

1. Implementation status of the existing EC

| S.No | Plant / Facility                      | As per EC dated :09.03.2016 ( A=A1+A2)          |                        |   |          |                     |                |            | Proposed Expansion (B)                    |          | Final after expansion (A+B)                     |          | Remarks  |
|------|---------------------------------------|---|------------------------|---|----------|---------------------|----------------|------------|---|----------|---|----------|--|
|      |                                       | Total (A)                                       |                        | Implemented (A1)                              |          | Un-implemented (A2) |                | As per CTO | Config.                                   | Capacity | Config.   | Capacity |  |
|      |                                       | Config.   | Capacity               | Config.                                       | Capacity | Config.             | Capacity       | Capacity   |   |          |   |          |  |
| 1    | HBI Plant (DRI Mod I to VI) (in MTPA) | Mod I-IV: 4.0<br>Mod:V -1.98<br>Mod VI: 1.85    | 7.83<br>(- 4.0* =3.83) | Mod I-IV: 4.0<br>Mod:V - 1.98<br>Mod VI: 1.85 | 7.83     | -                   | -              | 7.83       | 0   | 0        | Mod I-IV: 4.0<br>Mod:V -1.98<br>Mod VI: 1.85    | 7.83     | * Earlier planning was to remove HBI Modules (1 to 4) totalling 4 MTPA and replace it with Blast Furnace of 3.0 MTPA. This could not be implemented due to fund constraints and legal cases at the NCLT.<br>*Original capacity prior to EC 2016 was 7.83 MTPA only. It is now proposed to maintain this original capacity.<br>CTO has been sanctioned for 7.83 MTPA. |
| 2    | Blast Furnace (BF) (in MTPA)          | 1 x 2.04 (2200 m3)<br>1 x 3.0                   | 5.04                   | 1 x 2.04                                      | 2.04*    | -                   | (-3.0#)        | 2.04       | 1 x 0.96*<br>+<br>2 x 4.0 (~4500 m3 each) | 8.96     | 1 x 3.0<br>2 x 4.0                              | 11.0     | # 3.0 MTPA couldn't be implemented due to fund constraints and legal cases at the NCLT, now dropped.<br>* Existing operational BF of capacity 2.04 MTPA is proposed to be upgraded to 3.0 MTPA.<br>2 nos. of new BFs with 4.0 MTPA capacity each is proposed.  |
| 3    | Sinter Plant                          | 1x 1.48 (1 x 120 m2)<br>2 x 3.5 (~ 325 m2 each) | 8.48*                  | 1 x 1.48                                      | 1.48     | -                   | <b>(-7.0#)</b> | 1.48       | 2 x 3.5                                   | 7.0      | 1x 1.48 (1 x 120 m2)<br>2 x 3.5 (~ 325 m2 each) | 8.48     | # <b>7.0 MTPA plant couldn't be implemented due to fund constraints and legal cases at the NCLT, it was dropped.</b><br><b>Now, 7.0 MTPA Plant is proposed in Expansion Project (It will comprise of 02 number plants).</b>  |
| 4    | Coke Oven (Recovery Type)             | 1 x 1.20<br>1 x 1.35                            | 2.55                   | 2 x 59 Ovens                                  | 1.35#    | -                   | 1.20*          | -          | 4 x 59 Ovens                              | 3.05     | 2 x 59 Ovens                                    | 4.4      | # Under implementation<br>*1.2 MTPA plant could not be implemented due to fund   |

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|------|-------------------------------|---|----------|---|----------|---------------------|----------|------------|------------------------|----------|---|----------|---|
|      |                               | Total (A)   |          | Implemented (A1)  |          | Un-implemented (A2) |          | As per CTO | Config.                | Capacity | Config.   | Capacity |   |
|      |                               | Config.   | Capacity | Config.   | Capacity | Config.             | Capacity | Capacity   |                        |          |   |          |   |
|      |                               |   |          |   |          |                     |          |            |                        |          | 4 x 59 Ovens  |          | constraints and legal cases at the NCLT.<br>*2016 EC approved for 2.55 MTPA, AMNSI is proceeding only with 1.35 MTPA since 1.2 MTPA originally secured in 2010 EC has now lapsed.   |
| 5    | Air Separation Plant (Nm3/Hr) | 1 X 343 TPD<br>1 X 257 TPD<br>1 X 785 TPD<br>3 X 1714 TPD<br>1 X 700 TPD<br>(Only oxygen)<br>1 X 2200 TPD | 424,744  | 1 X 343 TPD<br>1 X 257 TPD<br>1 X 785 TPD<br>3 X 1714 TPD<br>1 X 700 TPD<br>(Only oxygen) | 360,544  | 1 X 2200 TPD        | 64,200*  | 360,544    | -                      | -        | 1 X 343 TPD<br>1 X 257 TPD<br>1 X 785 TPD<br>3 X 1714 TPD<br>1 X 700 TPD<br>1 X 2200 TPD<br>(Only oxygen) | 424,744  | *64200 Nm3/hr plant will be established as per 2016 EC  |
| 6    | SMS-1 (EAF 4 Nos.)            | 4 x 150 MT Heat size  | 4.6*     | 4 x 150 MT Heat size  | 4.6*     |                     | -        | 4.6        | -                      | -        | 4 x 150 MT Heat size  | 4.6      | *Earlier planning was to remove 4.6 MTPA EAF -4 nos. and replacing with BOF-3 nos. in its place but that could not be implemented due to fund constraints and legal cases at the NCLT.e Original capacity prior to EC 2016 was 4.6 MTPA only and it is now submitted to retain this original capacity.<br>CTO has been sanctioned for 4.6 MTPA. |
| 7    | SMS-2                         | 4 x 200 MT Heat size  | 5.0      | 4 x 200 MT Heat size  | 5.0      |                     | -        | 5.0        |                        | 0        | 4 x 200 MT Heat size  | 5.0      |   |



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|------|---|--|----------|---|----------|---------------------|----------|------------|---|----------|---|----------|---|
|      |   | Total (A)  |          | Implemented (A1)                                  |          | Un-implemented (A2) |          | As per CTO | Config.   | Capacity | Config.                                 | Capacity |   |
|      |   | Config.  | Capacity | Config.   | Capacity | Config.             | Capacity | Capacity   |   |          |   |          |   |
|      | H Saw Pipes (in MTPA)                         | 1 x 0.15   | 0.15     | 1 x 0.15<br>1 x 0.15*                             | 0.30*    |                     | 0        | 0.3        |   | 0        | 1 x 0.15<br>1 x 0.15*                   | 0.30     | 0.15 MTPA as per 2016 EC *CTO taken for additional 0.15 MTPA from GPCB. (0.15+0.15=0.30).   |
|      | L Saw Pipes (in MTPA)                         | 1 x 0.33   | 0.33     | 1 x 0.33  | 0.33     |                     | 0        | 0.33       |   | 0        | 1 x 0.33                                | 0.33     |   |
| 15   | CPP (in MW)                                   | 1 X 475 MW<br>1 X 31 MW<br>1 X 40 MW<br>1 X 10 MW<br>1 X 48 MW | 604      | 1 X 475 MW<br>1 X 31 MW<br>1 X 40 MW<br>1 X 10 MW | 556      | 1 x 48 MW           | (-48#)   | 556        | 1 X 475 MW<br>1 X 31 MW<br>1 X 40 MW<br>1 X 10 MW<br>2 x100 MW<br>2 x 25 MW | 250 #    |   | 806      | #48 MW Power plant dropped<br># 2 x 100 MW surplus fuel gas<br>+ 2 x 25 MW TRT.   |
| 16   | Waste Heat Recovery based Power Plant (in MW) | 1 x 25 MW<br>1 x 20 MW   | 45       | 1 X 25 MW   | 25       | 1 X 20 MW           | 20*      | 25         | 1x 100 MW CDQ   | 100      | 1 x 25 MW<br>1 x 20 MW<br>1x 100 MW CDQ | 145      | *20 MW to be implemented<br>1 x 100 MW CDQ based  |
| 17   | Jetty (length in m)                           | 456 m+<br>734 m  | 1190 m   | 456 m +<br>734 m                                  | 1190 m   | -                   | -        | 734 m*     | -   | -        | 456 m + 734 m                           | 1190 m   | * 734- and 456-meters capacity was sanctioned in 2006 EC.<br>This was implemented although inadvertently mentioned 734 m only in 2016 EC and CTO also mentioned the same 734m length. |

2. The unit configuration and capacity of existing and proposed project is given below:

| Sr. No | Name                        | Existing Units                                    |                      | Proposed Units                                      |                         | Total (Existing + Proposed)  |  |
|--------|-----------------------------|---|----------------------|---|-------------------------|--|--|
|        |                             | Configuration                                     | Production TPA       | Configuration                                       | Production TPA          | Configuration  | Production TPA   |
| 1.     | HBI Plant (DRI Mod I to VI) | DRI Module I to VI                                | 7830000              | --  | --                      | Mod I to VI  | 7830000  |
| 2.     | Blast Furnace (BF)          | 1x3200 cum.                                       | 2040000              | Upgradation of existing BF#1<br>2x4500 Cum          | 960000                  | BF#1 1x3200 cum<br>BF#2&3<br>2x4500 cum                                  | 3000000  |
|        |                             |   |                      |   | 8000000                 |  | 8000000  |
| 3.     | Sinter Plant                | 1 x 120 sqm                                       | 1480000              | ~ 650 sqm   | 7000000                 | ~ 770 sqm  | 84800000   |
| 4.     | Coke Oven (Recovery Type)   | 2x59 Ovens  | 1350000              | 4x59 Ovens  | 3050000                 |  | 4.4  |
| 5.     | Air Separation Plant        | ---   | 424744               |   | ---                     |  | 424744 Nm <sup>3</sup> /hr.<br>(64200 Nm <sup>3</sup> /hr will be established as per 2016 EC |
| 6.     | SMS-1 (EAF 4 Nos.)          | 4x150 Ton   | 4600000              | --  |                         | 4x150 Ton  | 4600000  |
| 7.     | SMS-2 (ConArc 2 Nos.)       | 2x200 Ton   | 5000000              | --  | --                      | 2x200 Ton  | 5000000  |
| 8.     | SMS-3 (BOF-3 nos.)          | ---   | ---                  | 3x350 Ton   | 6000000                 | 3x350 Ton  | 6000000  |
| 9.     | Corex Plant*                |   | 1700000              | ---   | --                      | ---  | 1700000  |
| 10.    | Lime Plant (Lime/Dolime)    | 4x300 Ton Shaft Kilns<br>1 x 200 +<br>1x 500 TPD  | 930000 +<br>270000 * | 4x600 Ton +<br>1x500 Ton +<br>1x200 Ton Shaft Kilns | 800000                  | 4x300 Ton +<br>4x600 Ton +<br>1x500 Ton +<br>1x200 Ton                   | 2000000<br>(*Approved in Modification Project)   |
| 11.    | CPP                         | 1 X 475 MW<br>1 X 31 MW<br>1 X 40 MW<br>1 X 10 MW | 556                  | By-product Gas Fired<br>TRT BF #2&3                 | 2x100 MW<br><br>2X25 MW | 1 X 475 MW<br>1 X 31 MW<br>1 X 40 MW<br>1 X 10 MW<br>2x100 MW<br>2X25 MW | 806  |
| 12.    | Plate Mill                  | 1x1.5 MTPA  | 1500000              | --  | --                      | 1x1.5 MTPA   | 1500000  |
| 13.    | CSP and HRC                 | CSP 1x3.5 MTPA                                    | 3500000              | 1x6 MTPA  | 6000000                 | CSP 1x3.5 MTPA   | 14000000   |
|        |                             | HRC 1x4.5 MTPA                                    | 4500000              |   |                         | HRC 1x4 MTPA<br>HRC 1x6 MTPA   |  |
| 14.    | CRM                         |   | 5.24                 | --  | -                       |  | 5.24   |
| 15.    | Jetty                       |   | 734 meters           | ---   | ---                     | ---  | 1190 meters  |
|        |                             |   | 456 meters           | ---   | ---                     | ---  |  |

| Sr. No   | Name                      | Existing Units                 |                    | Proposed Units |                | Total<br>(Existing + Proposed) |   |
|--|---------------------------|--------------------------------|--------------------|----------------|----------------|--------------------------------|---|
|  |                           | Configuration                  | Production TPA     | Configuration  | Production TPA | Configuration                  | Production TPA  |
| 16.  | Waste Heat Recovery Plant | 1 x 25 MW<br><br>1 x 20 MW CDQ | 25 MW<br><br>20 MW | 1 x 100 MW CDQ | 100 MW         | —                              | 145<br><br>(*20 MW to be implemented<br>1 x 100 MW CDQ based) |
| 17.  | H Saw Pipes               |                                | 300000             | ---            | ---            |                                | 300000  |
|  | L Saw Pipes               |                                | 330000             | ---            | ---            |                                | 330000  |
| * Plant will be operated till the proposed expansion is completed. Thereafter it will be shutdown safely and will be started only in case of any unit going down but maintaining sanctioned production of hot metal. |                           |                                |                    |                |                |                                |   |