr) | | | | | | | | | | | | | |
| 25 | AFC (Rs. Kwh) | | | 1.11 | 1.13 | 1.28 | 1.43 | 1.42 | 1.41 | 1.40 | 1.40 | 1.38 | 1.38 | 1.39 |
| 26 | Energy Charge (Rs./Kwh) | | | 1.32 | 1.34 | 1.56 | 1.68 | 1.85 | 2.26 | 2.64 | 2.69 | 2.73 | 2.66 | 2.91 |
| 27 | Total tariff (Rs. Kwh) | | | 2.43 | 2.46 | 2.84 | 3.10 | 3.27 | 3.68 | 4.04 | 4.09 | 4.11 | 4.04 | 4.30 |
| 28 | Revenue realisation before tax (Rs. Crore) | | | | | | | | | | | | | |
| 29 | Revenue realisation after tax (Rs. Crore) | | | | | | | | | | | | | |
| 30 | Profit/ loss (Rs. Crore)* | 224.57 | 190.22 | 220.01 | 317.89 | 282.57 | 466.47 | 466.19 | 408.29 | 728.26 | 462.33 | 322.13 | 318.64 | 403.41 |
| 31 | DSM Generation (MU) | | | 5.976 | 21.505 | 14.230 | 15.172 | 17.777 | 21.415 | 8.536 | 124.628 | -45.846 | -89.898 | -106.942 |
| 32 | DSM Rate (Ps/Kwh) | | | | | | | | | | | | | |
| 33 | Revenue from DSM (Rs. Crore) | | | | | | | | | -4.66 | -0.79 | 5.92 | 14.68 | 16.97 |

Note:

- 1 \$ "Ex-Bus" word is additionally inserted.
- 2 # "Average" word is additionally inserted.
- 3 \$ "for 2004-09 & pre tax (admitted by CERC) for 2009-17" word is additional inserted
- 4 # Additional Row 24(e) inserted
- 5 DSM Revenue (-)Received / (+) Paid
- 6 * For the whole station as an when the units were declared COD