| 0  | Task       | Task Name   | Duration           | Start        | Finish       | Predecessors                          | Qtr 1, 20 |          | 1            |       | 2, 2018                                 | 1        | Qtr 3, 2 |     |  |
|----|------------|---|--------------------|--------------|--------------|---------------------------------------|-----------|----------|--------------|-------|---|----------|----------|-----|--|
| U  | Mode       | 1 . Bhogpur - 15MW Cogen Power Plant - Engineering schedule | 153 38 days        | Thu 01-02-18 | Thu 16-08-18 |                                       | Jan       | Fe       | b   I        | Mar / | Apr                                     | May      | Jun Jul  | Aug |  |
|    | <b>-</b> 5 | 1.1 Inputs to EPC Cogen Power Plant engineering             | 62 days            | Thu 01-02-18 | Fri 20-04-18 |                                       |           | <u> </u> |              |       | _                                       |          |          | · · |  |
| }  | -5         | 1.1.1 Contract Document                                     | 1 day              | Thu 01-02-18 | Thu 01-02-18 |                                       |           |          |              |       | _                                       |          |          |     |  |
| 1  | -5         | 1.1.2 Pressure parts sketch                                 | 20 days            | Thu 01-02-18 | Mon 26-02-18 |                                       |           |          |              |       |   |          |          |     |  |
| 5  | -5         | 1.1.3 Plot plan   | 1 day              | Thu 01-02-18 | Thu 01-02-18 |                                       |           |          |              |       |   |          |          |     |  |
| 6  | =3         | 1.1.4 Topo Survey drawing                                   | 20 days            | Thu 01-02-18 | Mon 26-02-18 |                                       |           |          |              |       |   |          |          |     |  |
| 7  | -5         | 1.1.5 Raw water analysis                                    | 1 day              | Thu 01-02-18 | Thu 01-02-18 | 3SS                                   |           |          |              |       |   |          |          |     |  |
| 8  | -5         | 1.1.6 Soil resistivity report                               | 1 day              | Thu 01-02-18 | Thu 01-02-18 | 3SS                                   |           |          |              |       |   |          |          |     |  |
| 9  | =3         | 1.1.7 Boiler GA (from Boiler team)                          | 1 day              | Wed 28-02-18 |              |                                       |           |          |              |       |   |          |          |     |  |
| .0 | -5         | 1.1.8 Ash distribution chart (from Boiler team)             | 1 day              | Wed 28-02-18 |              | · ·                                   |           |          |              |       |   |          |          |     |  |
| .1 | -3         | 1.1.9 BFP GA with allowable nozzle F&M (Post order)         | 1 day              | Fri 20-04-18 | Fri 20-04-18 | 3FS+60 days                           |           |          |              |       | 1                                       |          |          |     |  |
| .2 |            | 1.2 MBOP Engineering  | •                  | Fri 02-02-18 | Thu 16-08-18 | 31 31 00 days                         |           |          |              |       |   |          |          |     |  |
| .3 |            | 1.2.1 Basic engineering documents                           | 94.5 days          | Mon 05-02-18 |              |                                       |           |          |              |       |   |          |          |     |  |
| .4 |            | 1.2.1.1 HBD   | -                  |              | Mon 05-03-18 | 76                                    |           |          |              |       |   |          | •        |     |  |
| .5 | -5<br>-5   | 1.2.1.1 HBD 1.2.1.2 Design basis report                     | 1 day<br>45.5 days | Mon 05-03-18 |              | 70                                    |           |          |              |       |   |          |          |     |  |
| .6 |            |   | -                  |              |              | 14FC+1 day                            |           |          |              | · ·   |   |          |          |     |  |
|    | ->         | 1.2.1.2.1 Cooling tower                                     | 4 hrs              |              | Wed 07-03-18 | · ·                                   |           |          |              |       |   |          |          |     |  |
| .7 | ->         | 1.2.1.2.2 Compressor, Air dryer and Air receiver            | 1 day              |              | Tue 03-04-18 | 44,78FS+1 day                         |           |          |              |       |   |          |          |     |  |
| .8 | ->         | 1.2.1.2.3 Water treatment plant                             | 2 hrs              |              | Mon 05-02-18 | /F3+1 udy                             |           |          |              |       |   |          |          |     |  |
| .9 | -3         | 1.2.1.3 Basic design calculation                            | 32.5 days          | Tue 06-03-18 | Mon 16-04-18 | 1.45C . 1. da                         |           |          |              |       |   |          |          |     |  |
| 20 | -3         | 1.2.1.3.1 IBR Pipe sizing calculation                       | 1 day              | Wed 07-03-18 |              | •                                     |           |          |              |       |   |          |          |     |  |
| 21 |            | 1.2.1.3.2 NIBR Pipe sizing calculation                      | 1 day              | Tue 03-04-18 | Wed 04-04-18 | -                                     |           |          |              |       |   |          |          |     |  |
| 22 | -3         | 1.2.1.3.3 PRDS heat and mass balance                        | 1 hr               | Tue 06-03-18 | Tue 06-03-18 | 14                                    |           |          |              |       |   |          |          |     |  |
| !3 | -3         | 1.2.1.3.4 Pressure drop calculation                         | 1 hr               | Thu 08-03-18 | Thu 08-03-18 | 20                                    |           |          |              |       |   |          |          |     |  |
| 24 | -5         | 1.2.1.3.5 N-Pit sizing calculation                          | 2 hrs              |              | Mon 16-04-18 | 250FS+2 days                          |           |          |              |       |   |          |          |     |  |
| !5 | -3         | 1.2.1.3.6 BOP Pump head calculation                         | 0.88 days          |              | Wed 07-03-18 |                                       |           |          |              |       |   |          |          |     |  |
| 26 | ->         | 1.2.1.3.6.1 DM transfer pump                                | 3 hrs              |              | Wed 07-03-18 | · · · · · · · · · · · · · · · · · · · |           |          |              |       |   |          |          |     |  |
| 27 | -5         | 1.2.1.3.6.2 Cooling water pump                              | 3 hrs              |              | Wed 07-03-18 | 16                                    |           |          | <del> </del> |       |   |          | _        |     |  |
| 18 | -5         | 1.2.1.4 Basic engineering drawings                          | 88.5 days          | Mon 12-02-18 |              |                                       |           |          |              |       |   | İ        | 1        |     |  |
| .9 | -5         | 1.2.1.4.1 Layout  | 10 days            | Mon 12-02-18 |              |                                       |           |          |              |       |   |          |          |     |  |
| 0  | -5         | 1.2.1.4.1.1 Plot Plan                                       | 7 days             |              | Tue 20-02-18 | 3FS+7 days                            |           |          |              |       |   |          |          |     |  |
| 1  | -5         | 1.2.1.4.1.2 TG Building layout                              | 7 days             | Thu 15-02-18 | Fri 23-02-18 | 3FS+10 days                           |           |          |              |       |   |          |          |     |  |
| 2  | -5         | 1.2.1.4.2 Schemes   | 39 days            |              | Mon 16-04-18 | _                                     |           |          |              |       |   |          |          |     |  |
| 3  | -5         | 1.2.1.4.2.1 Sketch for Plant FGL, FFL, TOG levels           | 4 hrs              |              | Mon 26-02-18 | •                                     |           |          |              |       |   |          |          |     |  |
| 34 | -5         | 1.2.1.4.2.2 Overall Power Plant scheme                      | 1 day              |              | Mon 16-04-18 | · · · · · · · · · · · · · · · · · · · |           |          |              |       | _                                       |          |          |     |  |
| 5  | -5         | 1.2.1.4.2.3 Water balance diagram                           | 1 day              |              | Thu 29-03-18 | 102FS+2 days                          |           |          |              |       |   |          |          |     |  |
| 6  | -5         | 1.2.1.4.2.4 Scheme for FHS                                  | 3 hrs              |              | Mon 05-03-18 | •                                     |           |          |              |       |   |          |          |     |  |
| 57 | -5         | 1.2.1.4.2.5 PRDS scheme                                     | 3 hrs              |              | Mon 12-03-18 | 44FS+1 day                            |           |          |              |       | 10000000000000000000000000000000000000  |          |          |     |  |
| 8  | -5         | 1.2.1.4.3 Assignment drawings                               | 74.5 days          | Thu 01-03-18 | Tue 05-06-18 |                                       |           |          |              |       |   | İ        | l        |     |  |
| 9  | -5         | 1.2.1.4.3.1 Cooling tower basin height basis                | 2 hrs              | Wed 07-03-18 |              | 27                                    |           |          |              |       | 200000000000000000000000000000000000000 |          |          |     |  |
| 0  | -5         | 1.2.1.4.3.2 Cooling tower puddle pipe layout                | 4 hrs              | Tue 29-05-18 | Wed 30-05-18 |                                       |           |          |              |       | 200000000000000000000000000000000000000 | <u> </u> |          |     |  |
| 1  | -5         | 1.2.1.4.3.3 Plant drain system layout                       | 4 hrs              | Thu 01-03-18 | Thu 01-03-18 | 30FS+7 days                           |           |          | Y            |       | *************************************** |          |          |     |  |
| 2  | -5         | 1.2.1.4.3.4 Layout of Compressor, Air dryer and Air rece    | v4 hrs             | Tue 05-06-18 | Tue 05-06-18 | 219FS+1 day                           |           |          |              |       | 200000000000000000000000000000000000000 |          | L        |     |  |
| 3  | -5         | 1.2.1.4.4 PIDs  | 23 days            | Thu 08-03-18 | Thu 05-04-18 |                                       |           |          |              |       |   |          |          |     |  |
| 4  | -5         | 1.2.1.4.4.1 PID of External steam system                    | 2 days             | Thu 08-03-18 | Fri 09-03-18 | 14,20                                 |           |          |              | }     |   |          |          |     |  |

|        | Task         | Task Name   | Duration    | Start         | Finish       | Predecessors           | 04. 1. 2011        | ,  |     | 0.0000                | 1   |                    | Ot - 2 2010                             |     |
|--------|--------------|---|-------------|---------------|--------------|------------------------|--------------------|----|-----|-----------------------|-----|--------------------|---|-----|
| 0      | Mode         | Task Name   | Duration    | Start         | FIIIISII     | Fredecessors           | Qtr 1, 2018<br>Jan | Fe | ь М | Qtr 2, 2018<br>ar Apr | May | Jun                | Qtr 3, 2018<br>Jul A                    | Aug |
| 5      | -5           | 1.2.1.4.4.2 PID of DM water system                      | 4 hrs       | Wed 04-04-18  | Wed 04-04-18 | 21                     |                    |    |     |                       |     |                    | , |     |
| 5      | -5           | 1.2.1.4.4.3 PID of Cooling water system                 | 1 day       | Wed 04-04-18  | Thu 05-04-18 | 16,21                  |                    |    |     |                       |     |                    |   |     |
|        | -5           | 1.2.1.4.4.4 PID of Compressed air system                | 4 hrs       | Wed 04-04-18  | Wed 04-04-18 | 21                     |                    |    |     |                       |     |                    |   |     |
|        | -5           | 1.2.1.4.4.5 PID of Service water system                 | 4 hrs       | Fri 30-03-18  | Fri 30-03-18 | 78                     |                    |    |     |                       |     |                    |   |     |
|        | -5           | 1.2.1.4.4.6 Legends                                     | 4 hrs       | Thu 05-04-18  | Thu 05-04-18 | 44,45,46,47            |                    |    |     |                       |     |                    |   |     |
|        | -5           | 1.2.2 Technical specifications for MBOP                 | 110.88 days | Fri 02-02-18  | Sat 23-06-18 |                        |                    |    |     |                       |     |                    |   |     |
|        | <u>_</u>     | 1.2.2.1 Turbine generator                               | 1 day       | Fri 02-02-18  | Fri 02-02-18 | 3                      |                    | K  |     |                       |     |                    |   |     |
|        | <u>_</u>     | 1.2.2.2 Fuel handling system                            | 4 hrs       | Fri 02-03-18  | Fri 02-03-18 | 9FS+1 day              |                    |    |     |                       |     |                    |   |     |
|        | -5           | 1.2.2.3 Ash handling system                             | 4 hrs       | Fri 02-03-18  | Fri 02-03-18 | 10FS+1 day             |                    |    |     |                       |     |                    |   |     |
|        | -5           | 1.2.2.4 Compressor, Air dryer and Air receiver          | 4 hrs       | Wed 04-04-18  | Wed 04-04-18 | 17FS+1 day             |                    |    |     |                       |     |                    |   |     |
|        | -5           | 1.2.2.5 Cooling tower                                   | 4 hrs       | Thu 08-03-18  | Thu 08-03-18 | ,<br>16FS+0.5 days     |                    |    |     |                       |     |                    |   |     |
|        | -5           | 1.2.2.6 BOP Pumps - DM Transfer, CT makeup, CW Pump     | 4 hrs       | Thu 08-03-18  | Thu 08-03-18 | 25FS+0.5 days          |                    |    | +   |                       |     |                    |   |     |
| ,      | -5           | 1.2.2.7 EOT crane                                       | 4 hrs       | Tue 27-02-18  | Tue 27-02-18 | 31FS+2 days            |                    |    |     |                       |     |                    |   |     |
|        | -5           | 1.2.2.8 Water treatment plant & ETP                     | 1 day       | Mon 05-02-18  | Tue 06-02-18 | 18                     |                    |    |     |                       |     |                    |   |     |
|        | -5           | 1.2.2.9 Piping BOC package                              | 82.88 days  |               | Sat 23-06-18 | 10                     |                    |    |     |                       |     |                    |   |     |
|        | -5           | 1.2.2.9.1 PRDS  | 1 hr        | Mon 12-03-18  | Mon 12-03-18 | 37                     |                    |    |     |                       |     | •                  |   |     |
| _      | -5           | 1.2.2.9.2 IBR Manual Valves                             | 4 hrs       | Sat 10-03-18  | Sat 10-03-18 | 44FS+0.5 days          |                    |    |     |                       |     |                    |   |     |
| 2      | -5           | 1.2.2.9.3 Motorised operated valves                     | 0.5 hrs     | Sat 10-03-18  | Sat 10-03-18 | 44FS+0.5 days          |                    |    |     |                       |     |                    |   |     |
| ·<br>} | -3           | 1.2.2.9.4 NIBR Manual Valves                            | 1 day       | Thu 05-04-18  | Fri 06-04-18 | 45,46,47,48FS+0.5 days | _                  |    |     |                       |     |                    |   |     |
| '      |              | 1.2.2.5.4 NIBR Wallual Valves                           | 1 day       | 111u U3-U4-16 | FII 00-04-18 | 43,40,47,40F3+0.3 uays |                    |    |     |                       |     |                    |   |     |
|        | -5           | 1.2.2.9.5 TG warmup vent silencer                       | 1 hr        | Sat 10-03-18  | Sat 10-03-18 | 44                     |                    |    |     |                       |     |                    |   |     |
| 5      | -5           | 1.2.2.9.6 Safety valves                                 | 1 hr        | Sat 10-03-18  | Sat 10-03-18 | 44                     |                    |    |     |                       |     |                    |   |     |
| 5      | -5           | 1.2.2.9.7 Steam trap                                    | 1 hr        | Fri 25-05-18  | Fri 25-05-18 | 291                    |                    |    |     |                       |     |                    |   |     |
| 7      | -5           | 1.2.2.9.8 Strainer                                      | 1 hr        | Thu 05-04-18  | Thu 05-04-18 | 46                     |                    |    |     |                       |     |                    |   |     |
| 3      | -5           | 1.2.2.9.9 Pipes & Fittings                              | 37.5 days   | Wed 18-04-18  |              |                        |                    |    |     |                       |     |                    |   |     |
| )      | -5           | 1.2.2.9.9.1 Preliminary                                 | 4 hrs       |               | Wed 18-04-18 | 286 289                |                    |    |     |                       |     |                    |   |     |
|        | -5           | 1.2.2.9.9.2 Final                                       | 1 day       | Tue 05-06-18  | Tue 05-06-18 | 291,298                |                    |    |     |                       |     |                    |   |     |
|        | -5           | 1.2.2.9.10 Fastners, Gaskets and Hardwares              | 4 hrs       | Wed 06-06-18  |              |                        |                    |    |     |                       |     |                    |   |     |
| ·<br>! | -5           | 1.2.2.9.11 Insulation and Claddings                     | 4 hrs       | Tue 20-03-18  | Tue 20-03-18 | 286                    |                    |    |     |                       |     |                    |   |     |
|        | - <u>-</u> - | 1.2.2.9.12 Spring supports                              | 3 hrs       | Thu 07-06-18  | Thu 07-06-18 | 282                    |                    |    |     |                       |     |                    |   |     |
|        | - <u>-</u> - | 1.2.2.9.13 Primary and Secondary supports               | 3 hrs       | Sat 23-06-18  | Sat 23-06-18 | 309,326                |                    |    |     |                       |     |                    |   |     |
|        |              | 1.2.3 Offer evaluation of MBOP                          |             | Wed 07-02-18  |              | 303,320                |                    |    |     |                       |     | <u> </u>           |   |     |
|        |              | 1.2.3.1 Turbine Generator                               | 20 days     | Wed 07-02-18  |              | 51FS+2 days            | -                  |    |     |                       |     |                    | 1                                       |     |
|        |              | 1.2.3.1 Turbine Generator  1.2.3.2 Fuel handling system |             | Mon 12-03-18  |              | •                      | -                  |    |     |                       |     |                    |   |     |
|        |              |   | 15 days     |               |              | 52FS+7 days            |                    |    |     |                       |     |                    |   |     |
| )      | -5           | 1.2.3.3 Ash handling system                             | 15 days     | Mon 12-03-18  |              | 53FS+7 days            |                    |    |     |                       |     |                    |   |     |
| _      | -5           | 1.2.3.4 Compressor, Air dryer and Air receiver          | 15 days     | Sat 14-04-18  | Wed 02-05-18 | •                      | -                  |    |     |                       |     |                    |   |     |
|        | -5           | 1.2.3.5 Cooling tower                                   | 15 days     | Fri 16-03-18  | Thu 05-04-18 | 55FS+7 days            |                    |    |     |                       |     |                    |   |     |
|        | -5           | 1.2.3.6 BOP Pumps - DM Transfer, CT makeup, CW Pump     | 15 days     | Fri 16-03-18  | Thu 05-04-18 | 56FS+7 days            | -                  |    |     |                       |     |                    |   |     |
|        | -3           | 1.2.3.7 EOT crane                                       | 15 days     | Thu 08-03-18  | Tue 27-03-18 | 57FS+7 days            |                    |    |     |                       |     |                    |   |     |
|        | -5           | 1.2.3.8 Water treatment plant & ETP                     | 15 days     | Wed 14-02-18  |              | 58FS+7 days            |                    |    |     |                       |     |                    |   |     |
|        | -5           | 1.2.3.9 Piping BOC package                              | 84.25 days  |               | Thu 05-07-18 |                        |                    |    |     |                       |     |                    | <b>¬</b>                                |     |
|        | -5           | 1.2.3.9.1 PRDS  | 15 days     | Wed 21-03-18  |              | 60FS+7 days            |                    |    |     |                       |     |                    |   |     |
| i      | -5           | 1.2.3.9.2 IBR Manual Valves                             | 30 days     | Wed 21-03-18  |              | 61FS+7 days            |                    |    |     |                       |     |                    |   |     |
|        | -5           | 1.2.3.9.3 Motorised operated valves                     | 30 days     | Tue 20-03-18  | Fri 27-04-18 | 62FS+7 days            |                    |    |     |                       |     |                    |   |     |
|        | -5           | 1.2.3.9.4 NIBR Manual Valves                            | 30 days     | Mon 16-04-18  | Thu 24-05-18 | 63FS+7 days            |                    |    |     |                       |     | $H \mid \parallel$ |   |     |

|   | Task       | gar Mill Expansion Task Name                        | Duration    | Start        | eration Power Pla<br>Finish | Predecessors | 0. 1.005               | la: a                        | EPC: Uttamenergy, Pune -                          |
|---|------------|---|-------------|--------------|-----------------------------|--------------|------------------------|------------------------------|---|
| 0 |            | I dok Indille                                       | Duration    | SldTl        | רווואוו                     | rieuecessors | Qtr 1, 2018<br>Jan Fel | Qtr 2, 2018<br>b Mar Apr May | Qtr 3, 2018  Jun Jul Aug S                        |
| ) |            | 1.2.3.9.5 TG warmup vent silencer                   | 7 days      | Tue 20-03-18 | Wed 28-03-18                | 64FS+7 days  |                        |                              |   |
|   | -5         | 1.2.3.9.6 Safety valves                             | 15 days     | Tue 20-03-18 | Mon 09-04-18                | •            |                        |                              | i   <b>  1</b>                                    |
|   | -5         | 1.2.3.9.7 Steam trap                                | 7 days      | Mon 04-06-18 | Tue 12-06-18                | 66FS+7 days  |                        |                              |   |
|   | -5         | 1.2.3.9.8 Strainer                                  | 7 days      | Sat 14-04-18 | Tue 24-04-18                | 67FS+7 days  |                        |                              |   |
|   | -5         | 1.2.3.9.9 Spring supports                           | 15 days     | Fri 15-06-18 | Thu 05-07-18                | 73FS+7 days  |                        |                              |   |
|   | -5         | 1.2.4 Ordering of MBOP                              | 105.38 days | Tue 13-03-18 | Thu 26-07-18                |              |                        |                              |   |
|   | -5         | 1.2.4.1 Turbine Generator                           | 1 day       | Tue 13-03-18 | Tue 13-03-18                | 76FS+7 days  |                        |                              |   |
|   | -5         | 1.2.4.2 Fuel handling system                        | 1 day       | Thu 19-04-18 | Fri 20-04-18                | 77FS+15 days |                        |                              |   |
|   | -5         | 1.2.4.3 Ash handling system                         | 1 day       | Thu 19-04-18 | Fri 20-04-18                | 78FS+15 days |                        |                              |   |
|   | -5         | 1.2.4.4 Compressor, Air dryer and Air receiver      | 1 day       | Wed 23-05-18 | Wed 23-05-18                | 79FS+15 days |                        |                              |   |
|   |            | 1.2.4.5 Cooling tower                               | 1 day       | Wed 25-04-18 | Thu 26-04-18                | 80FS+15 days |                        |                              |   |
| ) | -5         | 1.2.4.6 BOP Pumps - DM Transfer, CT makeup, CW Pump | 1 day       | Wed 25-04-18 | Thu 26-04-18                | 81FS+15 days |                        |                              |   |
|   |            | 1.2.4.7 EOT crane                                   | 1 day       | Mon 16-04-18 | Tue 17-04-18                | 82FS+15 days |                        |                              |   |
|   |            | 1.2.4.8 Water treatment plant & ETP                 | 1 day       | Sat 24-03-18 | Mon 26-03-18                | 83FS+15 days |                        |                              |   |
|   |            | 1.2.4.9 Piping BOC package                          | 78.25 days  | Tue 17-04-18 | Thu 26-07-18                |              |                        |                              | <del>                                      </del> |
|   |            | 1.2.4.9.1 PRDS                                      | 1 day       | Sat 28-04-18 | Mon 30-04-18                | 85FS+15 days |                        |                              |   |
| 5 | -5         | 1.2.4.9.2 IBR Manual Valves                         | 1 day       | Thu 17-05-18 | Thu 17-05-18                | 86FS+15 days |                        |                              |   |
|   | -5         | 1.2.4.9.3 Motorised operated valves                 | 1 day       | Wed 16-05-18 | Thu 17-05-18                | 87FS+15 days |                        |                              |   |
|   | -5         | 1.2.4.9.4 NIBR Manual Valves                        | 1 day       | Tue 12-06-18 | Wed 13-06-18                | 88FS+15 days |                        |                              |   |
|   | -5         | 1.2.4.9.5 TG warmup vent silencer                   | 1 day       | Tue 17-04-18 | Wed 18-04-18                | 89FS+15 days |                        |                              |   |
|   |            | 1.2.4.9.6 Safety valves                             | 1 day       | Fri 27-04-18 | Sat 28-04-18                | 90FS+15 days |                        |                              |   |
|   |            | 1.2.4.9.7 Steam trap                                | 1 day       | Mon 02-07-18 | Tue 03-07-18                | 91FS+15 days |                        |                              |   |
|   |            | 1.2.4.9.8 Strainer                                  | 1 day       | Sat 12-05-18 | Mon 14-05-18                | 92FS+15 days |                        |                              |   |
| 2 | -5         | 1.2.4.9.9 Spring supports                           | 1 day       | Wed 25-07-18 | Thu 26-07-18                | 93FS+15 days |                        |                              |   |
| 3 | -5         | 1.2.5 Post order drawings/documents for MBOP        | 114.38 days | Fri 23-03-18 | Thu 16-08-18                |              |                        |                              |   |
|   | -5         | 1.2.5.1 Turbine Generator                           | 64 days     | Fri 23-03-18 | Tue 12-06-18                |              |                        |                              | <del> -  - - </del>   -                           |
|   |            | 1.2.5.1.1 Mechanical                                | 64 days     | Fri 23-03-18 | Tue 12-06-18                |              |                        |                              | <del> -  - -  </del>                              |
| 5 |            | 1.2.5.1.1.1 PIDs                                    | 7 days      | Fri 23-03-18 | Fri 30-03-18                |              |                        | <b> </b>                     |   |
|   | <b>-</b> 5 | 1.2.5.1.1.1.1 Steam path system                     | 7 days      | Fri 23-03-18 | Fri 30-03-18                | 95FS+7 days  |                        |                              |   |
|   |            | 1.2.5.1.1.1.2 Turbine condensate system             | 7 days      | Fri 23-03-18 | Fri 30-03-18                | 95FS+7 days  |                        |                              |   |
|   |            | 1.2.5.1.1.1.3 Protection system                     | 7 days      | Fri 23-03-18 | Fri 30-03-18                | 95FS+7 days  |                        |                              |   |
|   |            | 1.2.5.1.1.1.4 LOS system                            | 7 days      | Fri 23-03-18 | Fri 30-03-18                | 95FS+7 days  |                        |                              |   |
|   |            | 1.2.5.1.1.2 Turbine GA                              | 1 day       | Tue 03-04-18 | Tue 03-04-18                | 95FS+15 days |                        |                              |   |
|   |            | 1.2.5.1.1.3 Gearbox GA                              | 1 day       | Tue 10-04-18 | Tue 10-04-18                | 95FS+20 days |                        |                              |   |
|   | <b>-</b> 5 | 1.2.5.1.1.4 LOS GA                                  | 1 day       | Fri 04-05-18 | Fri 04-05-18                | 95FS+40 days |                        |                              |   |
|   |            | 1.2.5.1.1.5 Oil centrifuge GA                       | 1 day       | Fri 04-05-18 | Fri 04-05-18                | 95FS+40 days |                        |                              |   |
|   |            | 1.2.5.1.1.6 Ejector GA                              | 1 day       | Fri 04-05-18 | Fri 04-05-18                | 95FS+40 days |                        |                              |   |
| 5 | -5         | 1.2.5.1.1.7 GSC GA                                  | 1 day       | Fri 04-05-18 | Fri 04-05-18                | 95FS+40 days |                        |                              |   |
|   | -5         | 1.2.5.1.1.8 QCNRV GA                                | 1 day       | Fri 04-05-18 | Fri 04-05-18                | 95FS+40 days |                        |                              |   |
|   | -5         | 1.2.5.1.1.9 Utility list                            | 1 day       | Tue 27-03-18 | Tue 27-03-18                | 95FS+10 days |                        | Y                            |   |
|   | -5         | 1.2.5.1.1.10 Piping layout                          | 1 day       | Tue 12-06-18 | Tue 12-06-18                | 95FS+70 days |                        |                              |   |
| ) | -5         | 1.2.5.1.1.11 Piping iso drawing                     | 1 day       | Tue 12-06-18 | Tue 12-06-18                | 95FS+70 days |                        |                              |   |
|   |            | 1.2.5.1.1.12 Piping support drawing                 | 1 day       | Tue 12-06-18 | Tue 12-06-18                | 95FS+70 days |                        |                              |   |
| 2 | -5         | 1.2.5.1.1.13 Turbine F&M                            | 1 day       | Fri 04-05-18 | Fri 04-05-18                | 95FS+40 days |                        |                              |   |

| CITC. DITC | J. J         | ar Mill Expansion  | Duwatia - |                | eration Power Pla |                 |                           | 1                      | EPC: Uttamenergy, Pune - 1                        |
|------------|--------------|--|-----------|----------------|-------------------|-----------------|---------------------------|------------------------|---|
| 0          | Task<br>Mode | Task Name  | Duration  | Start          | Finish            | Predecessors    | Qtr 1, 2018<br>Jan Feb Ma | Qtr 2, 2018<br>r Apr M | Qtr 3, 2018<br>Nay Jun Jul Aug S                  |
| 33         | -5           | 1.2.5.1.2 E&I  | 46 days   | Tue 03-04-18   | Wed 30-05-18      |                 |                           |                        | <del>                                      </del> |
| 4          | -5           | 1.2.5.1.2.1 Alternator GA  | 1 day     | Tue 10-04-18   | Tue 10-04-18      | 95FS+20 days    |                           |                        |   |
| 5          | -5           | 1.2.5.1.2.2 Alternator Data sheet  | 1 day     | Tue 10-04-18   | Tue 10-04-18      | 95FS+20 days    |                           |                        |   |
| 6          | -5           | 1.2.5.1.2.3 Generator performance curves   | 1 day     | Tue 10-04-18   | Tue 10-04-18      | 95FS+20 days    |                           |                        |   |
| 7          | -5           | 1.2.5.1.2.4 Main and Neutral Terminal box GA   | 1 day     | Tue 10-04-18   | Tue 10-04-18      | 95FS+20 days    |                           |                        |   |
| 8          | -5           | 1.2.5.1.2.5 Aux Terminal box GA  | 1 day     | Tue 10-04-18   | Tue 10-04-18      | 95FS+20 days    |                           |                        |   |
| 9          | -5           | 1.2.5.1.2.6 CT & PT Calculations   | 1 day     | Tue 10-04-18   | Tue 10-04-18      | 95FS+20 days    |                           |                        |   |
| 10         | -5           | 1.2.5.1.2.7 SLD  | 3 days    | Tue 03-04-18   | Thu 05-04-18      | 95FS+15 days    |                           |                        |   |
| 1          | -5           | 1.2.5.1.2.8 Oil centrifuge panel wiring diagram                                      | 1 day     | Fri 04-05-18   | Fri 04-05-18      | 95FS+40 days    |                           |                        |   |
| 12         | -5           | 1.2.5.1.2.9 DC starter panel GA, Resistance calculation and wiring schematic diagram | 1 day     | Fri 04-05-18   | Fri 04-05-18      | 95FS+40 days    |                           |                        |   |
| 3          | -5           | 1.2.5.1.2.10 Barring gear GA and wiring schematic diagram                            | 1 day     | Fri 04-05-18   | Fri 04-05-18      | 95FS+40 days    |                           |                        |   |
| 4          | -5           | 1.2.5.1.2.11 DC Motor GA, Data sheet and Curves                                      | 1 day     | Fri 04-05-18   | Fri 04-05-18      | 95FS+40 days    |                           |                        |   |
| 5          | -5           | 1.2.5.1.2.12 TSP GA and wiring schematic diagram                                     | 3 days    | Fri 04-05-18   | Tue 08-05-18      | 95FS+40 days    |                           |                        |   |
| 16         | -5           | 1.2.5.1.2.13 AVR Panel GA and wiring schematic diagram                               | 2 days    | Fri 04-05-18   | Mon 07-05-18      | 95FS+40 days    |                           |                        |   |
| 7          | -5           | 1.2.5.1.2.14 GRP & GMSP Panel GA and wiring schematic diagram                        | 7 days    | Fri 04-05-18   | Sat 12-05-18      | 95FS+40 days    |                           |                        |   |
| 8          | -5           | 1.2.5.1.2.15 Generator relay parameter setting chart with supporting calculation     | 1 day     | Fri 04-05-18   | Fri 04-05-18      | 95FS+40 days    |                           |                        |   |
| .9         | -5           | 1.2.5.1.2.16 JB GA drawing   | 1 day     | Fri 04-05-18   | Fri 04-05-18      | 95FS+40 days    |                           |                        |   |
| 0          | -5           | 1.2.5.1.2.17 JB Location drawing   | 1 day     | Fri 04-05-18   | Fri 04-05-18      | 95FS+40 days    |                           |                        |   |
| 1          | -5           | 1.2.5.1.2.18 System Write up   | 1 day     | Fri 04-05-18   | Fri 04-05-18      | 95FS+40 days    |                           |                        |   |
| 2          | -5           | 1.2.5.1.2.19 Feeder List   | 1 day     | Mon 23-04-18   | Mon 23-04-18      | 95FS+30 days    |                           |                        |   |
| 3          | -5           | 1.2.5.1.2.20 Instrument list   | 1 day     | Mon 23-04-18   | Mon 23-04-18      | 95FS+30 days    |                           |                        |   |
| 1          | <b>-</b> 5   | 1.2.5.1.2.21 IO List   | 1 day     | Mon 23-04-18   | Mon 23-04-18      | 95FS+30 days    |                           |                        |   |
| 5          | -5           | 1.2.5.1.2.22 Power Cable schedule  | 2 days    | Fri 04-05-18   | Mon 07-05-18      | 95FS+40 days    |                           |                        |   |
| 6          | -5           | 1.2.5.1.2.23 Control cable schedule  | 2 days    | Fri 04-05-18   | Mon 07-05-18      | 95FS+40 days    |                           |                        |   |
| 7          | -5           | 1.2.5.1.2.24 Instrumentation cable schedule  | 2 days    | Fri 04-05-18   | Mon 07-05-18      | 95FS+40 days    |                           |                        |   |
| 3          | -5           | 1.2.5.1.2.25 Control system write up   | 2 days    | Thu 17-05-18   | Fri 18-05-18      | 95FS+50 days    |                           |                        |   |
| 9          | -5           | 1.2.5.1.2.26 NGR Panel GA and wiring schematic diagram                               |           | Thu 17-05-18   | Fri 18-05-18      | 95FS+50 days    |                           |                        |   |
| )          | -5           | 1.2.5.1.2.27 All motors GA, Data sheet and Curves                                    | 1 day     | Wed 30-05-18   | Wed 30-05-18      | •               |                           |                        |   |
| 1          | -5           | 1.2.5.1.2.28 Local gauge board panel GA  | 1 day     | Thu 17-05-18   | Thu 17-05-18      | 95FS+50 days    |                           |                        | #   |
| 2          | -5           | 1.2.5.1.2.29 Instrument hookup drawing   | 2 days    | Thu 17-05-18   | Fri 18-05-18      | 95FS+50 days    |                           |                        | <b>*</b>  |
| 3          | -5           | 1.2.5.1.2.30 Logic diagram   | 7 days    | Thu 17-05-18   | Fri 25-05-18      | 95FS+50 days    |                           |                        |   |
| 4          | -3           | 1.2.5.1.2.30 Edgic diagram   | 7 days    | Thu 17-05-18   | Fri 25-05-18      | 95FS+50 days    |                           |                        |   |
| 5          |              | 1.2.5.1.3 Civil Input  | 31 days   | Mon 23-04-18   |                   | 551 5 . 50 days |                           |                        |   |
| 6          |              | 1.2.5.1.3 Civil input  1.2.5.1.3.1 TG deck load data                                 | 1 day     |                | Mon 23-04-18      | 95ES+30 days    |                           |                        |   |
| 7          |              | 1.2.5.1.3.2 TG deck load data  |           | Thu 17-05-18   | Thu 17-05-18      | 95FS+50 days    |                           |                        | ₩   |
| 8          | -3<br>-3     | ·  | 1 day     |                |                   | •               |                           |                        |   |
|            |              | 1.2.5.1.3.3 Cut out and IP detail drawing  | 1 day     |                | Wed 30-05-18      | 33F3+0U days    |                           |                        | <u>                                      </u>     |
| 9          | -3           | 1.2.5.2 Fuel handling system   | 54 days   |                | Mon 09-07-18      |                 |                           |                        | <u>                                      </u>     |
| 0          | -5           | 1.2.5.2.1 Mechanical   | 11 days   |                | Mon 14-05-18      | 0000.7          |                           |                        |   |
| ′1         | -5           | 1.2.5.2.1.1 FHS layout   | 7 days    | IVION 3U-04-18 | Wed 09-05-18      | 96F2+/ days     |                           |                        |   |

|    | Taal         | Tools Name  | Dunatio - | Ctowt        | Finish       | Dradagazzz       |                        |                            |   |
|----|--------------|---|-----------|--------------|--------------|------------------|------------------------|----------------------------|---|
| 0  | Task<br>Mode | Task Name   | Duration  | Start        | Finish       | Predecessors     | Qtr 1, 2018<br>Jan Feb | Qtr 2, 2018<br>Mar Apr May | Qtr 3, 2018<br>Jun Jul Aug                        |
| 2  | -5           | 1.2.5.2.1.2 Conveyor GA   | 3 days    | Thu 10-05-18 | Mon 14-05-18 | 96FS+15 days     |                        |                            | 7.49  |
| 3  | -5           | 1.2.5.2.1.3 Utitlity list   | 1 day     | Mon 30-04-18 | Tue 01-05-18 | 96FS+7 days      |                        |                            |   |
| 4  | -5           | 1.2.5.2.2 Civil Inputs  | 2 days    | Tue 22-05-18 | Thu 24-05-18 |                  |                        |                            |   |
| '5 | -5           | 1.2.5.2.2.1 Foundation load data for Conveyors                                | 2 days    | Tue 22-05-18 | Thu 24-05-18 | 171FS+10 days    |                        |                            |   |
| 6  | -5           | 1.2.5.2.3 E&I   | 46 days   | Thu 10-05-18 | Mon 09-07-18 |                  |                        |                            |   |
| 7  | -5           | 1.2.5.2.3.1 Feeder list   | 1 day     | Thu 10-05-18 | Fri 11-05-18 | 96FS+15 days     |                        |                            |   |
| 3  | -5           | 1.2.5.2.3.2 DCS IO list   | 1 day     | Wed 16-05-18 | Thu 17-05-18 | 96FS+20 days     |                        |                            |   |
| 9  | -5           | 1.2.5.2.3.3 Field instrument list   | 1 day     | Tue 29-05-18 | Wed 30-05-18 | 96FS+30 days     |                        |                            |   |
| 0  | -5           | 1.2.5.2.3.4 Belt weigh scale drawing  | 1 day     | Mon 11-06-18 | Tue 12-06-18 | 96FS+40 days     |                        |                            |   |
| 31 | -5           | 1.2.5.2.3.5 Cable tray layout   | 1 day     | Mon 11-06-18 | Tue 12-06-18 | 96FS+40 days     |                        |                            |   |
| 32 | -5           | 1.2.5.2.3.6 Control logic diagram   | 1 day     | Mon 11-06-18 | Tue 12-06-18 | 96FS+40 days     |                        |                            |   |
| 3  | -5           | 1.2.5.2.3.7 System control write up   | 1 day     | Sat 23-06-18 | Mon 25-06-18 | 96FS+50 days     |                        |                            |   |
| 1  | -5           | 1.2.5.2.3.8 Local panel GA and wiring schematic diagram                       | n 1 day   | Sat 23-06-18 | Mon 25-06-18 | 96FS+50 days     |                        |                            |   |
| 5  | -5           | 1.2.5.2.3.9 Motor GA, Data sheet and Curves                                   | 1 day     | Fri 06-07-18 | Mon 09-07-18 | 96FS+60 days     |                        |                            |   |
| 6  | -5           | 1.2.5.3 Ash handling system   | 54 days   | Mon 30-04-18 | Mon 09-07-18 |                  |                        |                            | <del>                                      </del> |
| 7  | -5           | 1.2.5.3.1 Mechanical  | 26 days   | Mon 30-04-18 | Fri 01-06-18 |                  |                        |                            |   |
| 8  | -5           | 1.2.5.3.1.1 Flow diagram of AHS   | 2 days    | Mon 30-04-18 | Wed 02-05-18 | 97FS+7 days      |                        |                            |   |
| 9  | -5           | 1.2.5.3.1.2 Piping layout   | 7 days    | Tue 15-05-18 | Thu 24-05-18 | 188FS+10 days    |                        |                            |   |
| 0  |              | 1.2.5.3.1.3 Piping support  | 7 days    | Thu 24-05-18 | Fri 01-06-18 | 189              |                        |                            |   |
| )1 | -            | 1.2.5.3.1.4 Utility list  | 1 day     | Wed 02-05-18 | Thu 03-05-18 | 188              |                        |                            |   |
| 2  | -5           | 1.2.5.3.1.5 Ash silo GA   | 1 day     | Thu 10-05-18 | Fri 11-05-18 | 97FS+15 days     |                        |                            |   |
| 3  | -            | 1.2.5.3.1.6 Grate ash conveyor GA   | 1 day     | Fri 25-05-18 | Sat 26-05-18 | 189FS+1 day      |                        |                            |   |
| 4  | -5           | 1.2.5.3.1.7 Equipment GA drawing  | 1 day     | Wed 23-05-18 | Thu 24-05-18 |                  |                        |                            |   |
| 5  | -            | 1.2.5.3.1.7.1 Ash vessel GA   | 1 day     | Wed 23-05-18 | Thu 24-05-18 | 97FS+25 days     |                        |                            |   |
| 6  | -5           | 1.2.5.3.1.7.2 Knife gate valve GA   | 1 day     | Wed 23-05-18 | Thu 24-05-18 | 97FS+25 days     |                        |                            |   |
| 7  | -5           | 1.2.5.3.1.7.3 Expansion Bellow GA   | 1 day     | Wed 23-05-18 | Thu 24-05-18 | 97FS+25 days     |                        |                            |   |
| 8  | <b>-</b> 5   | 1.2.5.3.1.7.4 Relief valve GA   | 1 day     | Wed 23-05-18 | Thu 24-05-18 | 97FS+25 days     |                        |                            |   |
| 19 | -5           | 1.2.5.3.1.7.5 Surge hopper GA   | 1 day     | Wed 23-05-18 | Thu 24-05-18 | 97FS+25 days     |                        |                            |   |
| 0  | <u>_</u>     | 1.2.5.3.1.7.6 Ash conditioner GA  | 1 day     | Wed 23-05-18 | Thu 24-05-18 | 97FS+25 days     |                        |                            |   |
| L  | -5           | 1.2.5.3.1.7.7 RAV Valve GA  | 1 day     | Wed 23-05-18 | Thu 24-05-18 | 97FS+25 days     |                        |                            |   |
| 2  | -5           | 1.2.5.3.1.7.8 Telescopic chute GA   | 1 day     | Wed 23-05-18 | Thu 24-05-18 | 97FS+25 days     |                        |                            |   |
| 3  | -5           | 1.2.5.3.1.7.9 Vent Bag filter GA  | 1 day     | Wed 23-05-18 | Thu 24-05-18 | 97FS+25 days     |                        |                            |   |
| 4  | -5           | 1.2.5.3.1.7.10 Air receiver GA  | 1 day     | Wed 23-05-18 | Thu 24-05-18 | 97FS+25 days     |                        |                            |   |
| 5  | -5           | 1.2.5.3.1.7.11 Fludising pad GA   | 1 day     | Wed 23-05-18 | Thu 24-05-18 | 97FS+25 days     |                        |                            |   |
| 6  | -5           | 1.2.5.3.2 Civil inputs  | 10 days   | Wed 30-05-18 | Tue 12-06-18 | -                |                        |                            | H   |
| 7  | -5           | 1.2.5.3.2.1 Civil load data for Grate ash conveyor, Ash vessels and Pipe rack | 1 day     | Mon 11-06-18 | Tue 12-06-18 | 189,190FS+7 days |                        |                            |   |
| 8  |              | 1.2.5.3.2.2 Civil load data for Ash silo                                      | 1 day     | Wed 30-05-18 | Thu 31-05-18 | 192FS+15 days    |                        |                            |   |
| 9  |              | 1.2.5.3.3 E&I   | 46 days   | Thu 10-05-18 | Mon 09-07-18 |                  |                        |                            | <del>                                      </del> |
| )  | -5           | 1.2.5.3.3.1 Pneumatic circuit diagram   | 1 day     | Mon 18-06-18 | Tue 19-06-18 | 97FS+45 days     |                        |                            |   |
| 1  | -5           | 1.2.5.3.3.2 Feeder list   | 1 day     | Thu 10-05-18 | Fri 11-05-18 | 97FS+15 days     |                        |                            |   |
| 2  | -5           | 1.2.5.3.3.3 IO list   | 1 day     | Wed 16-05-18 | Thu 17-05-18 | 97FS+20 days     |                        |                            |   |
| 3  | -5           | 1.2.5.3.3.4 Field instrument list   | 1 day     |              | Thu 24-05-18 | 97FS+25 days     |                        |                            |   |
| 4  | -5           | 1.2.5.3.3.5 System control write up   | 1 day     | Mon 18-06-18 |              | 97FS+45 days     |                        |                            |   |
| .5 | -5           | 1.2.5.3.3.6 Logic diagram   | 1 day     | Sat 23-06-18 | Mon 25-06-18 | 97FS+50 days     |                        |                            |   |

|    | <u> </u>     | ar Mill Expansion   | D        |              | eration Power Pla |               |                    |       | 1          |           | 1                      | nergy, Pune |
|----|--------------|---|----------|--------------|-------------------|---------------|--------------------|-------|------------|-----------|------------------------|-------------|
| 0  | Task<br>Mode | Task Name   | Duration | Start        | Finish            | Predecessors  | Qtr 1, 2018<br>Jan | Feb M | Qtr 2, 20: | L8<br>May | Qtr 3, 2018<br>Jun Jul | Aug         |
| 6  | -5           | 1.2.5.3.3.7 Motor GA, Data sheet and Curves                     | 1 day    | Fri 06-07-18 | Mon 09-07-18      | 97FS+60 days  |                    |       |            |           |                        |             |
| L7 |              | 1.2.5.3.3.8 Local control panel GA and wiring schematic diagram | 1 day    | Sat 23-06-18 | Mon 25-06-18      | 97FS+50 days  |                    |       |            |           |                        |             |
| 18 | -5           | 1.2.5.4 Compressor, Air dryer and Air receiver                  | 9 days   | Fri 01-06-18 | Tue 12-06-18      |               |                    |       |            |           |                        |             |
| 19 |              | 1.2.5.4.1 Mechanical  | 1 day    | Fri 01-06-18 | Fri 01-06-18      |               |                    |       |            |           |                        |             |
| 20 |              | 1.2.5.4.1.1 Compressor GA                                       | 1 day    | Fri 01-06-18 | Fri 01-06-18      | 98FS+7 days   |                    |       |            |           |                        |             |
| 21 | -5           | 1.2.5.4.1.2 Air dryer GA  | 1 day    | Fri 01-06-18 | Fri 01-06-18      | 98FS+7 days   |                    |       |            |           |                        |             |
| 22 |              | 1.2.5.4.1.3 Air receiver GA                                     | 1 day    | Fri 01-06-18 | Fri 01-06-18      | 98FS+7 days   |                    |       |            |           |                        |             |
| 23 | -5           | 1.2.5.4.2 E&I   | 9 days   | Fri 01-06-18 | Tue 12-06-18      |               |                    |       |            |           |                        |             |
| 24 | -5           | 1.2.5.4.2.1 Electrical wiring diagram                           | 1 day    | Tue 12-06-18 | Tue 12-06-18      | 98FS+15 days  |                    |       |            |           |                        |             |
| 25 | -5           | 1.2.5.4.2.2 Compressor internal PID                             | 1 day    | Fri 01-06-18 | Fri 01-06-18      | 98FS+7 days   |                    |       |            |           |                        |             |
| 26 | -5           | 1.2.5.5 Cooling tower   | 24 days  | Fri 04-05-18 | Tue 05-06-18      |               |                    |       |            |           |                        |             |
| 27 |              | 1.2.5.5.1 Mechanical  | 7 days   | Fri 04-05-18 | Mon 14-05-18      |               |                    |       |            |           |                        |             |
| 28 | -5           | 1.2.5.5.1.1 Cooling tower GA                                    | 7 days   | Fri 04-05-18 | Mon 14-05-18      | 99FS+7 days   |                    |       |            |           |                        |             |
| 29 | -5           | 1.2.5.5.1.2 Cooling tower data sheet                            | 1 day    | Wed 09-05-18 | Thu 10-05-18      | 99FS+10 days  |                    |       |            |           |                        |             |
| 30 | <b>-</b> 5   | 1.2.5.5.1.3 Thermal data sheet                                  | 1 day    | Wed 09-05-18 | Thu 10-05-18      | 99FS+10 days  |                    |       |            |           |                        |             |
| 31 |              | 1.2.5.5.2 Civil Input   | 1 day    | Tue 15-05-18 | Wed 16-05-18      |               |                    |       |            |           |                        |             |
| 32 | -5           | 1.2.5.5.2.1 Foundation load data for Cooling tower              | 1 day    | Tue 15-05-18 | Wed 16-05-18      | 99FS+15 days  |                    |       |            |           |                        |             |
| 33 | -5           | 1.2.5.5.3 E&I   | 11 days  | Tue 22-05-18 | Tue 05-06-18      | •             |                    |       |            |           |                        |             |
| 34 | -5           | 1.2.5.5.3.1 Lightning arrestor layout (if required)             | 1 day    | Tue 22-05-18 | Wed 23-05-18      | 99FS+20 days  |                    |       |            | <b>\</b>  |                        |             |
| 35 | -            | 1.2.5.5.3.2 Motor GA, Data sheet and Curve                      | 1 day    | Mon 04-06-18 |                   | 99FS+30 days  |                    |       |            |           |                        |             |
| 36 |              | 1.2.5.6 BOP Pumps - DM Transfer, CT makeup, CW Pump             | 20 days  | Tue 15-05-18 | Sat 09-06-18      | ,             |                    |       |            |           |                        |             |
| 37 | -3           | 1.2.5.6.1 Mechanical  | 10 days  | Tue 15-05-18 | Mon 28-05-18      |               |                    |       |            |           |                        |             |
| 38 | -5           | 1.2.5.6.1.1 Pump GA and Load data                               | 10 days  | Tue 15-05-18 | Mon 28-05-18      | 100FS+15 days |                    |       |            |           |                        |             |
| 39 | -5           | 1.2.5.6.1.2 Pump Data sheet and Performance & TS curv           | -        | Tue 15-05-18 | Mon 28-05-18      | •             |                    |       |            |           |                        |             |
| 40 | =5           | 1.2.5.6.2 E&I   | 10 days  | Mon 28-05-18 |                   | ,             |                    |       |            |           |                        |             |
| 41 | -5           | 1.2.5.6.2.1 Motor GA, Data sheet and Curves                     | 10 days  | Mon 28-05-18 |                   | 100FS+25 days |                    |       |            |           |                        |             |
| 42 | -5           | 1.2.5.7 EOT crane   | 24 days  | Thu 26-04-18 | Sat 26-05-18      | ,             |                    |       |            |           |                        |             |
| 43 | -5           | 1.2.5.7.1 Mechanical  | 24 days  | Thu 26-04-18 | Sat 26-05-18      |               |                    |       |            |           |                        |             |
| 44 | -5           | 1.2.5.7.1.1 GA drawing  | 10 days  | Thu 26-04-18 | Wed 09-05-18      | 101FS+7 days  |                    |       |            |           |                        |             |
| 45 | -            | 1.2.5.7.1.2 Gantry girder drawing                               | 7 days   | Thu 17-05-18 | Sat 26-05-18      | 244FS+7 days  |                    |       |            |           |                        |             |
| 46 | -5           | 1.2.5.7.2 Electrical  | 1 day    | Thu 17-05-18 | Fri 18-05-18      | ,             |                    |       |            |           |                        |             |
| 47 | -5           | 1.2.5.7.2.1 Electrical wiring diagram for EOT Crane             | 1 day    | Thu 17-05-18 | Fri 18-05-18      | 244FS+7 days  |                    |       |            |           |                        |             |
| 48 | -            | 1.2.5.8 Water treatment plant & ETP                             | 54 days  |              | Tue 12-06-18      | •             |                    |       |            |           |                        |             |
| 49 | -5           | 1.2.5.8.1 Mechanical  | 14 days  |              | Mon 23-04-18      |               |                    |       |            |           |                        |             |
| 50 | -5           | 1.2.5.8.1.1 PID   | 7 days   | Wed 04-04-18 |                   | 102FS+7 days  |                    |       |            |           |                        |             |
| 51 | -5           | 1.2.5.8.1.2 Equipment Layout                                    | 7 days   |              | Tue 17-04-18      | 102FS+10 days |                    |       |            |           |                        |             |
| 52 | -3           | 1.2.5.8.1.3 Equipment GA  | 1 day    | Fri 20-04-18 | Mon 23-04-18      | •             |                    |       |            |           |                        |             |
| 53 | <b>-</b> 5   | 1.2.5.8.2 Civil Inputs  | 7 days   | Fri 20-04-18 | Mon 30-04-18      | 7-            |                    |       |            |           |                        |             |
| 54 | -5           | 1.2.5.8.2.1 Civil load data of equipments                       | 7 days   | Fri 20-04-18 |                   | 102FS+20 days |                    |       |            |           |                        |             |
| 55 | -3           | 1.2.5.8.3 E&I   | 41 days  | Fri 20-04-18 | Tue 12-06-18      |               |                    |       |            |           |                        |             |
| 56 | =3           | 1.2.5.8.3.1 Feeder list   | 1 day    | Fri 20-04-18 |                   | 102FS+20 days |                    |       |            |           |                        |             |
| 57 | -3           | 1.2.5.8.3.2 IO List   | 1 day    | Thu 03-05-18 | Fri 04-05-18      | 102FS+30 days |                    |       |            |           |                        |             |
| 58 | <b>-</b> 5   | 1.2.5.8.3.3 Instrumentation List                                | 1 day    | Thu 03-05-18 | Fri 04-05-18      | 102FS+30 days |                    |       |            |           |                        |             |
| 59 |              | 1.2.5.8.3.4 Motor GA, Data sheet and Curves                     | 1 day    |              | Tue 12-06-18      | 102FS+60 days |                    |       |            |           | +                      |             |

| ient. bn |              | gar Mill Expansion   | T          |              | eration Power Pla |                       |                    |       |   |                  |          |          | EPC: Uttame        | nergy, Pu | ıne - |
|----------|--------------|--|------------|--------------|-------------------|-----------------------|--------------------|-------|---|------------------|----------|----------|--------------------|-----------|-------|
| 0        | Task<br>Mode | Task Name  | Duration   | Start        | Finish            | Predecessors          | Qtr 1, 2018<br>Jan | Feb M |   | r 2, 2018<br>Apr | May      | Jun      | Qtr 3, 2018<br>Jul | Aug       |       |
| 0        | -5           | 1.2.5.8.3.5 Cable schedules - Power, Control and Instrumentation | 1 day      | Wed 16-05-18 | Thu 17-05-18      | 102FS+40 days         |                    |       |   |                  |          |          |                    |           |       |
| L        | -5           | 1.2.5.8.3.6 Logic diagram  | 1 day      | Wed 16-05-18 | Thu 17-05-18      | 102FS+40 days         |                    |       |   |                  |          |          |                    |           |       |
| 2        | -5           | 1.2.5.8.3.7 System write up                                      | 1 day      | Tue 29-05-18 | Wed 30-05-18      | 102FS+50 days         |                    |       |   |                  |          |          |                    |           |       |
| 3        | -5           | 1.2.5.8.3.8 Cable tray layout                                    | 1 day      | Mon 11-06-18 | Tue 12-06-18      | 102FS+60 days         |                    |       |   |                  |          |          |                    |           |       |
| 54       |              | 1.2.5.8.3.9 Local panel GA and wiring schematic diagram          | · ·        | Tue 29-05-18 | Wed 30-05-18      | 102FS+50 days         |                    |       |   |                  |          |          |                    |           |       |
| 5        | -5           | 1.2.5.9 Piping BOC package                                       | 87.25 days | Fri 27-04-18 | Thu 16-08-18      |                       |                    |       |   |                  |          |          |                    |           |       |
| 66       | -3           | 1.2.5.9.1 PRDS   | 2 days     | Wed 02-05-18 | Fri 04-05-18      | 104FS+2 days          |                    |       |   | -       -        |          |          |                    |           |       |
| 57       | -            | 1.2.5.9.2 IBR Manual Valves                                      | 30 days    | Thu 31-05-18 | Mon 09-07-18      | 105FS+10 days         |                    |       |   |                  |          |          |                    |           |       |
| 58       | -5           | 1.2.5.9.3 Motorised operated valves                              | 30 days    | Wed 30-05-18 | Mon 09-07-18      | 106FS+10 days         |                    |       |   |                  |          |          |                    |           |       |
| 59       | -5           | 1.2.5.9.4 NIBR Manual Valves                                     | 30 days    | Tue 26-06-18 | Fri 03-08-18      | 107FS+10 days         |                    |       |   |                  |          |          |                    |           |       |
| 70       | -5           | 1.2.5.9.5 TG warmup vent silencer                                | 2 days     | Fri 27-04-18 | Mon 30-04-18      | 108FS+7 days          |                    |       |   |                  |          |          |                    |           |       |
| 71       | -5           | 1.2.5.9.6 Safety valves  | 7 days     | Fri 11-05-18 |                   | 109FS+10 days         |                    |       |   |                  |          |          |                    |           |       |
| 2        | -5           | 1.2.5.9.7 Steam trap   | 1 day      | Thu 12-07-18 | Fri 13-07-18      | 110FS+7 days          |                    |       |   |                  |          |          | +                  |           |       |
| 73       | -5           | 1.2.5.9.8 Strainer   | 2 days     | Wed 16-05-18 | Fri 18-05-18      | 111FS+2 days          |                    |       |   |                  |          |          |                    |           |       |
| 4        | -5           | 1.2.5.9.9 Spring supports  | 10 days    | Fri 03-08-18 | Thu 16-08-18      | 112FS+7 days          |                    |       |   |                  |          |          |                    |           |       |
| 75       | -5           | 1.2.6 Piping engineering drawings/documents                      | 82 days    | Sat 10-03-18 | Sat 23-06-18      | 1121317 day3          |                    |       |   |                  |          |          | •                  |           |       |
| 76       | -3           | 1.2.6.1 CAESAR - Stress analysis                                 | 36 days    | Mon 23-04-18 | Wed 06-06-18      |                       |                    |       |   |                  |          | <b>_</b> |                    |           |       |
| 77       |              | 1.2.6.1.1 Main steam   | 7 days     |              | Mon 14-05-18      | 122 286               |                    |       |   | -                |          |          |                    |           |       |
| 8        |              | 1.2.6.1.2 Turbine extraction                                     | 7 days     | Tue 15-05-18 | Thu 24-05-18      | 127,132,286,277FS+0.5 |                    |       |   |                  |          |          |                    |           |       |
|          |              | 1.2.0.1.2 Tarbine extraction                                     | 7 days     | Tue 15-05-16 | 111u 24-03-10     | days                  |                    |       |   |                  |          |          |                    |           |       |
| 79       | -5           | 1.2.6.1.3 Process steam  | 7 days     | Tue 15-05-18 | Thu 24-05-18      | 132,286,277FS+0.5     |                    |       |   |                  |          |          |                    |           |       |
|          |              |  | ,          |              |                   | days                  |                    |       |   |                  |          |          |                    |           |       |
| 30       |              | 1.2.6.1.4 PRDS Piping  | 2 days     | Thu 24-05-18 | Sat 26-05-18      | 278,279               |                    |       |   |                  |          |          |                    |           |       |
| 81       | <b>-</b> 5   | 1.2.6.1.5 BFP discharge piping                                   | 3 days     | Mon 23-04-18 | Wed 25-04-18      | 11                    |                    |       |   |                  |          |          |                    |           |       |
| 82       | <u>_</u>     | 1.2.6.1.6 F&M report (Turbine supplier concurrence)              | 10 days    | Fri 25-05-18 | Wed 06-06-18      | 277,278FS+0.5 days    |                    |       |   |                  |          |          |                    |           |       |
| 33       | <b>-</b> 5   | 1.2.6.2 Piping drawings  | 82 days    | Sat 10-03-18 | Sat 23-06-18      |                       |                    |       |   |                  |          |          | 1                  |           |       |
| 34       | -5           | 1.2.6.2.1 Composite piping layout                                | 71 days    | Sat 10-03-18 | Sat 09-06-18      |                       |                    |       |   |                  |          |          |                    |           |       |
| 35       | -5           | 1.2.6.2.1.1 IBR Piping   | 71 days    | Sat 10-03-18 | Sat 09-06-18      |                       |                    |       |   |                  |          | <b>—</b> |                    |           |       |
| 36       | -5           | 1.2.6.2.1.1.1 Preliminary  | 7 days     | Sat 10-03-18 | Tue 20-03-18      | 30,31,44FS+0.5 days   |                    |       |   |                  |          |          |                    |           |       |
| 37       | -5           | 1.2.6.2.1.1.2 Final  | 2 days     | Thu 07-06-18 | Sat 09-06-18      | 282FS+0.5 days        |                    |       |   |                  |          |          |                    |           |       |
| 38       | -3           | 1.2.6.2.1.2 NIBR Piping  | 44.38 days | Thu 05-04-18 | Thu 31-05-18      | ,                     | -                  |       |   |                  |          |          |                    |           |       |
| 89       | -5           | 1.2.6.2.1.2.1 Preliminary  | 10 days    | Thu 05-04-18 | Wed 18-04-18      | 30,31,45,46,47,48FS+1 |                    |       | + |                  |          |          |                    |           |       |
|          |              | ,  | ,          |              |                   | day                   |                    |       |   |                  |          |          |                    |           |       |
| 90       | -5           | 1.2.6.2.1.2.2 Final  | 2 days     | Tue 29-05-18 | Thu 31-05-18      | 238FS+1 day           |                    |       |   |                  |          |          |                    |           |       |
| 91       | -            | 1.2.6.2.2 IBR Piping Iso drawing with BOM                        | 50 days    | Thu 22-03-18 | Fri 25-05-18      |                       |                    |       |   |                  |          | <b>-</b> |                    |           |       |
| 92       | -            | 1.2.6.2.2.1 BFP Suction piping                                   | 1 day      | Thu 22-03-18 | Fri 23-03-18      | 286FS+2 days          |                    |       |   |                  |          |          |                    |           |       |
| 93       | -5           | 1.2.6.2.2.2 BFP Discharge piping                                 | 1 day      | Thu 26-04-18 | Thu 26-04-18      | 281                   |                    |       |   | Ť                |          |          |                    |           |       |
| 94       | -5           | 1.2.6.2.2.3 Main steam piping                                    | 1 day      | Tue 15-05-18 | Tue 15-05-18      | 277                   |                    |       |   |                  | <b>†</b> |          |                    |           |       |
| 95       | -5           | 1.2.6.2.2.4 Turbine extraction steam piping                      | 1 day      | Thu 24-05-18 | Fri 25-05-18      | 278                   |                    |       |   |                  | #        |          |                    |           |       |
| 96       | -5           | 1.2.6.2.2.5 Deaerator steam piping                               | 0.5 days   | Thu 24-05-18 |                   | 278                   |                    |       |   |                  | #        |          |                    |           |       |
| 97       | -5           | 1.2.6.2.2.6 Process steam piping                                 | 0.5 days   | Thu 24-05-18 |                   | 279                   |                    |       |   |                  | +        |          |                    |           |       |
| 98       | -5           | 1.2.6.2.3 NIBR Piping layout with BOM                            | 7 days     | Sat 26-05-18 | Mon 04-06-18      |                       |                    |       |   |                  | +        | <b>-</b> |                    |           |       |
| 99       | -5           | 1.2.6.2.3.1 DM makeup water piping                               | 1 day      | Thu 31-05-18 |                   | 307                   |                    |       |   |                  | ا        |          |                    |           |       |
|          | -5           | 1.2.6.2.3.2 Deaerator Overflow and Drain piping                  | 1 day      | Mon 04-06-18 |                   |                       | -                  |       |   |                  | 2        | <b>1</b> |                    |           |       |

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| Client: Bh | ogpur Sug    | ar Mill Expansion   |           | 15MW Cogen   | eration Power Pla | nt             | EPC: Uttamenergy, Pune   |
|------------|--------------|---|-----------|--------------|-------------------|----------------|--|
| 0          | Task<br>Mode | Task Name   | Duration  | Start        | Finish            | Predecessors   | Qtr 1, 2018         Qtr 2, 2018         Qtr 3, 2018           Jan         Feb         Mar         Apr         May         Jun         Jul         Aug  |
| 301        | -5           | 1.2.6.2.3.3 Sample cooler piping                          | 1 day     | Mon 04-06-18 | Mon 04-06-18      | 302            |  |
| 302        | -5           | 1.2.6.2.3.4 Turbine Drain piping                          | 1 day     | Fri 01-06-18 | Fri 01-06-18      | 303            |  |
| 303        | -5           | 1.2.6.2.3.5 DM transfer Pump suction and disharge piping  | 1 day     | Thu 31-05-18 | Thu 31-05-18      | 307            |  |
| 04         | -5           | 1.2.6.2.3.6 Cooling water pump suction & discharge piping | 2 days    | Sat 26-05-18 | Mon 28-05-18      | 291FS+0.5 days |  |
| 05         | <b>-</b> 5   | 1.2.6.2.3.7 Cooling water supply piping                   | 1 day     | Sat 26-05-18 | Sat 26-05-18      | 291FS+0.5 days | <b>*</b>   |
| 306        | -5           | 1.2.6.2.3.8 Cooling water return piping                   | 1 day     | Sat 26-05-18 | Sat 26-05-18      | 291FS+0.5 days | K  |
| 07         | -5           | 1.2.6.2.3.9 Compressed air system piping                  | 2 days    | Tue 29-05-18 | Wed 30-05-18      | 304,305,306    |  |
| 08         | -5           | 1.2.6.2.3.10 Service water piping                         | 1 day     | Mon 04-06-18 | Mon 04-06-18      | 302            | <b>†</b>   |
| 09         | -5           | 1.2.6.2.4 Primary support drawings                        | 7 days    | Mon 11-06-18 | Wed 20-06-18      |                |  |
| 310        | -5           | 1.2.6.2.4.1 BFP Suction piping                            | 7 days    | Mon 11-06-18 | Wed 20-06-18      | 285FS+1 day    | <b>—</b>   |
| 11         | -5           | 1.2.6.2.4.2 BFP Discharge piping                          | 7 days    | Mon 11-06-18 | Wed 20-06-18      | 285FS+1 day    | <b>—</b>   |
| 312        | -5           | 1.2.6.2.4.3 Main steam piping                             | 7 days    | Mon 11-06-18 | Wed 20-06-18      | 285FS+1 day    |  |
| 313        | -5           | 1.2.6.2.4.4 Turbine extraction steam piping               | 7 days    | Mon 11-06-18 | Wed 20-06-18      | 285FS+1 day    |  |
| 14         | -5           | 1.2.6.2.4.5 Deaerator steam piping                        | 7 days    | Mon 11-06-18 | Wed 20-06-18      | 285FS+1 day    |  |
| 15         | -5           | 1.2.6.2.4.6 Process steam piping                          | 7 days    | Mon 11-06-18 | Wed 20-06-18      | 285FS+1 day    |  |
| 16         | -5           | 1.2.6.2.4.7 DM makeup water piping                        | 7 days    | Mon 11-06-18 | Wed 20-06-18      | 285FS+1 day    | <b>*</b>   |
| 17         | -5           | 1.2.6.2.4.8 Deaerator Overflow and Drain piping           | 7 days    | Mon 11-06-18 | Wed 20-06-18      | 285FS+1 day    | <b>*</b>   |
| 18         | -5           | 1.2.6.2.4.9 Sample cooler piping                          | 7 days    | Mon 11-06-18 | Wed 20-06-18      | 285FS+1 day    | <b>*</b>   |
| 19         | -5           | 1.2.6.2.4.10 Turbine Drain piping                         | 7 days    | Mon 11-06-18 | Wed 20-06-18      | 285FS+1 day    | <b>*</b>   |
| 20         | <u>-</u> 5   | 1.2.6.2.4.11 DM transfer Pump suction and disharge pip    | ir 7 days | Mon 11-06-18 | Wed 20-06-18      | 285FS+1 day    | <b>*</b>   |
| 21         | <b>-</b> 5   | 1.2.6.2.4.12 Cooling water pump suction & discharge pi    | pi 7 days | Mon 11-06-18 | Wed 20-06-18      | 285FS+1 day    | <b>*</b>   |
| 22         | <u>_</u>     | 1.2.6.2.4.13 Cooling water supply piping                  | 7 days    | Mon 11-06-18 | Wed 20-06-18      | 285FS+1 day    | <b>*</b>   |
| 23         | <u>_</u>     | 1.2.6.2.4.14 Cooling water return piping                  | 7 days    | Mon 11-06-18 | Wed 20-06-18      | 285FS+1 day    | <b>*</b>   |
| 24         | -5           | 1.2.6.2.4.15 Compressed air system piping                 | 7 days    | Mon 11-06-18 | Wed 20-06-18      | 285FS+1 day    | <b>*</b>   |
| 25         | <u>-</u> 5   | 1.2.6.2.4.16 Service water piping                         | 7 days    | Mon 11-06-18 | Wed 20-06-18      | 285FS+1 day    | <b>*</b>   |
| 326        | <b>-</b> 5   | 1.2.6.2.5 Secondary support drawing                       | 3 days    | Wed 20-06-18 | Sat 23-06-18      | 309            |  |
| 327        | -5           | 1.2.6.2.6 Miscellaneous drawings                          | 67 days   | Tue 20-03-18 | Wed 13-06-18      |                | I I  |
| 28         | -5           | 1.2.6.2.6.1 Steam blowing piping                          | 1 day     | Mon 11-06-18 | Mon 11-06-18      | 285FS+0.5 days | <b>†</b>   |
| 329        | -5           | 1.2.6.2.6.2 Target Plate assembly drawing                 | 0.5 days  | Mon 11-06-18 | Mon 11-06-18      | 285FS+0.5 days | <u> </u>   |
| 30         | -5           | 1.2.6.2.6.3 Insert plate layout drawing                   | 2 days    | Mon 11-06-18 | Tue 12-06-18      | 287FS+0.5 days | <u> </u>   |
| 31         | -5           | 1.2.6.2.6.4 Insert plate fabrication drawing              | 0.5 days  | Wed 13-06-18 | Wed 13-06-18      | 330            |  |
| 332        | -5           | 1.2.6.2.6.5 Pipe cross over and platform                  | 1 day     | Mon 11-06-18 | Tue 12-06-18      | 287FS+1 day    | Ť  |
| 333        | -5           | 1.2.6.2.6.6 General notes and Legends                     | 1 hr      | Tue 20-03-18 | Tue 20-03-18      | 286            | T T  |
| 334        | -5           | 1.2.6.2.6.7 Welding standard details                      | 2 hrs     | Tue 20-03-18 | Tue 20-03-18      | 286            | T T  |
| 335        | -5           | 1.2.6.2.6.8 Thermowell boss detail                        | 4 hrs     | Tue 20-03-18 | Tue 20-03-18      | 286            | The state of the s |