



# Ministry of Power (Government of India)

&

**NTPC Limited**  
(A Government of India Enterprise)

2011-12

**MEMORANDUM OF UNDERSTANDING 2011-2012**  
**BETWEEN**  
**MINISTRY OF POWER, GOVERNMENT OF INDIA AND**  
**NTPC LIMITED**

**PART-I**

**Our Vision**

"TO BE THE WORLD'S LARGEST AND BEST POWER PRODUCER, POWERING INDIA'S GROWTH"

**Mission**

DEVELOP AND PROVIDE RELIABLE POWER, RELATED PRODUCTS AND SERVICES AT COMPETITIVE PRICES, INTEGRATING MULTIPLE ENERGY SOURCES WITH INNOVATIVE AND ECO-FRIENDLY TECHNOLOGIES AND CONTRIBUTE TO SOCIETY.

**Objectives**

To realise the above mission, eight key corporate objectives have been identified.

**Business portfolio growth**

- To further consolidate NTPC's position as the leading thermal power generation company in India and establish a presence in hydro power segment
- To broad base the generation mix by evaluating conventional and non-conventional sources of energy to ensure long run competitiveness and mitigate fuel risks
- To diversify across the power value chain in India by considering backward and forward integration into areas such as power trading, transmission, distribution, coal mining, coal beneficiation, etc
- To develop a portfolio of generation assets in international markets
- To establish a strong services brand in the domestic and international markets

**Customer Focus**

- To foster a collaborative style of working with customers, growing to be a preferred brand for supply of quality power
- To expand the relationship with existing customers by offering a bouquet of services in addition to supply of power – e.g. trading, energy consulting, distribution consulting, management practices
- To expand the future customer portfolio through profitable diversification into downstream businesses, inter alia retail distribution and direct supply
- To ensure rapid commercial decision making, using customer specific information, with adequate concern for the interests of the customer

### Agile Corporation

- To ensure effectiveness in business decisions and responsiveness to changes in the business environment by
  - ▶ Adopting a portfolio approach to new business development
  - ▶ Continuous and co-ordinated assessment of the business environment to identify and respond to opportunities and threats
- To develop a learning organisation having knowledge-based competitive edge in current and future businesses
- To effectively leverage Information Technology to ensure speedy decision making across the organisation

### Performance Leadership

- To continuously improve on project execution time and cost in order to sustain long run competitiveness in generation
- To operate & maintain NTPC stations at par with the best-run utilities in the world with respect to availability, reliability, efficiency, productivity and costs
- To effectively leverage Information Technology to drive process efficiencies
  - ▶ To aim for performance excellence in the diversification businesses
  - ▶ To embed quality in all systems and processes

### Human Resource Development

- To enhance organisational performance by institutionalising an objective and open performance management system
- To align individual and organisational needs and develop business leaders by implementing a career development system
- To enhance commitment of employees by recognising and rewarding high performance
- To build and sustain a learning organisation of competent world-class professionals
- To institutionalise core values and create a culture of team-building, empowerment, equity, innovation and openness which would motivate employees and enable achievement of strategic objectives

### Financial Soundness

- To maintain and improve the financial soundness of NTPC by prudent management of the financial resources
- To continuously strive to reduce the cost of capital through prudent management of deployed funds, leveraging opportunities in domestic and international financial markets
- To develop appropriate commercial policies and processes which would ensure remunerative tariffs and minimise receivables
- To continuously strive for reduction in cost of power generation by improving operating practices

### Sustainable Power Development

- To contribute to sustainable power development by discharging corporate social responsibilities
- To lead the sector in the areas of resettlement and rehabilitation and environment protection including effective ash-utilisation, peripheral development and energy conservation practices
- To lead developmental efforts in the Indian power sector through efforts at policy advocacy, assisting customers in reforms, disseminating best practices in the operations and management of power plants etc

### Research and Development

- To pioneer the adoption of reliable, efficient and cost-effective technologies by carrying out fundamental and applied research in alternate fuels and technologies
- To carry out research and development of breakthrough techniques in power plant construction and operation that can lead to more efficient, reliable and environment friendly operation of power plants in the country
- To disseminate the technologies to other players in the sector and in the long run generating revenue through proprietary technologies.

**NTPC PERFORMANCE TARGETS FOR 2011-12**

For the purpose of performance evaluation of the Corporation for the year 2011-12, the scale as also the weights assigned to various parameters are given below:

| PARAMETER  | UNITS     | WEIGHT | PARAMETER SCALE |          |          |          |          | BE/V. GOOD TARGET |          |
|--|-----------|--------|-----------------|----------|----------|----------|----------|-------------------|----------|
| Part- A  |           |        | Excellent       | V. Good  | Good     | Average  | Poor     | 2010-11           | 2011-12  |
| <b>A-I. Static Parameters</b>  |           |        |                 |          |          |          |          |                   |          |
| <b>(a) Financial performance indicators</b>                                    |           |        |                 |          |          |          |          |                   |          |
| (i) Gross Margin/Gross Block   | %         | 0.02   | 15.83           | 15.27    | 14.75    | 14.26    | 13.77    | 17.13             | 15.27    |
| (ii) Net Profit/Net Worth  | %         | 0.10   | 9.78            | 9.16     | 8.67     | 8.22     | 7.79     | 10.73             | 9.16     |
| (iii) Gross Profit/Capital Employed  | %         | 0.10   | 13.93           | 13.26    | 12.67    | 12.11    | 11.57    | 15.91             | 13.26    |
| <b>(b) Financial Indicators - Size</b>   |           |        |                 |          |          |          |          |                   |          |
| (i) Gross Margin   | ₹ Cr      | 0.08   | 14013.17        | 13519.49 | 13084.29 | 12667.23 | 12264.64 | 13449.81          | 13519.49 |
| (ii) Gross Sales   | ₹ Cr      | 0.04   | 57609.15        | 56899.46 | 55676.97 | 54784.26 | 53906.74 | 45199.47          | 56899.46 |
| <b>(c) Financial returns Labour productivity and Total Factor productivity</b> |           |        |                 |          |          |          |          |                   |          |
| (i) PBDIT/Total Employment#  | ₹ Cr /Emp | 0.07   | 0.526           | 0.507    | 0.489    | 0.473    | 0.459    | 0.517             | 0.507    |
| (ii) Added Value   | ₹ Cr      | 0.09   | 6129.31         | 5669.60  | 5608.34  | 5548.71  | 5490.03  | 6854.00           | 5669.60  |

**Notes:**

- Financial targets for the year 2011-12 have been computed based on DPE definitions.
- "Added value, in place of added value/sales, has been kept as per Task Force MOM for 2010-11
- The Return on Equity (ROE) component of the fixed charges considered for computing the financial parameters for the year 2011-12 has been grossed up with the MAT tax rate which has resulted in the profitability and the other financial parameters being significantly lower.
- in case of revision of tariff or annual charges due to change in CERC GUIDELINE or COURT ORDER, the same shall be excluded from the actual at the time of evaluation. Moreover, in case any arrear are recognized in the Annual Accounts of CPSE due to reasons referred herein, the same shall be excluded from Gross Sales and Gross Margin for the purpose of evaluation.

# Total employment is excluding manpower engaged in Subsidiaries and Joint Ventures.

| PARAMETER   | UNITS | WEIGHT | PARAMETER SCALE              |        |        |         |        | BE/V. GOOD TARGET |         |
|---|-------|--------|------------------------------|--------|--------|---------|--------|-------------------|---------|
|   |       |        | Excellent                    | V.Good | Good   | Average | Poor   | 2010-11           | 2011-12 |
| <b>A (II) –Dynamic Parameters</b>                 |       |        |                              |        |        |         |        |                   |         |
| i. Project implementation milestones NTPC (Ann-A) | Nos   | 0.13   | milestones as per annexure-A |        |        |         |        | *                 | *       |
| ii. Human Resource Development Activities (Ann-B) | Nos   | 0.05   | As per annexure-B            |        |        |         |        | *                 | *       |
| iii. CSR activities (Ann-C)                       | No.   | 0.05   | As per annexure- C           |        |        |         |        | *                 | *       |
| iv. Research & Development Activities (Ann-D)     | Nos   | 0.05   | As per annexure-D            |        |        |         |        | *                 | *       |
| v. Sustainable development Activities (Ann-E)     | Nos   | 0.05   | As per annexure-E            |        |        |         |        | *                 | *       |
| vi. Corporate Governance (Ann- F)                 | %     | 0.05   | As per annexure-F            |        |        |         |        | *                 | *       |
| <b>Part B : Specific Parameters</b>               |       |        |                              |        |        |         |        |                   |         |
| i. Gross Generation                               | MUs   | 0.06   | 235000                       | 232000 | 227000 | 224000  | 221000 | 219000            | 232000  |
| ii. Availability Factor $\delta$ , **             |       |        |                              |        |        |         |        |                   |         |
| Coal Stations                                     | %     | 0.05   | 89.5#                        | 88.5   | 87     | 86      | 85     | 87.5              | 88.5    |
| Gas Stations                                      | %     | 0.01   | 87                           | 85     | 84     | 83      | 82     | 85.5              | 85      |

# subject to availability of Coal

$\delta$  For coal and gas stations in commercial operation.

\* These parameters are not included in Annual Plan of PSE or the Ministry of Power.

\*\* Availability Factor (AF) % : As per existing CEA definition (No. of hrs the machine is available on bar out of the reference period, expressed as percentage).

## **PART - III**

### **COMMITMENTS / ASSISTANCE FROM GOVERNMENT OF INDIA**

MOP may support NTPC in the following areas:

#### **(1) Commercial**

- 1.1 To resolve the issue regarding payment of outstanding dues pertaining to DESU period.

#### **(2) Fuel Security**

- 2.1 To take up with Ministry of Env. & Forests for re-consideration of forestry clearance proposal for Hazaribagh – Shivpur - Tori Railway line, which is required for evacuation of coal from Chatti-Bariatu & Kerandari Blocks
- 2.2 For expeditious processing of Forestry clearance proposals of Chatti-Bariatu, Kerandari & Talaipalli and issuance of clearances.
- 2.3 For resolution of 'No-Go Area' issue pertaining Dulanga Block and expeditious issuance of forestry clearance.
- 2.4 In taking up with MOP&NG for allocation of domestic gas on priority for NTPC's 12<sup>th</sup> plan gas project.
- 2.5 To assist in reinforcement of railway infrastructure for augmentation of coal supply to Farakka, Kahalgaon.
- 2.6 To take up with MOC for expeditious development of the following linked mines:
  - i) Kanina and Bhubaneshwari for Talcher stage-II (4x500 MW)- Present status-CCEA cleared
  - ii) Amlohari expansion linked to Rihand stage-II (2x500 MW)- Present status – CCEA cleared
  - iii) Nigahi expansion-II linked to Vindhyanchal-III (2x500 MW) - Present status – CCEA cleared
  - iv) Rajmahal expansion, Chuparbita & Hurra C linked to Kahalgaon-II.
- 2.7 To assist for allocation of coal linkage for upcoming 12<sup>th</sup> plan projects

#### **(3) Ash Utilisation and Transportation**

- 3.1 Railway Freight Concessions for transporting ash to be brought from existing Category of 120 to Category of 90.

- 3.2 To take up with Ministry of Coal and Ministry of Environment and Forests for providing the Coal Conservation and Development Advisory Committee (CCDA) subsidy for transportation of ash for stowing of underground coal mines. MOP may take up with Ministry of Coal and Ministry of Environment and Forests.
- 3.3 To take up with Indian Council of Agricultural Research to issue guidelines for use of ash in agriculture.

#### **PART -IV**

While NTPC will periodically review the achievements of MOU targets, Ministry of Power along with NTPC will also review the same periodically.

#### **GENERAL**

- a) Various delegations of powers provided to NTPC in previous MOUs will continue to be operable in so far as these have not been modified .
- b) All the provisions of this MOU become effective and operable by both the parties, namely, the Government (including all the departments concerned) and NTPC, immediately on signing the MOU by the Government, represented by the Administrative Ministry (Ministry of Power) and NTPC Limited respectively.
- c) All the relevant provisions of this MOU will continue to be in force and operable beyond March, 2012 until such time, the same are modified by the signing of the subsequent MOU between the parties.



**(ARUP ROY CHOUDHURY)**  
Chairman & Managing Director  
NTPC Limited



**(P. UMASHANKAR)**  
Secretary  
Ministry of Power, GOI



**Annexure-A****PROJECT IMPLEMENTATION MILESTONES**

| S.No.                         | MILESTONES                         | EXCELLENT (E) | V. GOOD       | GOOD         | AVERAGE      | POOR        |
|-------------------------------|------------------------------------|---------------|---------------|--------------|--------------|-------------|
| <b>Simhadri-II (2x500 MW)</b> |                                    |               |               |              |              |             |
| 1.                            | Readiness of NDCT-4                | June'11       | July'11       | August'11    | September'11 | October'11  |
| 2.                            | U#4 Readiness of CW system         | June'11       | July'11       | August'11    | September'11 | October'11  |
| 3.                            | U#4 Steam blowing completion       | Sep'11        | October'11    | November'11  | December'11  | January'12  |
| 4.                            | U#4 Turbine Box up                 | Sep'11        | October'11    | November'11  | December'11  | January'12  |
| 5.                            | U#4 Commissioning (Full Load)      | Dec'11        | January'12    | February'12  | March'12     |             |
| <b>Sipat -I (3x660 MW)</b>    |                                    |               |               |              |              |             |
| 6.                            | U#2 Steam Blowing completion       | Jul'11        | August'11     | September'11 | October'11   | November'11 |
| 7.                            | U#2 Commissioning (Full Load)      | Aug'11        | Sep'11        | October'11   | November'11  | December'11 |
| 8.                            | U#3 Boiler Light Up                | Aug'11        | Sep'11        | October'11   | November'11  | December'11 |
| 9.                            | U#3, Turbine Box up                | Aug'11        | Sep'11        | October'11   | November'11  | December'11 |
| 10.                           | U#3 TG Oil Flushing compln         | Oct'11        | November'11   | December'11  | January'12   | February'12 |
| 11.                           | U#3 Synchronization on coal        | Jan'12        | February'12   | March'12     |              |             |
| 12.                           | U#3 Commissioning (Full Load)      | 7th March'12  | 31st March'12 |              |              |             |
| <b>Barh -I (3x660MW)</b>      |                                    |               |               |              |              |             |
| 13.                           | U#1 Ceiling girder Erection compln | Sep'11        | October'11    | November'11  | December'11  | January'12  |
| 14.                           | U#2 Start of Boiler Erection       | Jul'11        | Aug'11        | Sep'11       | October'11   | November'11 |
| 15.                           | CW Pump motor trial run Unit # 3   | Nov'11        | Dec'11        | January'12   | February'12  | March'12    |
| 16.                           | U #3 Cooling Tower readiness       | Dec'11        | January'12    | February'12  | March'12     |             |

| S.No.                        | MILESTONES                                 | EXCELLENT (E) | V. GOOD     | GOOD        | AVERAGE      | POOR        |
|------------------------------|--|---------------|-------------|-------------|--------------|-------------|
| 17.                          | U#3 Start of Boiler Erection               | Jan'12        | February'12 | March'12    |              |             |
| <b>Barh-II (2X660 MW)</b>    |  |               |             |             |              |             |
| 18.                          | U# 4 Boiler Hydro Test                     | Oct'11        | November'11 | December'11 | January'12   | February'12 |
| 19.                          | U#5 ESP erection start                     | Apr'11        | May'11      | June'11     | July'11      | August'11   |
| 20.                          | U#5 Boiler Pressure parts erection start   | Jul'11        | Aug'11      | Sep'11      | October'11   | November'11 |
| 21.                          | U# 5 TG Deck Casting completion            | Aug'11        | Sep'11      | October'11  | November'11  | December'11 |
| 22.                          | Unit #5 Commencement of Condenser Erection | Oct'11        | November'11 | December'11 | January'12   | February'12 |
| 23.                          | U#5 Commencement of TG Erection            | Dec'11        | January'12  | February'12 | March'12     |             |
| <b>Bongaigaon (3X250 MW)</b> |  |               |             |             |              |             |
| 24.                          | U#1 Chimney Shell completion.              | Oct'11        | November'11 | December'11 | January'12   | February'12 |
| 25.                          | 1st Cooling tower erection Completion      | Nov'11        | Dec'11      | January'12  | February'12  | March'12    |
| 26.                          | Readiness of 1st CW pump                   | Nov' 11       | Dec'11      | January'12  | February'12  | March'12    |
| 27.                          | U#1 Boiler Light up                        | Dec'11        | January'12  | February'12 | March'12     |             |
| <b>Mauda (2X500 MW)</b>      |  |               |             |             |              |             |
| 28.                          | Completion of Chimney shell casting        | Aug'11        | Sep'11      | October'11  | November'11  | December'11 |
| 29.                          | U#1 Boiler Light Up                        | Dec'11        | January'12  | February'12 | March'12     |             |
| 30.                          | U#1 Turbine Box up                         | Dec'11        | January'12  | February'12 | March'12     |             |
| 31.                          | U#2 Commencement of Condenser Erection     | Jun'11        | July'11     | August'11   | September'11 | October'11  |
| 32.                          | U#2 Commencement of TG Erection            | Sep'11        | October'11  | November'11 | December'11  | January'12  |
| 33.                          | U#2 Boiler Hydro Test                      | Nov'11        | Dec'11      | January'12  | February'12  | March'12    |

| S.No.                            | MILESTONES   | EXCELLENT (E) | V. GOOD       | GOOD        | AVERAGE      | POOR         |
|----------------------------------|--|---------------|---------------|-------------|--------------|--------------|
| <b>Rihand –III (2X500MW)</b>     |  |               |               |             |              |              |
| 34.                              | U#5 Boiler Hydro Test  | Jun'11        | July'11       | August'11   | September'11 | October'11   |
| 35.                              | U#5 Chimney Flue can erection completion                                       | Nov'11        | Dec'11        | January'12  | February'12  | March'12     |
| 36.                              | Readiness of 1st CW pump   | Dec'11        | January'12    | February'12 | March'12     |              |
| 37.                              | U#6 Commencement of Condenser Erection   | May'11        | June'11       | July'11     | August'11    | September'11 |
| 38.                              | U#6 Commencement of TG Erection  | July'11       | Aug'11        | Sep'11      | October'11   | November'11  |
| 39.                              | U#5 Turbine Box up   | Feb'12        | March'12      |             |              |              |
| <b>Vindhyachal –IV (2X500MW)</b> |  |               |               |             |              |              |
| 40.                              | U#11 Boiler Hydro Test   | Jul'11        | Aug'11        | Sep'11      | October'11   | November'11  |
| 41.                              | U#11 Chimney Flue can erection completion                                      | Dec'11        | January'12    | February'12 | March'12     |              |
| 42.                              | Readiness of 1st CW pump   | Dec'11        | January'12    | February'12 | March'12     |              |
| 43.                              | U#12 Commencement of Condenser Erection  | Jun'11        | July'11       | August'11   | September'11 | October'11   |
| 44.                              | U#12 Commencement of TG Erection   | Jul'11        | Aug'11        | Sep'11      | October'11   | November'11  |
| 45.                              | U#11 Turbine Box up  | Jan'12        | February'12   | March'12    |              |              |
| 46.                              | Commissioning (Full Load) of one 500 MW unit (out of Mauda/Vindhyachal/Rihand) | 7th March'12  | 31st March'12 |             |              |              |
| <b>NTECL Vallur(3x 500 MW)</b>   |  |               |               |             |              |              |
| 47                               | U#1 Commissioning  | Nov'11        | Dec'11        | January'12  | February'12  | March'12     |
| 48                               | U#2 Chimney Flue compln  | Aug'11        | Sep'11        | October'11  | November'11  | December'11  |
| 49                               | U#2 TG Box up  | Sep'11        | October'11    | November'11 | December'11  | January'12   |
| 50                               | U#2 Boiler Light Up  | Sep'11        | October'11    | November'11 | December'11  | January'12   |
| 51                               | U#2 Commissioning  | Feb'12        | March'12      |             |              |              |
| 52                               | U#3 Boiler Hydrotest   | Dec'11        | January'12    | February'12 | March'12     |              |

| S.No.                               | MILESTONES   | EXCELLENT (E) | V. GOOD       | GOOD        | AVERAGE      | POOR         |
|-------------------------------------|--|---------------|---------------|-------------|--------------|--------------|
| <b>APCPL JHAJJAR (3x500 MW)</b>     |  |               |               |             |              |              |
| 53                                  | U#2 Boiler Light Up  | May'11        | June'11       | July'11     | August'11    | September'11 |
| 54                                  | U#2 CW Pump readiness  | Jun'11        | July'11       | August'11   | September'11 | October'11   |
| 55                                  | U#2 Commissioning  | Nov'11        | Dec'11        | January'12  | February'12  | March'12     |
| 56                                  | U#3 Cooling Tower readiness  | July'11       | Aug'11        | Sep'11      | October'11   | November'11  |
| 57                                  | U#3 TG Box Up  | Nov'11        | Dec'11        | January'12  | February'12  | March'12     |
| 58                                  | U#3 Commissioning  | 7th March'12  | 31st March'12 |             |              |              |
| <b>Kol Dam (4X200 MW)</b>           |  |               |               |             |              |              |
| 59                                  | Completion of Erection of Bus Ducts of all Units                             | Sep'11        | October'11    | November'11 | December'11  | January'12   |
| 60                                  | U# 4 Turbine Box up  | Nov'11        | Dec'11        | January'12  | February'12  | March'12     |
| 61                                  | Gallery Grouting 175 km (Cumulative)   | Dec'11        | January'12    | February'12 | March'12     |              |
| 62                                  | Dam height up to EL 625 m  | Dec'11        | January'12    | February'12 | March'12     |              |
| 63                                  | Spillway & Power Intake Concreting up to 4.4 Lac M <sup>3</sup> (Cumulative) | Dec'11        | January'12    | February'12 | March'12     |              |
| <b>Tapovan Vishnugad (4X130 MW)</b> |  |               |               |             |              |              |
| 64                                  | Excavation of 8Km of HRT   | Dec'11        | January'12    | February'12 | March'12     |              |
| 65                                  | Completion of 1 KM HRT lining excluding invert                               | Jan'12        | February'12   | March'12    |              |              |
| 66                                  | Completion of steel lining of upper inclined pressure shaft                  | Jan'12        | February'12   | March'12    |              |              |
| 67                                  | Commencement of erection of turbine (first unit)                             | Jan'12        | February'12   | March'12    |              |              |

**COAL MINING****Pakri Barwadih**

|   |  |         |            |             |             |              |
|---|--|---------|------------|-------------|-------------|--------------|
| 1 | Sec-11 Notification under CBA Act [Phase-IV] | May.'11 | June'11    | July'11     | August'11   | September'11 |
| 2 | CHP-I Commencement of work                   | Sept'11 | October'11 | November'11 | December'11 | January'12   |
| 3 | Sec-4 Notification under CBA Act [Phase-V]   | Aug.'11 | Sep'11     | October'11  | November'11 | December'11  |

**Talaipalli**

|   |                           |         |             |          |  |  |
|---|---------------------------|---------|-------------|----------|--|--|
| 4 | MDO- Mobilization at Site | Jan.'12 | February'12 | March'12 |  |  |
|---|---------------------------|---------|-------------|----------|--|--|

**Chatti-Bariatu (South)**

|   |                                  |         |             |             |            |             |
|---|----------------------------------|---------|-------------|-------------|------------|-------------|
| 5 | Submission of Mining Plan to MOC | Oct.'11 | November'11 | December'11 | January'12 | February'12 |
|---|----------------------------------|---------|-------------|-------------|------------|-------------|

TOTAL MILESTONES- 72

Total weightage: 13

Weightage distribution:

Milestones relating to commission (full load) (eight in nos) at Sl. no. 5,7,12,46,47,51,55 &58 will have wtg of 0.75 each.  
 Remaining 64 milestones will each have wtg of 0.109 each.

**ANNEXURE : B**

**HUMAN RESOURCE DEVELOPMENT ACTIVITIES**

|   | Activity  | Excellent                                | V. Good | Good | Average | Poor |
|---|---|--|---------|------|---------|------|
|   |   | No. of training programs to be conducted |         |      |         |      |
| 1 |   |  |         |      |         |      |
| a | Internal  | 285                                      | 280     | 276  | 273     | 270  |
| b | External  | 35                                       | 32      | 30   | 29      | 28   |
| 2 | No. of man days /<br>trained employee/ year   | 7  | 6.5     | 6.0  | 5.5     | 5.0  |
| 3 | No. of employees to<br>acquire proficiency in<br>Project Management<br>Certification (Level<br>C & D) | 60                                       | 58      | 55   | 53      | 50   |

All activities carry equal weightage

## ANNEXURE : C

### CORPORATE SOCIAL RESPONSIBILITY (CSR) ACTIVITIES

| S. no | Activity  | Wt  | Excellent | V. Good | Good    | Average | Poor    |
|-------|---|-----|-----------|---------|---------|---------|---------|
| 1     | Expenditure on CSR activities as % of PAT   | 1.0 | 0.5       | 0.4     | 0.3     | 0.2     | 0.1     |
| 2     | Commissioning of three (3) ITIs in respect of which award was finalised in FY 2010-11   | 1.0 | 21-1-12   | 15.2.12 | 28.2.12 | 15.3.12 | 31.3.12 |
| 3     | Identify locations for three (3) new ITIs and award of contracts  | 1.0 | 21-1-12   | 15.2.12 | 28.2.12 | 15.3.12 | 31.3.12 |
| 4     | Women empowerment to promote self-employment by providing sewing machines and conducting skill up gradation programs in sewing for women population in the project neighborhood villages (no. of persons to be covered) | 0.5 | 300       | 250     | 200     | 150     | 100     |
| 5     | Conducting medical camps for local villages for detection and treatment of respiratory diseases like TB and lung cancer<br>(Number of medical camps)  | 1.0 | 15        | 13      | 12      | 11      | 10      |
| 6     | Setting up Engineering College offering Power Engg. Course – Award of Construction Contract   | 0.5 | 15.2.12   | 28.2.12 | 10.3.12 | 15.3.12 | 31.3.12 |

- o The evaluation of CSR activities shall be carried out as per CSR guidelines

## ANNEXURE- D

### **RESEARCH & DEVELOPMENT AND ENERGY TECHNOLOGY ACTIVITIES**

| S. No. | Project  | wt  | Excellent | V. Good | Good    | Aver-<br>age | poor  |
|--------|--|-----|-----------|---------|---------|--------------|-------|
| 1      | Completion of Installation and Commissioning of bench scale test loop at NETRA of PSA based CO <sub>2</sub> capture technology               | 0.5 | Jan'12    | Feb' 12 | Mar' 12 |              |       |
| 2      | Lab scale testing and design of Pilot plant for CO <sub>2</sub> utilization through mineralization of fly ash' at Ramagundam Project.        | 0.5 | Dec'11    | Jan'12  | Feb' 12 | Mar' 12      |       |
| 3      | Supply of equipment and commencement of erection of 40 tonne rating solar HVAC plant at NETRA' through in house design and engineering'      | 0.5 | Feb'12    | Mar' 12 |         |              |       |
| 4      | Development of software and its trials for On-line chemical parameter monitoring and advisory at one station through in house efforts'       | 0.5 | Jan'12    | Feb' 12 | Mar' 12 |              |       |
| 5      | Design and preparation of feasibility report and DPR for 1MW solar Thermal R&D Pilot plant having provision of three types of concentrators" | 0.5 | Feb'12    | Mar' 12 |         |              |       |
| 6      | Study of micro-algae strains and short listing for detailed CO <sub>2</sub> capturing studies to 10 Nos'                                     | 0.5 | Feb'12    | Mar' 12 |         |              |       |
| 7      | Draft submission to the Management of R&D Policy in line with DPE's forthcoming guidelines   | 0.5 | Dec'11    | Jan'12  | Feb' 12 | Mar' 12      |       |
| 8      | Finalisation of specifications for gasifier of approx 100 MW.  | 0.5 | Feb'12    | Mar' 12 |         |              |       |
| 9      | Expenditure on R&D as Percentage of PAT  | 1.0 | 1.00%     | 0.90%   | 0.80%   | 0.70%        | 0.60% |

The evaluation of attainment of R&D activities would be done by an independent Agency



**ANNEXURE-E****SUSTAINABLE DEVELOPMENT ACTIVITIES**

| Sl. No                  | Activity   | Wtg | Excellent | V. Good | Good    | Average  | Poor  |
|-------------------------|--|-----|-----------|---------|---------|----------|-------|
| <b>RGVY ACTIVITIES</b>  |  |     |           |         |         |          |       |
| 1                       | No. of un-electrified villages to be made ready under RGVY | 0.5 | 252       | 225     | 200     | 175      | 150   |
| 2                       | No. of BPL connections to be provided to BPL households    | 0.5 | 68000     | 62000   | 56000   | 52000    | 46000 |
| 3                       | Cumulative target for village Energisation                 | 2.0 | 14551     | 12805   | 11268   | 9916     | 8726  |
| <b>OTHER ACTIVITIES</b> |  |     |           |         |         |          |       |
| 4                       | Ash Utilisation %  | 0.5 | 55        | 50      | 48      | 46       | 44    |
| 5                       | Preparation of Sustainability Report for NTPC              | 0.5 | Dec. 11   | Jan. 12 | Feb. 12 | Mar., 12 |       |
| 6                       | Utilisation of Budget on SD. (Rupees 3.0 crores)           | 0.5 | 100%      | 90%     | 80%     | 70%      | 60%   |
| 7                       | Study of low energy absorption building envelope design    | 0.5 | Feb'12    | Mar' 12 |         |          |       |

**ANNEXURE-F**

**CORPORATE GOVERNANCE- ACTIVITIES**

| Activity |   | WT  | Excellent | V. Good | Good               | Average            | Poor                        |
|----------|---|-----|-----------|---------|--------------------|--------------------|-----------------------------|
| 1        | No. of Board Sub committee meetings   | 2.0 | 10        | 9       | 8                  | 7                  | 6                           |
| 2        | Disposal of audit paras pending on 31st March 2011 (%)                        | 1.0 | 95        | 90      | 85                 | 80                 | 75                          |
| 3        | Date of submission to DPE of completed data-sheet for PE Survey and penalties | 1.0 | 15.9.11   | 1.10.11 | 15.10.11<br>(0.25) | 31.10.11<br>(0.50) | After<br>31.10.11<br>(1.00) |
| 4        | Internal Review & implementation of Code of Conduct                           | 1.0 | Feb'12    | Mar'12  |                    |                    |                             |