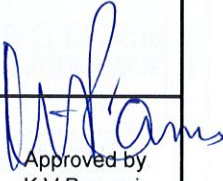




**Bharat Heavy Electricals Limited, Piping Centre, Chennai.**  
**List of Raw material Manufacturer approved by NTPC for Piping and Tank**  
**Fabrication with Vendor material**

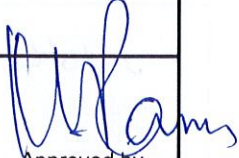
**QCP : 17**  
**Rev : 03**  
**Date : 31.10.2019**

| Sl                                                                                                                            | Vendor Name                                     | Location               | Material                    | Remarks                                                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <b>A) PIPES (Seamless) : CS - Carbon steel ; SS - Stainless Steel</b>                                                         |                                                 |                        |                             | <b>For Sl. 1 to 22 :-</b><br><b>Refer Anneuxre-I :</b><br><b>QCP:17:Rev01</b><br><b>dt:12/04/2011 for</b><br><b>NTPC approval</b>       |
| 1                                                                                                                             | BHEL / SSTP                                     | Trichy                 | CS                          |                                                                                                                                         |
| 2                                                                                                                             | ISMT LIMITED                                    | Baramathi / Ahmednagar | CS                          |                                                                                                                                         |
| 3                                                                                                                             | JINDAL SAW                                      | Nashik                 | CS                          |                                                                                                                                         |
| 4                                                                                                                             | MAHARASTRA SEAMLESS LTD                         | Raigad                 | CS                          |                                                                                                                                         |
| 5                                                                                                                             | REMI EDELSTAL TUBULARES LTD ( upto 10")         | Mumbai / Tarapur       | SS, CS                      |                                                                                                                                         |
| 6                                                                                                                             | RATNAMANI METALS & TUBES LTD (upto 10")         | Ahmedabad / Kutch      | SS                          |                                                                                                                                         |
| 7                                                                                                                             | BENTELER STAHL/ROHR GMBH & CO.KG.               | Germany                | CS upto Dia 160mm           |                                                                                                                                         |
| 8                                                                                                                             | DALMINE                                         | Italy                  | CS                          |                                                                                                                                         |
| 9                                                                                                                             | SALZGITTER MANESSMANN STAINLESS (DMV STAINLESS) | France, Italy, Germany | SS                          |                                                                                                                                         |
| 10                                                                                                                            | HUTA BATORY SA                                  | Poland                 | CS                          |                                                                                                                                         |
| 11                                                                                                                            | JFE,JAPAN (formerly Kawasaki Corpn.)            | Japan                  | CS,SS                       |                                                                                                                                         |
| 12                                                                                                                            | NIPPON STEEL                                    | Japan                  | CS,SS                       |                                                                                                                                         |
| 13                                                                                                                            | TENARIS GLOBAL (NKK TUBES)                      | Japan                  | CS                          |                                                                                                                                         |
| 14                                                                                                                            | PRODUCTOS TUBULARES S.A.U                       | Spain                  | CS                          |                                                                                                                                         |
| 15                                                                                                                            | ROMAN CORPORATION                               | Korea                  | SS                          |                                                                                                                                         |
| 16                                                                                                                            | SIDERCA S.A.I.C                                 | Argentina              | CS                          |                                                                                                                                         |
| 17                                                                                                                            | SUMITOMO METALS                                 | Japan                  | CS,SS                       |                                                                                                                                         |
| 18                                                                                                                            | TENARIS DALMINE S.P.A                           | Italy                  | CS                          |                                                                                                                                         |
| 19                                                                                                                            | TUBACEX                                         | Spain                  | SS                          |                                                                                                                                         |
| 20                                                                                                                            | TUBOS REUNIDOS S.A.                             | Spain                  | CS                          |                                                                                                                                         |
| 21                                                                                                                            | VALLOUREC & MANNESMANN TUBES                    | France,Germany         | CS                          |                                                                                                                                         |
| 22                                                                                                                            | WYMAN-GORDON FORGINGS INC.                      | USA                    | CS                          |                                                                                                                                         |
| 23                                                                                                                            | ARCELORMITTAL TUBULAR PRODUCT ROMAN             | Romania                | CS                          | <b>For Sl. 23 to 31 :-</b><br><b>Refer Anneuxre-II</b><br><b>: Ref :01/CQA/gs</b><br><b>dt : 24/02/2016</b><br><b>for NTPC approval</b> |
| 24                                                                                                                            | HENGYANG STEEL TUBE GROUP INT'L                 | China                  | CS                          |                                                                                                                                         |
| 25                                                                                                                            | JIANGSU CHENGDE STEEL TUBE                      | China                  | CS upto Dia 219mm           |                                                                                                                                         |
| 26                                                                                                                            | RINGMILL                                        | Italy                  | Forged CS Pipes             |                                                                                                                                         |
| 27                                                                                                                            | VALCONVY TRUB CHOMUTOV                          | CZECH REP.             | CS                          |                                                                                                                                         |
| 28                                                                                                                            | BAOSHAN IRON & STEEL CO. LTD                    | China                  | CS Upto Dia 88.9mm          |                                                                                                                                         |
| 29                                                                                                                            | TENARIS GLOBAL (SILCO TUBES)                    | Romania                | CS Upto Dia 159mm           |                                                                                                                                         |
| 30                                                                                                                            | IBF SPA                                         | Italy                  | CS                          |                                                                                                                                         |
| 31                                                                                                                            | YANGZHOU CHENGDE STEEL PIPE CO. LTD.            | China                  | CS                          |                                                                                                                                         |
| 32                                                                                                                            | YANGZHOU LONTRIN STEEL TUBE CO. LTD.            | China                  | CS                          | <b>For Sl. 32 to 34 :- Refer</b><br><b>Annexure- IV for NOA of</b><br><b>Panki 1x660 MW (page 3</b><br><b>of 3)</b>                     |
| 33                                                                                                                            | VALLOUREC CHANGZHOU CO. LTD                     | China                  | CS                          |                                                                                                                                         |
| 34                                                                                                                            | HMTL                                            | India                  | CS                          |                                                                                                                                         |
| <b>B) PIPES (Welded ):IS 1239, IS 3589, SA 672, API &amp; SS.</b>                                                             |                                                 |                        |                             |                                                                                                                                         |
| 1                                                                                                                             | ADVANCE STEEL TUBES LTD                         | GAZIABAD               | IS3589 up to NB250, IS 1239 |                                                                                                                                         |
| 2                                                                                                                             | APEX TUBES PVT. LTD,                            | GURGAON                | SS                          |                                                                                                                                         |
| <br>Prepared by<br>J Nanthini<br>Dy.Mgr/QA |                                                 |                        |                             | <br>Reviewed by<br>D Sandra Priya<br>Dy.Mgr/QA       |
|                                                                                                                               |                                                 |                        |                             | <br>Approved by<br>K V Ramani<br>AGM/Engg&Quality  |

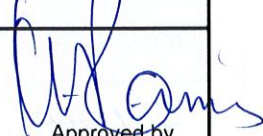


|  |                                  | Bharat Heavy Electricals Limited, Piping Centre, Chennai.<br><b>List of Raw material Manufacturer approved by NTPC for Piping and Tank Fabrication with Vendor material</b> |                                                                          | QCP : 17<br>Rev : 03<br>Date : 31.10.2019                                    |
|-----------------------------------------------------------------------------------|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|------------------------------------------------------------------------------|
| SI                                                                                | Vendor Name                      | Location                                                                                                                                                                    | Material                                                                 | Remarks                                                                      |
| 3                                                                                 | APL APOLLO TUBES LIMITED,        | DELHI                                                                                                                                                                       | IS 1239,BS 3059, IS1161                                                  | <b>For SI. 1 to 44 :-<br/>Shall be as per<br/>BHEL's Internal<br/>System</b> |
| 4                                                                                 | ASIAN MILLS PVT LTD              | AHMEDABAD                                                                                                                                                                   | IS 3589 up to NB500, IS 1239                                             |                                                                              |
| 5                                                                                 | ALTEC FABRICATORS                | TRICHY                                                                                                                                                                      | IS 3589 > 2540mm                                                         |                                                                              |
| 6                                                                                 | BHUSHAN STEEL LIMITED,           | MUMBAI                                                                                                                                                                      | IS3589 up to NB 400,<br>API5GRX52, API5LGRB                              |                                                                              |
| 7                                                                                 | CAPACITE STRUCTURES LTD.         | MUMBAI                                                                                                                                                                      | IS3589 NB450-2500 ; IS3589><br>2540 mm                                   |                                                                              |
| 8                                                                                 | ESSAR STEEL INDIA LTD            | HAZIRA                                                                                                                                                                      | IS3589 NB300-2500, IS3589><br>2540 mm, API5GRX52,<br>API5LGRB            |                                                                              |
| 9                                                                                 | EXCEL INDUSTRIES.,               | HYDERABAD                                                                                                                                                                   | IS 3589 > 2540mm                                                         |                                                                              |
| 10                                                                                | GAJANAN TUBES PVT LTD            | CALCUTTA                                                                                                                                                                    | IS3589 up to NB400, IS 1239                                              |                                                                              |
| 11                                                                                | GAURANG PRODUCTS PVT LTD         | DELHI                                                                                                                                                                       | IS3589 up to NB400, IS<br>1239,BS 3059, IS1161<br>API5GRX52,API5LGRB     |                                                                              |
| 12                                                                                | GOODLUCK INDIA LIMITED           | GAZIABAD                                                                                                                                                                    | IS3589 up to NB250, IS 1239<br>,API5GRX52, API5LGRB                      |                                                                              |
| 13                                                                                | HI-TECH PIPES LIMITED,           | DELHI                                                                                                                                                                       | IS3589- up to NB400, IS 1239                                             |                                                                              |
| 14                                                                                | INDUS TUBES LTD                  | DELHI                                                                                                                                                                       | IS3589- up to NB250, IS 1239                                             |                                                                              |
| 15                                                                                | JCO GAS PIPE LTD.                | BHOPAL                                                                                                                                                                      | IS3589 NB300-2500                                                        |                                                                              |
| 16                                                                                | JINDAL ( INDIA ) LIMITED,        | CALCUTTA                                                                                                                                                                    | IS3589 up to NB400,<br>API5GRX52, API5LGRB                               |                                                                              |
| 17                                                                                | JINDAL INDUSTRIES LTD.,          | ROHTAK                                                                                                                                                                      | API5GRX52,API5LGRB,<br>IS3589, IS 1239, BS 3059,<br>IS1161               |                                                                              |
| 18                                                                                | JINDAL PIPES LTD.                | GURGAON                                                                                                                                                                     | API5GRX52,API5LGRB,<br>IS3589, IS 1239, BS 3059,<br>IS1161               |                                                                              |
| 19                                                                                | JINDAL SAW LTD.,                 | DELHI                                                                                                                                                                       | IS3589 NB300-2500, IS<br>3589 > 2540mm, API5GRX52,<br>API5LGRB           |                                                                              |
| 20                                                                                | LALIT PIPES AND PIPES LIMITED    | MUMBAI                                                                                                                                                                      | A672, API5GRX52, API5LGRB,<br>IS3589 NB450-2500                          |                                                                              |
| 21                                                                                | MAHARASHTRA SEAMLESS LTD.,       | CHENNAI                                                                                                                                                                     | API5GRX52,API5LGRB,IS3589                                                |                                                                              |
| 22                                                                                | MAN INDUSTRIES (INDIA) LTD.      | MUMBAI                                                                                                                                                                      | API5GRX52,API5LGRB,<br>IS3589, A672                                      |                                                                              |
| 23                                                                                | MEGHA ENGINEERING                | HYDERABAD                                                                                                                                                                   | IS3589 NB450-2500,<br>IS3589 > 2540 mm                                   |                                                                              |
| 24                                                                                | MKK METAL SECTIONS PVT LTD       | RANIPET                                                                                                                                                                     | IS3589 up to NB400, IS 1239,<br>BS 3059, IS1161                          |                                                                              |
| 25                                                                                | MUKAT TANKS AND VESSELS PVT LTD  | MUMBAI                                                                                                                                                                      | IS3589 up to NB300-2500, A672                                            |                                                                              |
| 26                                                                                | NEZONE TUBES LIMITED,            | CALCUTTA                                                                                                                                                                    | IS 1239, BS 3059, IS1161                                                 |                                                                              |
| 27                                                                                | P.S.STEEL TUBES LTD, UNIT II     | BHILAI                                                                                                                                                                      | IS 1239, BS 3059, IS1161                                                 |                                                                              |
| 28                                                                                | PRAKASH STEELAGE LTD             | MUMBAI                                                                                                                                                                      | SS                                                                       |                                                                              |
| 29                                                                                | PSL LIMITED,                     | CHENNAI                                                                                                                                                                     | API5GRX52,API5LGRB, IS3589                                               |                                                                              |
| 30                                                                                | RATNAMANI METALS & TUBES LTD.,   | AHMEDABAD                                                                                                                                                                   | API5GRX52,API5LGRB,IS3589 -<br>all sizes, A672, SS                       |                                                                              |
| 31                                                                                | RAVINDRA TUBES LIMITED,          | DELHI                                                                                                                                                                       | IS1239                                                                   |                                                                              |
| 32                                                                                | REMI EDELSTAHL TUBULARS LIMITED, | MUMBAI                                                                                                                                                                      | SS                                                                       |                                                                              |
| 33                                                                                | RIDDHI STEEL & TUBES (P) LTD     | AHMEDABAD                                                                                                                                                                   | IS3589- up to NB250, IS<br>1239,BS 3059, IS1161                          |                                                                              |
| 34                                                                                | SG HEAVY ENGINEERING PVT LTD     | MUMBAI                                                                                                                                                                      | IS3589 NB300-2500,<br>IS3589 > 2540 mm                                   |                                                                              |
| 35                                                                                | STEEL AUTHORITY OF INDIA LTD     | CHENNAI                                                                                                                                                                     | IS3589 up to NB400                                                       |                                                                              |
| 36                                                                                | SURYA ROSHNI LTD                 | DELHI                                                                                                                                                                       | IS 1239, API5GRX52,<br>API5LGRB, IS3589 up to<br>2500NB, BS 3059, IS1161 |                                                                              |
| Prepared by<br>J Nanthini<br>Dy.Mgr/QA                                            |                                  |                                                                                                                                                                             |                                                                          | Reviewed by<br>D Sandra Priya<br>Dy.Mgr/QA                                   |
| Approved by<br>K V Ramani<br>AGM/Engg&Quality                                     |                                  |                                                                                                                                                                             |                                                                          |                                                                              |

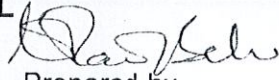
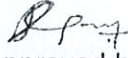


|                                              |                                               | Bharat Heavy Electricals Limited, Piping Centre, Chennai.<br><b>List of Raw material Manufacturer approved by NTPC for Piping and Tank Fabrication with Vendor material</b> |                                                    | QCP : 17<br>Rev : 03<br>Date : 31.10.2019                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| SI                                                                                                                            | Vendor Name                                   | Location                                                                                                                                                                    | Material                                           | Remarks                                                                                                                                                  |
| 37                                                                                                                            | SWASTIK PIPES LIMITED,                        | DELHI                                                                                                                                                                       | PIPES-IS3589 up to NB400, IS 1239, BS 3059, IS1161 |                                                                                                                                                          |
| 38                                                                                                                            | TAMIL NADU STEEL TUBES LTD                    | CHENNAI                                                                                                                                                                     | IS1239 upto NB150, BS 3059, IS1161                 |                                                                                                                                                          |
| 39                                                                                                                            | TATA STEEL LIMITED.                           | CHENNAI                                                                                                                                                                     | IS 1239                                            |                                                                                                                                                          |
| 40                                                                                                                            | TOPWORTH PIPES & TUBES PVT.LTD.,              | MUMBAI                                                                                                                                                                      | IS1239, IS3589 NB450-2500                          |                                                                                                                                                          |
| 41                                                                                                                            | VENKATESWARA CONDUITS PVT.LTD                 | CHENNAI                                                                                                                                                                     | PIPES- IS 1239                                     |                                                                                                                                                          |
| 42                                                                                                                            | VENUS PIPES & TUBES PVT. LTD                  | GANDHINAGR                                                                                                                                                                  | SS                                                 |                                                                                                                                                          |
| 43                                                                                                                            | WELSPUN CORP LIMITED,                         | MUMBAI                                                                                                                                                                      | IS3589 - all sizes, IS1239, API5GRX52, API5LGRB,   |                                                                                                                                                          |
| 44                                                                                                                            | ZENITH BIRLA ( INDIA ) LIMITED                | MUMBAI                                                                                                                                                                      | IS 1239, BS 3059, IS1161                           |                                                                                                                                                          |
| <b>C) PLATES</b>                                                                                                              |                                               |                                                                                                                                                                             |                                                    | <b>For Sl. 1 to 10 :-</b><br><br><b>Refer Anneuxre-I :</b><br><br><b>QCP:17:Rev01</b><br><br><b>dt:12/04/2011 for</b><br><br><b>NTPC approval</b>        |
| 1                                                                                                                             | ESSAR STEEL                                   | Hazira                                                                                                                                                                      | CS                                                 |                                                                                                                                                          |
| 2                                                                                                                             | JINDAL STEEL                                  | Raigarh / Hissar                                                                                                                                                            | CS, SS                                             |                                                                                                                                                          |
| 3                                                                                                                             | LLOYDS STEEL                                  | Wardha                                                                                                                                                                      | CS                                                 |                                                                                                                                                          |
| 4                                                                                                                             | STEEL AUTHORITY OF INDIA LTD                  | Bhilai / Salem                                                                                                                                                              | CS, SS                                             |                                                                                                                                                          |
| 5                                                                                                                             | DILLING-GTS VENTES                            | Germany                                                                                                                                                                     | CS, SS                                             |                                                                                                                                                          |
| 6                                                                                                                             | INDUSTEEL FRANCE                              | France                                                                                                                                                                      | CS, SS                                             |                                                                                                                                                          |
| 7                                                                                                                             | METAL ONE CORPORATION                         | Japan                                                                                                                                                                       | CS, SS                                             |                                                                                                                                                          |
| 8                                                                                                                             | INDUSTEEL BELGIUM                             | Belgium                                                                                                                                                                     | CS, SS                                             |                                                                                                                                                          |
| 9                                                                                                                             | THYSSEN KRUPP STAHLUNION GMBH                 | Germany                                                                                                                                                                     | CS, SS                                             |                                                                                                                                                          |
| 10                                                                                                                            | VOEST ALPINE GROBBLECH GmbH & CO KG           | Austria                                                                                                                                                                     | CS                                                 |                                                                                                                                                          |
| 11                                                                                                                            | ACRONI.D.O.O,                                 | Slovenia                                                                                                                                                                    | CS, SS                                             | <b>For Sl. 11 to 16 :-</b><br><br><b>Refer Anneuxre-III</b><br><br><b>: Ref :01/CQA/gs</b><br><br><b>dt : 24/02/2016</b><br><br><b>for NTPC approval</b> |
| 12                                                                                                                            | REINER BRACH GMBH & CO.KG                     | Germany                                                                                                                                                                     | CS                                                 |                                                                                                                                                          |
| 13                                                                                                                            | ILSENBURGER GROBBLECH (SALZGITTER MANNESMANN) | Germany                                                                                                                                                                     | CS, SS                                             |                                                                                                                                                          |
| 14                                                                                                                            | NIPPON STEEL CORPORATION                      | Japan                                                                                                                                                                       | CS                                                 |                                                                                                                                                          |
| 15                                                                                                                            | POSCO                                         | Republic of Korea                                                                                                                                                           | CS                                                 |                                                                                                                                                          |
| 16                                                                                                                            | KOLUMBUS STAINLESS STEEL (ACRINOX)            | South Africa                                                                                                                                                                | SS                                                 |                                                                                                                                                          |
| 17                                                                                                                            | OUTOKUMPU                                     | Sweden                                                                                                                                                                      | SS upto 20 mm thickness                            | <b>For Sl. 17 to 19 :-</b><br><br><b>Refer Annexure-V for</b><br><br><b>NOA of Patratu 3x660 MW</b>                                                      |
| 18                                                                                                                            | JSL STAINLESS                                 | Jaipur                                                                                                                                                                      | SS                                                 |                                                                                                                                                          |
| 19                                                                                                                            | ARCELOR MITTAL GALATI                         | Romania                                                                                                                                                                     | CS upto 80 mm thickness                            |                                                                                                                                                          |
| <b>D) FITTINGS</b>                                                                                                            |                                               |                                                                                                                                                                             |                                                    |                                                                                                                                                          |
| 1                                                                                                                             | DEE DEVELOPMENT ENGINEERS LTD                 | Faridabad                                                                                                                                                                   | CS,AS,SS, Formed Fittings - SA234, SA420, SA403    |                                                                                                                                                          |
| 2                                                                                                                             | FLASH FORGE PVT LTD                           | Vizag                                                                                                                                                                       | CS,AS,SS, Formed Fittings - SA234, SA420, SA403    |                                                                                                                                                          |
| 3                                                                                                                             | SIDDARTH AND GAUTAM ENGINEERS                 | Faridabad                                                                                                                                                                   | CS,AS,SS, SW Fittings                              |                                                                                                                                                          |
| 4                                                                                                                             | UNITECH MACHINES LTD                          | Saharanpur                                                                                                                                                                  | CS,AS,SS                                           |                                                                                                                                                          |
| <br>Prepared by<br>J Nanthini<br>Dy.Mgr/QA |                                               | <br>Reviewed by<br>D Sandra Priya<br>Dy.Mgr/QA                                           |                                                    | <br>Approved by<br>K V Ramani<br>AGM/Engg&Quality                   |



|                                              |                                     | Bharat Heavy Electricals Limited, Piping Centre, Chennai.<br><b>List of Raw material Manufacturer approved by NTPC for Piping and Tank Fabrication with Vendor material</b> |                                               | QCP : 17<br>Rev : 03<br>Date : 31.10.2019                                                                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SI                                                                                                                            | Vendor Name                         | Location                                                                                                                                                                    | Material                                      | Remarks                                                                                                                                                                                                     |
| 5                                                                                                                             | RAY ENGG ENTERPRISES                | Calcutta                                                                                                                                                                    | IS1239                                        | <b>For Sl. 1 to 30 :-</b><br><b>Refer Annexure-VI :</b><br><b>Shall be as per</b><br><b>BHEL's Internal</b><br><b>System (Ref :NOA of</b><br><b>Patratu 3x660 MW)</b>                                       |
| 6                                                                                                                             | INDL. PRODUCT MARKETING CORPORATION | Chennai                                                                                                                                                                     | IS 1239                                       |                                                                                                                                                                                                             |
| 7                                                                                                                             | P.K.TUBES & FITTINGS PVT. LTD,      | Gurgoan                                                                                                                                                                     | CS,AS,SS                                      |                                                                                                                                                                                                             |
| 8                                                                                                                             | SKY FORGE PVT. LTD.                 | Faridabad                                                                                                                                                                   | IS 1239                                       |                                                                                                                                                                                                             |
| 9                                                                                                                             | EFTEN ENGINEERING PVT.LTD.,-        | SRIPERUMBUDUR                                                                                                                                                               | CS,AS,SS,SW fittings                          |                                                                                                                                                                                                             |
| 10                                                                                                                            | FIT TECH INDUSTRIES,                | THANE.                                                                                                                                                                      | CS, SS,AS,SW fittings                         |                                                                                                                                                                                                             |
| 11                                                                                                                            | GUJARAT INFRAPIPES PVT. LTD.,       | BARODA                                                                                                                                                                      | CS,AS,SS                                      |                                                                                                                                                                                                             |
| 12                                                                                                                            | HARIHAR ALLOYS (P) LTD.             | TRICHY                                                                                                                                                                      | only SW fittings                              |                                                                                                                                                                                                             |
| 13                                                                                                                            | INTER TECH FITTINGS INDIA PVT LTD   | THANE.                                                                                                                                                                      | CS, AS                                        |                                                                                                                                                                                                             |
| 14                                                                                                                            | K. S. PIPE FITTINGS PVT.LTD         | FARIDABAD.                                                                                                                                                                  | CS, AS, Formed Fittings - SA234, SA420, SA403 |                                                                                                                                                                                                             |
| 15                                                                                                                            | NAV DURGA FORGING & FITTINGS        | MUMBAI                                                                                                                                                                      | only SW fittings                              |                                                                                                                                                                                                             |
| 16                                                                                                                            | ARSHYA ENGINEERS & FABRICATIONS     | PALWAL                                                                                                                                                                      | CS, IS 1239                                   |                                                                                                                                                                                                             |
| 17                                                                                                                            | PETRO-CHEM INDUSTRIES               | VADODARA                                                                                                                                                                    | CS,AS,SS,IS 1239                              |                                                                                                                                                                                                             |
| 18                                                                                                                            | PARMAR TECHNO FORGE,                | PUNE                                                                                                                                                                        | CS                                            |                                                                                                                                                                                                             |
| 19                                                                                                                            | SAWAN ENGINEERS PVT LTD             | VADODARA                                                                                                                                                                    | CS,AS,SS,SW fittings                          |                                                                                                                                                                                                             |
| 20                                                                                                                            | UI PIPE FITTINGS PVT LTD.,          | MEDAK DIST.                                                                                                                                                                 | CS,AS,SS,IS 1239                              |                                                                                                                                                                                                             |
| 21                                                                                                                            | VAIBHAV FITTINGS INDIA PVT LTD      | GUJARAT                                                                                                                                                                     | only SW fittings                              |                                                                                                                                                                                                             |
| 22                                                                                                                            | ALLIED INTERNATIONAL SRL            | ITALY                                                                                                                                                                       | AS,CS, Formed Fittings - SA234, SA420, SA403  |                                                                                                                                                                                                             |
| 23                                                                                                                            | IBF SPA                             | ITALY                                                                                                                                                                       | Formed Fittings - SA234, SA420, SA403         |                                                                                                                                                                                                             |
| 24                                                                                                                            | IGAWARA INDL SERVICE & TRADING PTE  | SINGAPORE                                                                                                                                                                   | CS, AS, Formed Fittings - SA234, SA420, SA403 |                                                                                                                                                                                                             |
| 25                                                                                                                            | LONGSHAN PIPE SOULTIONS CO LTD      | CHINA                                                                                                                                                                       | Formed Fittings - SA234, SA420, SA403         |                                                                                                                                                                                                             |
| 26                                                                                                                            | MEGA SPA                            | ITALY                                                                                                                                                                       | CS, AS                                        |                                                                                                                                                                                                             |
| 27                                                                                                                            | PETROL RACCORD SPA                  | ITALY                                                                                                                                                                       | CS,AS, Formed Fittings - SA234, SA420, SA403  |                                                                                                                                                                                                             |
| 28                                                                                                                            | SHANGHAI CHANGQIANG INDUSTRIAL      | SHANGHAI                                                                                                                                                                    | CS, AS, Formed Fittings - SA234, SA420, SA403 |                                                                                                                                                                                                             |
| 29                                                                                                                            | SHENYANG DONGGUAN POWER             | CHINA                                                                                                                                                                       | CS                                            |                                                                                                                                                                                                             |
| 30                                                                                                                            | SUNGKWANG BEND CO LTD               | SOUTH KOREA                                                                                                                                                                 | CS,AS                                         |                                                                                                                                                                                                             |
| <b>E) DISHED ENDS</b>                                                                                                         |                                     |                                                                                                                                                                             |                                               | <b>For Sl. 1 to 3 :-</b><br><b>Refer Annexure - I :</b><br><b>QCP:17:01 dt:12.04.2011</b><br><b>for NTPC approval</b><br><b>For Sl. 4:-Refer Annexure VII - Ref:01/ CQA/2260-101-19052014 Dt 19/05/2014</b> |
| 1                                                                                                                             | SATHYA FABRICATORS Pvt. LIMITED.    | Hyderabad                                                                                                                                                                   | CS                                            |                                                                                                                                                                                                             |
| 2                                                                                                                             | METAL ENGINEERS.                    | Hyderabad                                                                                                                                                                   | CS                                            |                                                                                                                                                                                                             |
| 3                                                                                                                             | SOUTHERN HEAVY ENGINEERING P. LTD.  | Sriperumbudur                                                                                                                                                               | CS                                            |                                                                                                                                                                                                             |
| 4                                                                                                                             | DISH INDIA (P) LTD                  | Delhi                                                                                                                                                                       | CS                                            |                                                                                                                                                                                                             |
| <br>Prepared by<br>J Nanthini<br>Dy.Mgr/QA |                                     | <br>Reviewed by<br>D Sandra Priya<br>Dy.Mgr/QA                                           |                                               | <br>Approved by<br>K V Ramani<br>AGM/Engg&Quality                                                                      |



|                                                                                                       | Bharat Heavy Electricals Limited, Piping Centre, Chennai.<br><b>List of Raw material Manufacturer approved by NTPC for Piping and Tank Fabrication with Vendor material</b> |                                                                                                                                      | <b>QCP : 17</b><br><b>Rev : 01</b><br><b>Date : 12.04.11</b> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| SI                                                                                                                                                                                     | Vendor Name                                                                                                                                                                 | Location                                                                                                                             | Material                                                     |
| <b>A) PIPES (Seamless) : CS -Carbon steel ; SS-Stainless Steel</b>                                                                                                                     |                                                                                                                                                                             |                                                                                                                                      |                                                              |
| 1                                                                                                                                                                                      | BHEL / SSTP                                                                                                                                                                 | Trichy                                                                                                                               | CS                                                           |
| 2                                                                                                                                                                                      | ISMT LIMITED                                                                                                                                                                | Baramathi / Pune                                                                                                                     | CS                                                           |
| 3                                                                                                                                                                                      | JINDAL SAW                                                                                                                                                                  | Gujarat                                                                                                                              | CS                                                           |
| 4                                                                                                                                                                                      | MAHARASTRA SEAMLESS LTD                                                                                                                                                     | Maharashtra                                                                                                                          | CS                                                           |
| 5                                                                                                                                                                                      | REMI EDELSTAL TUBULARES LTD ( upto 10")                                                                                                                                     | Mumbai / Tarapur                                                                                                                     | SS                                                           |
| 6                                                                                                                                                                                      | RATNAMANI METALS & TUBES LTD (upto 10")                                                                                                                                     | Ahmedabad / Kutch                                                                                                                    | SS                                                           |
| 7                                                                                                                                                                                      | BENTELER STAHL/ROHR GMBH & CO.KG.                                                                                                                                           | Germany                                                                                                                              | CS                                                           |
| 8                                                                                                                                                                                      | DALMINE                                                                                                                                                                     | Italy                                                                                                                                | CS                                                           |
| 9                                                                                                                                                                                      | DMV STAINLESS                                                                                                                                                               | France, Italy, Germany                                                                                                               | SS                                                           |
| 10                                                                                                                                                                                     | HUTA BATORY SA                                                                                                                                                              | Poland                                                                                                                               | CS                                                           |
| 11                                                                                                                                                                                     | JFE,JAPAN (formerly Kawasaki Corpn.)                                                                                                                                        | Japan                                                                                                                                | CS,SS                                                        |
| 12                                                                                                                                                                                     | NIPPON STEEL                                                                                                                                                                | Japan                                                                                                                                | CS,SS                                                        |
| 13                                                                                                                                                                                     | NKK CORPORATION                                                                                                                                                             | Japan                                                                                                                                | CS                                                           |
| 14                                                                                                                                                                                     | PRODUCTOS TUBULARES S.A.U                                                                                                                                                   | Spain                                                                                                                                | CS                                                           |
| 15                                                                                                                                                                                     | ROMAN CORPORATION                                                                                                                                                           | Korea                                                                                                                                | SS                                                           |
| 16                                                                                                                                                                                     | SIDERCA S.A.I.C                                                                                                                                                             | Argentina                                                                                                                            | CS                                                           |
| 17                                                                                                                                                                                     | SUMITOMO CORPORATION                                                                                                                                                        | Japan                                                                                                                                | CS,SS                                                        |
| 18                                                                                                                                                                                     | TENARIS DALMINE S.P.A                                                                                                                                                       | Italy                                                                                                                                | CS                                                           |
| 19                                                                                                                                                                                     | TUBACEX                                                                                                                                                                     | Spain                                                                                                                                | SS                                                           |
| 20                                                                                                                                                                                     | TUBOS REUNIDOS S.A.                                                                                                                                                         | Spain                                                                                                                                | CS                                                           |
| 21                                                                                                                                                                                     | VALLOUREC & MANNESMANN TUBES                                                                                                                                                | France,Germany                                                                                                                       | CS                                                           |
| 22                                                                                                                                                                                     | WYMAN-GORDON FORGINGS INC.                                                                                                                                                  | USA                                                                                                                                  | CS                                                           |
| <b>B) PIPES (Welded ):IS 1239,IS 3589,SA 672,API.</b>                                                                                                                                  |                                                                                                                                                                             |                                                                                                                                      |                                                              |
| 1                                                                                                                                                                                      | JINDAL PIPES (ERW) UPTO 14 INCH                                                                                                                                             | Ghaziabad                                                                                                                            | IS 1239,IS 3589,API                                          |
| 2                                                                                                                                                                                      | LALIT PIPES AND PIPES LIMITED (LS welded)                                                                                                                                   | Mumbai                                                                                                                               | IS 3589,SA 672                                               |
| 3                                                                                                                                                                                      | MAHARASTRA SEAMLESS LTD( ERW UPTO 20 ")                                                                                                                                     | Raigad,Maharashtra                                                                                                                   | IS 3589                                                      |
| 4                                                                                                                                                                                      | MAN INDUSTRIES (INDIA) LTD. ( LS & Spiral welded)                                                                                                                           | Pithampur/Gujarat                                                                                                                    | IS 3589,SA 672                                               |
| 5                                                                                                                                                                                      | PSL LIMITED (Spiral welded)                                                                                                                                                 | Vizag/Chennai/Gujarat                                                                                                                | IS 3589                                                      |
| 6                                                                                                                                                                                      | RATNAMANI METALS & TUBES LTD ( LS & Spiral welded)                                                                                                                          | Kutch                                                                                                                                | IS 3589, SA672,API                                           |
| 7                                                                                                                                                                                      | STEEL AUTHORITY OF INDIA LTD                                                                                                                                                | India                                                                                                                                | IS 3589,API                                                  |
| 8                                                                                                                                                                                      | SURYA ROSHNI LTD (ERW) UP TO 16 INCH                                                                                                                                        | Bahadurgarh,Haryana                                                                                                                  | IS 1239,IS 3589,API                                          |
| <b>NTPC</b>                                                                                                                                                                            |                                                                                                                                                                             | <b>BHEL</b>                                                                                                                          |                                                              |
| <br><br>12/04/11 |                                                                                                                                                                             | <br>Prepared by<br>G.Panneer Selvam,<br>DGM/QA   |                                                              |
|                                                                                                                                                                                        |                                                                                                                                                                             | <br>Approved by<br>P.Elangovan<br>AGM / Quality |                                                              |





Bharat Heavy Electricals Limited, Piping Centre, Chennai.  
**List of Raw material Manufacturer approved by NTPC for Piping and Tank Fabrication with Vendor material**

QCP : 17  
Rev : 01  
Date : 12.04.11

| SI | Vendor Name                                  | Location         | Material                |
|----|----------------------------------------------|------------------|-------------------------|
| 9  | TATA STEEL LIMITED                           | Jamshedpur       | IS 1239                 |
| 10 | WELSPUNE GUJARAT STAHL LS & Spiral welded)   | Gujarat / Mandya | IS 3589                 |
| 11 | SAMSHI PIPES INDUSTRIES LTD ( formerly GPT ) | Vadodhara        | IS 3589 (Spiral welded) |
| 12 | SURYA GLOBAL STEEL TUBE LTD ( Spiral welded) | Gujarat          | IS 3589                 |
| C) | PLATES                                       |                  |                         |
| 1  | ESSAR STEEL                                  | Hazira           | CS                      |
| 2  | JINDAL STEEL                                 | Raigarh / Hissar | CS, SS                  |
| 3  | LLOYDS STEEL                                 | Wardha           | CS                      |
| 4  | STEEL AUTHORITY OF INDIA LTD                 | India            | CS, SS                  |
| 5  | DILLING-GTS VENTES                           | France           | CS, SS                  |
| 6  | INDUSTEEL FRANCE                             | France           | CS, SS                  |
| 7  | METAL ONE CORPORATION                        | Japan            | CS, SS                  |
| 8  | INDUSTEEL BELGIUM                            | Belgium          | CS, SS                  |
| 9  | THYSSEN KRUPP STAHLUNION GMBH                | Germany          | CS, SS                  |
| 10 | VOEST ALPINE GROBBLECH GmbH &CO KG           | Austria          | CS                      |
| D) | FITTINGS                                     |                  |                         |
| 1  | DEE DEVELOPMENT ENGINEERS LTD                | Faridabad        | CS,SS                   |
| 2  | EBY FASTENERS                                | Mumbai           | CS,SS                   |
| 3  | FLASH FORGE PVT LTD                          | Vizag            | CS,SS                   |
| 4  | S&G ENGINEERS (P) LTD                        | Faridabad        | CS,SS                   |
| 5  | SIVANANDHA PIPE FITTINGS LTD                 | Tamilnadu        | CS,SS                   |
| 6  | TUBE PRODUCTS INCORPORATE                    | Baroda           | CS,SS                   |
| 7  | UI PIPE FITTINGS PVT LTD                     | Hyderabad        | CS,SS, IS1239           |
| 8  | UNITECH MACHINES LTD                         | Saharanpur       | CS,SS                   |
| 9  | RAY ENGG ENTERPRISES                         | Calcutta         | IS1239                  |
| 10 | INDL. PRODUCT MARKETING CORPORATION          | Chennai          | IS 1239                 |
| 11 | P.K.TUBES & FITTINGS PVT. LTD,               | Gurgoan          | CS                      |
| 12 | SKY FORGE PVT. LTD.                          | Ballabgarh       | IS 1239                 |
| E) | DISHED ENDS                                  |                  |                         |
| 1  | SATHYA FABRICATORS Pvt. LIMITED.             | Hyderabad        | CS                      |
| 2  | METAL ENGINEERS.                             | Hyderabad        | CS                      |
| 3  | SOUTHERN HEAVY ENGINEERING P. LTD.           | Sriperumbudur    | CS                      |

NTPC

  
12/04/11

Page 2 of 2

BHEL

  
Prepared by  
G.Panneer Selvam,  
DGM/QA  
Approved by  
P.Elangovan  
AGM / Quality



**ANNEXURE - II**

Ref : 01/CQA/gs Dt 24.02.2016



**एन टी पी सी लिमिटेड**  
भारत सरकार का उद्यम  
**NTPC Limited**  
A Govt. of India Enterprise  
(Formerly National Thermal Power Corporation Ltd.)

केन्द्रीय कार्यालय/Corporate Centre, Noida

Ref: 01/CQA/gs

DATE: 24.02.2016

Mr.A.P.Madhavan Kutty  
AGM-Quality,  
BHEL-Piping Center,  
Chennai.

**Sub:** Acceptance of Raw Materials suppliers for supply of Seamless Carbon Steel Pipes for SG Packages(through PVM vendors) of Vindhyachal-V(1X500),Singareni(1X600),Mouda-II(2X660),Nabinagar(3X660),Gadarwara(2X800), Unchahar(2X660), Darlipalli(2X800), Barh stage1(3x660), Telangana(2X800) Projects.

Dear Sir,

This has reference to your subject proposal requesting to approve various raw materials suppliers of Carbon Steel Pipes for the projects mentioned above.The proposal has been reviewed and accepted as under for the above mentioned projects:

|    | Source                               | Origin/Country | Material Spec      |
|----|--------------------------------------|----------------|--------------------|
| 1  | ARCELOR MITTAL                       | Romania        | CS                 |
| 2  | HENGYANG VALIN STEEL TUBE CO.        | China          | CS                 |
| 3  | JIANGSU CHENGDE STEEL TUBE SHARE     | China          | CS                 |
| 4  | RINGMIL                              | Italy          | Forged CS Pipes    |
| 6  | VALCONVY TRUB CHOMUTOV               | CZECH REP.     | CS                 |
| 7  | BAOSHAN IRON & STEEL CO. LTD         | China          | CS Upto Dia 88.9mm |
| 8  | TENNARIS GLOBAL (SILCO TUBES)        | Romania        | CS Upto Dia 159mm  |
| 9  | IBF SPA                              | Italy          | CS                 |
| 10 | YANGZHOU CHENGDE STEEL PIPE CO. LTD. | China          | CS                 |

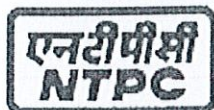
The above acceptance is subject to materials meeting NTPC Technical Specifications.

The above approval is in addition to the existing approved list vide QCP:17/01 dated 12/04/2011.

With Regards,

CTF Copy to: GM (QA&amp;I)- for kind information.

I/C RIO-Trichy



Ref: 01/CQA/gs

DATE: 24.02.2016

Mr.A.P.Madhavan Kutty  
AGM-Quality,  
BHEL-Piping Center,  
Chennai.

**Sub:** Acceptance of Raw Materials suppliers for supply of Carbon Steel Plates for SG Packages(through PVM vendors) of Vindhyachal-V(1X500),Singareni(1X600),N.Karanpura(3X660),Nabinagar(3X660), Gadarwara(2X800), Unchahar(2X660), Darlipalli(2X800), Barh stage1(3x660), Telangana(2X800) Projects.

Dear Sir,

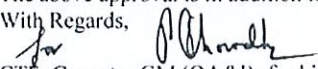
This has reference to your subject proposal requesting to approve various raw materials suppliers of Carbon Steel Plates for the on-going projects.The proposal has been reviewed and accepted as under for the above mentioned projects:

| No | Source / address                                                                                              | Origin/Country    | Material Spec                                                                                      |
|----|---------------------------------------------------------------------------------------------------------------|-------------------|----------------------------------------------------------------------------------------------------|
| 1  | REINER BRACH GMBH & CO.KG<br>AUF DEN DELBEN 35, 28237<br>BREMEN, GERMANY                                      | Germany           | CS- SA 515, BS EN 10025,<br>A 36, IS 2062 & OTHER STRUCTURAL STEEL GRADES<br>AS- UP TO GRADE 22    |
| 2  | ACRONI D.O.O<br>CESTA, BORISA, KIDRICA 44, SI-<br>4270 JESENICE, SLOVENIA                                     | Slovenia          | CS - SA 515, BS EN 10025, A 36,<br>IS 2062 & OTHER STRUCTURAL STEEL GRADES<br>AS- UP TO GRADE 91   |
| 3  | ILSENBURGER GROBBLECH SALZGITTER<br>MANNESMANN)<br>VECKENSTEDTER WEG 10, D-<br>38871, ILSENBURG, GERMANY      | Germany           | CS- SA 515, BS EN 10025,<br>IS 2062 & OTHER STRUCTURAL STEEL GRADES AS<br>UP TO GRADE<br>91        |
| 4  | NIPPON STEEL CORPORATION<br>NAGOYA WORKS, 5-3<br>TOKAIMACHI, TOKAI CITY, AICHI<br>PREFECTURE, 476-8686, JAPAN | Japan             | CS- SA 515, BS EN 10025, IS 2062 & OTHER<br>STRUCTURAL STEEL GRADES<br>AS- UP TO GRADE 22          |
| 5  | POSCO<br>POSCO CENTER, 892 DAECHI 4-<br>DONG, GANGNAM-GU, SEOUL, 135-<br>777, REPUBLIC OF KOREA               | Republic of Korea | CS- SA 515, BS EN 10025, A 36, IS 2062 &<br>OTHER STRUCTURAL STEEL GRADES<br><br>AS UP TO GRADE 22 |
| 6  | COLUMBUS STAINLESS STEEL (ACRINOX)<br>MIDDLEBURG, 1050 P.B.NO, 133,<br>SOUTH AFRICA                           | South Africa      | SS( GRADE 304, 309, 310, 316)                                                                      |

The above acceptance is subject to materials meeting NTPC Technical Specifications.

The above approval is in addition to the existing approved list vide QCP:17/01 dated 12/04/2011.

With Regards,

  
CTF Copy to: GM (QA&I)- for kind information.  
I/C RIO-Trichy



# ANNEXURE - IV Ref : NOA OF PANKI 1X660 MW

सु. माला सं-१ - ११.१.२००८ चक्र - १  
सु. माला सं-२ - ११.१.२००८ चक्र - २  
सु. माला सं-३ - ११.१.२००८ चक्र - ३

सु. माला सं-४ - ११.१.२००८ चक्र - ४

14A1A-SPC-G-0001

| Project       | PANKI                                          | 1x660          | MW     | LIST OF ITEMS REQUIRING QUALITY PLAN AND SUB-SUPPLIER APPROVAL |                      |                                   | DOC. NO. : | 14A1A-SPC-G-0001                    |                                         |                                                     |  |
|---------------|------------------------------------------------|----------------|--------|----------------------------------------------------------------|----------------------|-----------------------------------|------------|-------------------------------------|-----------------------------------------|-----------------------------------------------------|--|
| Package:      | EPC                                            |                |        |                                                                |                      |                                   | REV. NO. : |                                     |                                         |                                                     |  |
| Supplier:     | BHEL                                           |                |        |                                                                |                      |                                   | DATE:      | 14.08.2018                          |                                         |                                                     |  |
| Contract No.: | 14A1A-SPC-G-0001                               |                |        | STEAM GENERATOR/RAW SUB-SYS MATERIALS                          |                      |                                   |            |                                     |                                         |                                                     |  |
| S.No.         | ITEM                                           | Q.P/Insp. Cst. | Qp No. | Qp Sub-Schedule                                                | Qp approval schedule | Proposed sub-supplier             | Place      | Suppliers approval status/ category | supplier Details submission in schedule | Remarks                                             |  |
| 2             | SEAMLESS TUBES(RIFLED)                         | \$             |        |                                                                |                      | HMT                               | GUJARAT    | A                                   |                                         | HOT FINISHED CS GRADE (UPTO 76.2 MM OD & 12 MM THK) |  |
|               |                                                | \$             |        |                                                                |                      | CHANGZHOU CHANGBAO PRECISION      | CHINA      | A                                   |                                         | T-11,12                                             |  |
|               |                                                | \$             |        |                                                                |                      | SALZGITTER MANESS/AMANN PRECISION | FRANCE     | A                                   |                                         | CS                                                  |  |
|               |                                                | \$             |        |                                                                |                      | CHANGZHOU CHANGBAO PRECISION      | CHINA      | A                                   |                                         | T-11,12                                             |  |
|               |                                                | \$             |        |                                                                |                      | BAOSHAN STEEL                     | CHINA      | DR                                  |                                         |                                                     |  |
|               |                                                | \$             |        |                                                                |                      | TENNARIS GLOBAL(DALMINE)          | ITALY      | DR                                  |                                         |                                                     |  |
|               |                                                | \$             |        |                                                                |                      | SUMITOMO                          | JAPAN      | DR                                  |                                         |                                                     |  |
|               |                                                | \$             |        |                                                                |                      | TUBOS REUNIDOS                    | SPAIN      | A                                   |                                         |                                                     |  |
|               |                                                | \$             |        |                                                                |                      | KOBE                              | JAPAN      | A                                   |                                         | SS 304,SS347H                                       |  |
|               |                                                | \$             |        |                                                                |                      | POSCO SPL STEEL CO                | KOREA      | A                                   |                                         | SS 304,347H,SUPER 304                               |  |
| 3             | SEAMLESS TUBES(SS)UPTO DIA-76.1MM              | \$             |        |                                                                |                      | TUBACEX                           | SPAIN      | A                                   |                                         |                                                     |  |
|               |                                                | \$             |        |                                                                |                      | SMST                              | ITALY      | A                                   |                                         | SS 304,347H, SUPER 304                              |  |
|               |                                                | \$             |        |                                                                |                      | SUMITOMO METAL IND LTD.           | JAPAN      | A                                   |                                         | SS 304,347H, SUPER 304                              |  |
|               |                                                | \$             |        |                                                                |                      | HUADI STEEL GROUP                 | CHINA      | A                                   |                                         | SS 304, 364H,347H( WITH TP) SUB TO CONDITIONS       |  |
| 4             | SEAMLESS TUBES(SS) UPTO OD 159.0MM & WT-12.5MM | \$             |        |                                                                |                      | ZHEJIANG JIUJI HI TECH            | CHINA      | A                                   |                                         | SS 304, 364H,347H( WITH TP) SUB TO CONDITIONS       |  |
|               |                                                | \$             |        |                                                                |                      | PRODUCTUS TUBULARES               | SPAIN      | DR                                  |                                         |                                                     |  |
| 4             | SEAMLESS PIPES                                 | \$             |        |                                                                |                      | TUBACEX                           | SPAIN      | A                                   |                                         | SS PIPES                                            |  |
|               |                                                | \$             |        |                                                                |                      | SUMITOMO METALS                   | JAPAN      | A                                   |                                         | P-92,P-91,P-22,P-11,P-12,CS                         |  |
|               |                                                | \$             |        |                                                                |                      | VALLOREC TUBES                    | FRANCE     | A                                   |                                         | P-92,P-91,P-22,P-11,P-12,CS                         |  |

J. N. S. L.

नंदिनी. जे / NANTHINI. J

उप प्रबंधक, गुणवत्ता / Deputy Manager, Quality  
वीरचंद्रलाल, चार्जिंग सेक्टर / BHEL, Piping Centre  
टी. नगर, चेन्नै - 17 / T. Nagar, Chennai - 17

25/02/18

2/6

25/02/18



J. N. S. L.

नन्दिनी. जे / NANTHINI .J  
उप प्रबंधक, गुणवत्ता / Deputy Manager, Quality  
बीएचआईएल, माइसिंग सेक्टर / BHEL, Pising Center  
टी. नगर, चेन्नै - 17 / T. Nagar, Chennai - 17

3/6

8/17/74  
~~Tom Post~~  
James Post



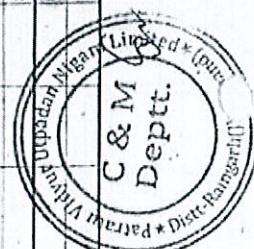




## ANNEXURE - V

Ref : NOA OF PATRATU 3X660 MW

| Project:      | PATRATU                    | 3x800 | MW | LIST OF ITEMS REQUIRING QUALITY PLAN AND SUB-SUPPLIER APPROVAL |         | DOC. NO. : CS-9585-001-2                                                               |
|---------------|----------------------------|-------|----|----------------------------------------------------------------|---------|----------------------------------------------------------------------------------------|
| Package:      | EPC                        |       |    |                                                                |         | REV. NO. :                                                                             |
| Supplier:     | BHEL                       |       |    |                                                                |         | DATE: 06.04.2017                                                                       |
| Contract No.: | CS-9585-001-2              |       |    |                                                                |         |                                                                                        |
| ITEM S.No.    |                            |       |    |                                                                |         |                                                                                        |
|               |                            |       |    | Proposed sub-supplier                                          | Place   | Remarks                                                                                |
|               |                            |       |    | REINER BRACH GMBH & CO.                                        | GERMANY | CS- SA 299 SA515 BS EN 10025 A36 IS 2002 OTHER STRUCTURAL STEEL GRADES; AS UPTO GR-22. |
|               |                            |       |    | JFE                                                            | JAPAN   |                                                                                        |
|               |                            |       |    | CLABECO                                                        | BELGIUM |                                                                                        |
|               |                            |       |    | JSPL                                                           | INDIA   |                                                                                        |
|               |                            |       |    | DUFERCO                                                        | GERMANY |                                                                                        |
|               |                            |       |    | GULDE                                                          | GERMANY | MEMBRANE FINS UPTO GR-22                                                               |
|               |                            |       |    | ARCELLOR MITTAL                                                | ROMANIA |                                                                                        |
|               |                            |       |    | METAL ONE                                                      | JAPAN   |                                                                                        |
|               |                            |       |    | LLYODS STEEL INDUS LTD (UTTAM VALUE STEEL)                     | INDIA   | MEMBRANE FINS UPTO GR-12 UPTO GR-22; SUBJECT TO CONDITION                              |
| 7             | PLATES & ROLLED SECTION(S) |       |    | ARCELLOR MITTAL GALATI                                         | ROMANIA | CS PLATES UPTO 80 MM                                                                   |
|               |                            |       |    | JSW STEEL LTD.                                                 | INDIA   | STRUCTURAL STEEL                                                                       |
|               |                            |       |    | RINL                                                           | INDIA   | STRUCTURAL STEEL                                                                       |
|               |                            |       |    | ESSAR STEEL LTD.                                               | INDIA   | STRUCTURAL STEEL                                                                       |
|               |                            |       |    | TISCO                                                          | INDIA   | STRUCTURAL STEEL                                                                       |
|               |                            |       |    | LLYODS STEEL INDUS LTD (UTTAM VALUE STEEL)                     | INDIA   | STRUCTURAL STEEL                                                                       |
|               |                            |       |    | ISPAT INDUSTRIES LTD.                                          | INDIA   | STRUCTURAL STEEL                                                                       |
|               |                            |       |    | JSPL                                                           | INDIA   | STRUCTURAL STEEL                                                                       |
|               |                            |       |    | SAIL                                                           | INDIA   | STRUCTURAL STEEL                                                                       |
| 8             | PLATES(SS)                 |       |    | OUTOKUMPU                                                      | SWEDEN  | SS PLATES UPTO 20 MM THK                                                               |
|               |                            |       |    | INDUS STEEL                                                    | BELGIUM | GR-304,309,310,316                                                                     |



5/6

Salvage  
06.04.2017

J. N. S. J.  
नंदिनी जे / NANTHINI J  
उप प्रबंधक, गुणवत्ता / Deputy Manager, Quality  
बीएसईएल, पाईपिंग सेंटर / BHEL, Piping Centre  
टी. नगर, चेन्नै - 17 / T. Nagar, Chennai - 17



| Project:      |                                                                                                                                                                                  | PATRAYU        | 3x800  | MW              | LIST OF ITEMS REQUIRING QUALITY PLAN AND SUB-SUPPLIER APPROVAL |                                    | DOC. NO. : CS-9586-001-2 |                                     |                                      |                    |  |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------|-----------------|----------------------------------------------------------------|------------------------------------|--------------------------|-------------------------------------|--------------------------------------|--------------------|--|
| Package:      |                                                                                                                                                                                  | EPC            |        |                 |                                                                |                                    | REV. NO. : 06.04.2017    |                                     |                                      |                    |  |
| Supplier:     |                                                                                                                                                                                  | BHEL           |        |                 |                                                                |                                    |                          |                                     |                                      |                    |  |
| Contract No.: |                                                                                                                                                                                  | CS-9585-001-2  |        |                 |                                                                |                                    |                          |                                     |                                      |                    |  |
| S.No.         | ITEM                                                                                                                                                                             | QPI/Insp. Cat. | QP No. | QP Sub-Schedule | QP approval schedule                                           | Proposed sub-supplier              | Place                    | Suppliers approval status/ category | supplier Details submission schedule | Remarks            |  |
|               |                                                                                                                                                                                  | \$             |        |                 |                                                                | JSL STAINLESS                      | JAIPUR                   | A                                   |                                      | LINER SS 304       |  |
|               |                                                                                                                                                                                  | \$             |        |                 |                                                                | INDUSTEEL LOIRE                    | FRANCE                   | A                                   |                                      | GR-304,309,310,316 |  |
|               |                                                                                                                                                                                  | \$             |        |                 |                                                                | SAIL                               | BHILAI/SALEM             | A                                   |                                      | GR-304,309,310,317 |  |
|               |                                                                                                                                                                                  | \$             |        |                 |                                                                | COLUMBUS STAINLESS STEEL (ACRINOX) | SOUTH AFRICA             | A                                   |                                      | GR-304,309,310,318 |  |
|               |                                                                                                                                                                                  | \$             |        |                 |                                                                | NIPPON STEEL CORP.                 | JAPAN                    | DR                                  |                                      |                    |  |
|               |                                                                                                                                                                                  | \$             |        |                 |                                                                | THYSEEN KRUPP                      | GERMANY                  | DR                                  |                                      |                    |  |
|               |                                                                                                                                                                                  | \$             |        |                 |                                                                | SUMITOMO                           | JAPAN                    | DR                                  |                                      |                    |  |
|               |                                                                                                                                                                                  | \$             |        |                 |                                                                | ACRONI SLOVENIA                    | JAPAN                    | DR                                  |                                      |                    |  |
|               |                                                                                                                                                                                  | \$             |        |                 |                                                                | DKC                                | KOREA                    | DR                                  |                                      |                    |  |
|               | ALUMINIUM CLADDING                                                                                                                                                               |                |        |                 |                                                                | MAIN CONTRACTOR'S APPROVED SOURCES |                          |                                     |                                      |                    |  |
| NOTE 1:       | VENDORS UNDER A(ACCEPTED CATEGORY) ARE APPROVED AND ACCEPTED BY NTPC IN PAST WITH OR WITHOUT CONDITIONS. SIMILAR CONDITIONS AS THE CASE MAY BE APPLICABLE FOR THIS PROJECT ALSO. |                |        |                 |                                                                |                                    |                          |                                     |                                      |                    |  |
| NOTE 2:       | VENDORS UNDER DR (DETAILS REQUIRED) CATEGORY SHALL BE REQUIRED TO SUBMIT THE DETAILS IN NTPC QUESTIONNAIRE.                                                                      |                |        |                 |                                                                |                                    |                          |                                     |                                      |                    |  |
| NOTE 3:       | PRE DESPATCH INSPECTION FOR ALLOYSS GRADES NEEDS TO BE TIED UP BY MAIN CONTRACTOR OR THIRD PARTY INSPECTION AGENCY AS REQUIRED.                                                  |                |        |                 |                                                                |                                    |                          |                                     |                                      |                    |  |
| NOTE 4:       | (S) REVIEW OF MILL TC FOR RAW MATERIAL TO BE DONE BY NTPC AND SHALL BE INCLUDED IN THE QP OF CORRESPONDING EQUIPMENT.                                                            |                |        |                 |                                                                |                                    |                          |                                     |                                      |                    |  |

J.N.D.E.

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टी. नगर, चेन्नई- 17 / T. Nagar, Chennai - 17

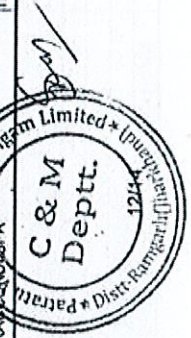
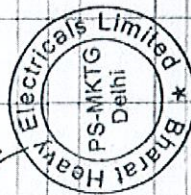




## ANNEXURE - VI

Ref: NOA OF PATRATU 3X660 MW

| Project:      | PATRATU 3x800 MW                             | LIST OF ITEMS REQUIRING QUALITY PLAN AND SUB-SUPPLIER APPROVAL | DOC. NO. : CS-9585-001-2                                 |
|---------------|----------------------------------------------|----------------------------------------------------------------|----------------------------------------------------------|
| Package:      | Steam Generator Island Package               |                                                                | REV. NO. : 0                                             |
| Supplier:     | BHEL                                         |                                                                | DATE: 04.04.2017                                         |
| Contract No.: | CS-9585-001-2                                | BHEL TRICHY                                                    |                                                          |
| ITEM          | QPinap. Cat.                                 | QP Sub-Schedule                                                | QP No.                                                   |
| S.No.         | ITEM                                         | Proposed sub-supplier                                          | Place                                                    |
| 44            | CERAMIC LINED COAL PIPES & BENDS             | BHEL EDN                                                       | BANGALORE                                                |
| 45            | COAL PIPES & BENDS(W/O CERAMIC LINES)        | BHEL                                                           | JAGDISHPUR                                               |
| 46            | COAL BUNKER                                  | MAIN CONTRACTOR'S APPROVED SOURCES                             |                                                          |
| 47            | SOOT BLOWER PRESSURE REDUCING VALVES & BLOCK | NTPC APPROVED VENDORS                                          | VENDORS TO BE PROPOSED LATER DURING PROJECT EXECUTION    |
| 48            | 3/102 GRADE FITTINGS (NOTE 6)                | REFER C&I VENDOR LIST                                          |                                                          |
|               |                                              |                                                                |                                                          |
|               |                                              | PETROL RACCORD SPA                                             | ITALY                                                    |
|               |                                              | BOKOYOUNG METAL CO                                             | LOREA                                                    |
|               |                                              | TF TECH CO. LTD.                                               | KOREA                                                    |
|               |                                              | FLASH FORGE                                                    | VZAG                                                     |
|               |                                              | BGH EDELSTAHL SIEGEN GMBH                                      | GERMANY                                                  |
|               |                                              | ERNE FITTINGS GMBH                                             | AUSTRIA                                                  |
|               |                                              | GAM RACCORD SPA                                                | ITALY                                                    |
|               |                                              |                                                                | P-91, P-92 FORMED/FORGED                                 |
|               |                                              |                                                                | P-91, FORGED                                             |
|               |                                              |                                                                | P-91 FORGED                                              |
|               |                                              |                                                                | 91 WITH SIZE/TYPE CONDITIONS AS PER NTPC APPROVAL LETTER |
|               |                                              |                                                                | P-91 FORGED                                              |
|               |                                              |                                                                | P-91 FORGED                                              |
|               |                                              |                                                                | P-91 FORMED                                              |

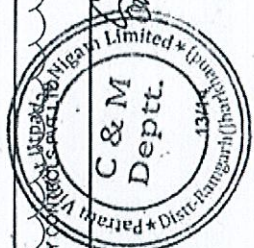
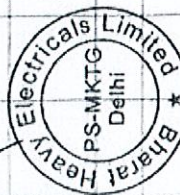


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टी. नगर, चेन्नै - 17 / T. Nagar, Chennai - 17



|               |                                                |        |                                                                |                      |                                                                   |           |                                     |                             |                                                                   |  |
|---------------|------------------------------------------------|--------|----------------------------------------------------------------|----------------------|-------------------------------------------------------------------|-----------|-------------------------------------|-----------------------------|-------------------------------------------------------------------|--|
| Project:      | PATRATU 3x800 MW                               |        | LIST OF ITEMS REQUIRING QUALITY PLAN AND SUB-SUPPLIER APPROVAL |                      | DOC. NO.: CS-9585-001-2                                           |           |                                     |                             |                                                                   |  |
| Package:      | Steam Generator Island Package                 |        | REV. NO.:                                                      |                      | 0                                                                 |           |                                     |                             |                                                                   |  |
| Supplier:     | BHEL                                           |        | DATE:                                                          |                      | 04.04.2017                                                        |           |                                     |                             |                                                                   |  |
| Contract No.: | CS-9585-001-2                                  |        | SUB-SYST                                                       |                      | STEAM GENERATOR                                                   |           |                                     |                             |                                                                   |  |
| ITEM          | Qp/Insp. Cat.                                  | Qp No. | Qp Sub-Schedule                                                | Qp approval schedule | Proposed sub-supplier                                             | Place     | Suppliers approval status/ category | supplier Details submission | Remarks                                                           |  |
|               |                                                |        |                                                                |                      | TECHNO FORGE SPA                                                  | ITALY     | A                                   |                             | P-91, P-92 FORMED                                                 |  |
|               |                                                |        |                                                                |                      | MEGA SPA                                                          | ITALY     | A                                   |                             | P-91 FORGED/WELDED                                                |  |
|               |                                                |        |                                                                |                      | BASSILLUCCI SPA                                                   | ITALY     | A                                   |                             | P-91 FORGED/WELDED                                                |  |
|               |                                                |        |                                                                |                      | IBF SPA                                                           | ITALY     | A                                   |                             | P-91, P-92 FORMED/FORGED                                          |  |
|               |                                                |        |                                                                |                      | ALLIED INT. (TACTUBI RACCORDI SPA, VIA ROMA 150, 28027 PODENZANO) | ITALY     | A                                   |                             | P-91, P-92 FORMED                                                 |  |
|               |                                                |        |                                                                |                      | BRUCK STRASSE 16 ENSHEIM                                          | GERMANY   | A                                   |                             | P-91 FORGED/WELDED                                                |  |
|               |                                                |        |                                                                |                      | SUNGKANG BEND CO. LTD.                                            | KOREA     | A                                   |                             | P-91/F-91 FORMED/FORGED/WELDED                                    |  |
|               |                                                |        |                                                                |                      | TK CORP. FORGITAL                                                 | KOREA     | A                                   |                             | P-91 FORMED                                                       |  |
|               |                                                |        |                                                                |                      | TIANJIN JINDING PIPING CO. LTD.                                   | CHINA     | A                                   |                             | 91 FORMED (ELBOW, TEE, REDUCER)                                   |  |
|               |                                                |        |                                                                |                      | RINGMILL SPA                                                      | ITALY     | A                                   |                             | FOR SEAMLESS AS (UPTO 91 GRADE) FORGED PIPE                       |  |
|               |                                                |        |                                                                |                      | FORGITAL                                                          | ITALY     | DR                                  |                             |                                                                   |  |
|               |                                                |        |                                                                |                      | DEE DEVELOPMENT                                                   | PALWAL    | A                                   |                             | 91 WITH SIZE/TYPE CONDITIONS AS PER NTPC APPROVAL LETTER          |  |
|               |                                                |        |                                                                |                      | CHW FORGE LTD.                                                    | GHAZIABAD | A                                   |                             | 91 WITH SIZE/TYPE CONDITIONS AS PER NTPC APPROVAL LETTER          |  |
|               |                                                |        |                                                                |                      | FORGE MONCHIERI SPA                                               | ITALY     | A                                   |                             | 91 FORGING- WITH SIZE/TYPE CONDITIONS AS PER NTPC APPROVAL LETTER |  |
|               |                                                |        |                                                                |                      | VIMAR SPA                                                         | ITALY     | DR                                  |                             | 91 FORGINGS                                                       |  |
|               |                                                |        |                                                                |                      | TIANJINDING PIPING CO. LTD.                                       | CHINA     | DR                                  |                             |                                                                   |  |
|               |                                                |        |                                                                |                      | WAFER-BACH                                                        | GERMANY   | DR                                  |                             |                                                                   |  |
| 49            | FITTINGS(CS,SS & AS UPTO GR 22)                |        |                                                                |                      | MAIN CONTRACTOR'S APPROVED SOURCES                                |           |                                     |                             |                                                                   |  |
| 50            | KNIFE EDGE GATE VALVES(Inlet and Burner Inlet) |        |                                                                |                      | CHENNAI                                                           |           |                                     | Upto size 26"               |                                                                   |  |



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टी. नगर, चेन्नै - 17 / T. Nagar, Chennai - 17



## ANNEXURE - VII

Ref:01/CQA/2260-101-19052014 Dt 19/05/2014



**एन टी पी सी लिमिटेड**  
भारत सरकार का उद्यम  
**NTPC Limited**  
A Govt. of India Enterprise  
(Formerly National Thermal Power Corporation Ltd.)

केन्द्रीय कार्यालय/Corporate Centre, Noida

Ref: 01/CQA/2260-101-19052014

Date: 19/05/2014

A.P.Madhavan Kutty  
AGM/Quality,  
BHEL-Piping Centre, Chennai

Sub: Acceptance of M/s Dish India (P) Ltd as a sub-sub vendor of M/s BHEL  
For Vindhyachal-V (1X500) project

Dear Sir,

This has reference to the subject proposal forwarded to NTPC vide email dated 08/05/2014

The proposal has been reviewed and accepted as under:

| Sl. No. | Name & Address of vendor                                                                              | Scope of supply                                                                                                                                                                               | Applicable project/package             |
|---------|-------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| 01      | M/s Dish India (P) Ltd.<br>Work address: KH.NO 40/21 &<br>39/25 ane, Mundka, Nangloi,<br>Delhi-110041 | Dished end cover (For<br>CBD pr.10kgs/sqcm .&<br>temp 179 deg.-IBR item<br>& IBD pr.3.5kgs/sqcm,<br>Temp 148deg. NON<br>IBR item) Sizes:<br>OD:2500x16mm and<br>Materials SA 515/516<br>Gr.70 | Vindhyachal-V (1X500MW)/<br>SG Package |

The above acceptance is subject to the conditions as under:

- 1) Manufacturing Drawing for dish ends shall be provided by BHEL-Chennai.
- 2) All Manufacturing and supply shall be as per NTPC Technical specification and approved QP.
- 3) BHEL-Chennai to ensure the IBR statutory requirements at M/s Dish India(P) Ltd, Delhi.

This is for your information and necessary action please.

Yours Sincerely,

Digitally signed by Yogesh  
Sawedkar  
DN: cn=Yogesh  
Sawedkar, c=IN, o=NTPC  
Ltd., ou=Vindhyachal TF,  
email=yogeshsawedkar@  
ntpc.co.in  
Date: 2014.05.19  
12:35:20 +0530

(For S K Jain)  
CTF Vindhyachal

Copy to: ED (QA &I)  
: GM (Insp, New Delhi)



Engineering Division  
ISO 9001:2008 Certified

अभियांत्रिकी कार्यालय परिसर, प्लॉट नं.- ए 8ए, मैकट-24, पोस्ट बॉक्स नं.-  
13, नोएडा (उ प) पिन-201 307

टेलिफोन नं.- 0120-2410333, 2410116 फैक्स-0120-2410136, 2410137

पंजीकृत कार्यालय: एनटीपीसी भवन, स्कोप कामप्लेक्स, 7 इंस्टीट्यूशनल एरिया, लोधी रोड, नई दिल्ली-110 003

टेलिफोन नं.- 011-24361018 फैक्स-011-24361018, वेबसाइट:

www.ntpc.co.in

ENGINEERING OFFICE COMPLEX, Plot No: A-8A, Sector-24, Post Box No: 13, Noida (UP), Pin  
Telephone No: 0120-2410333, 2410116 Fax-0120-2410136,  
2410137

Registered Office: NTPC Bhawan, Scope Complex, 7 Institutional Area, Lodhi Road, New Delhi-  
Telephone No: 011-24360100 Fax-011-24361018, Website: www.ntpc.co.in



