

**Tender Ref No : GEM/2022/B/2109340 dt 21/04/2022 – Pre-Bid Query Replies**

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| 1       | 2.4.2     | 5 of 78 | 2.4.2.2) All the barriers, isolators shall be suitable for classified area and shall have electrical classification EEx (ia) Gr. IIC, T3.  | Bidder Proposes SIL2 Barrier for Intrinsic Safe Signals. Request CPCL to approve as it complies Pipe to Pipe calculation for SIL3 Logic Solver.  | Bidder to provide Barriers & Isolators suitable for hazardous area classification as per tender specifications.             |
| 2       | 3.9       | 5 of 78 | Process Control System (Close-Loops): Scan time for a close-loop shall be defined as the cycle time taken by controller to read and process input, perform control calculations and update control output for all the loops configured within the controller.  | Complied<br>However, we presume that there is no closed loop in ESD system.  | Noted.  |
| 3       | 7.8       | 9 of 78 | Supply of all necessary system cables, communication cables & power cables required for satisfactory commissioning of the system including DCS interface using MODBUS RS 485. CPCL will provide required hardware from DCS end through DCS OEM. The PLC bidder has to co-ordinate with DCS bidder (Honeywell Automation India Ltd) for technical issues to interface PLC with DCS, at CPCL | DCS Interface is provided through redundant Modbus RS485 Module and Bidder system will be modbus master.   | Noted. However the communication shall be bi-directional and comply with tender specifications mentioned in section 12.4.3. |
| 4       | 7.12      | 9 of 78 | Supply of all accessories for installation including trays, conduits, fasteners, channel frame, glands for all cables at field room side, cables & wires as necessary.   | Bidder prefers to lay interconnection within staked cabinet as the present control room floor is concrete. In case of cable laying required outside and if it is through cable gallery. Request CPCL to provide support on CIVIL structure opening in below panel mounting area. | Noted. CPCL Scope of work as per section 9.0 of tender document.  |

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| 5              | 8.6              | 10 of 78       | Bidder may visit the site and analyze the usage of the existing marshalling rack while replacing all the components (PSU's, Signal Converters etc) as per I/O Count in Section 10.0 , within the shutdown period of 10 days. There shall be new System & Power supply wirings (24VDC Power to Components, Signal from Barriers ,Relays to FTA's etc). Bidder to submit suitable timeline proposal in the bid for CPCL approval, If the cabinets are reused .CPCL has the right to demand New Pre-Wired marshalling panels if the proposal to reuse the existing cabinets is not acceptable & feasible. | We observed during site visit that the present panels are non standard and not in good condition to reuse. Thus Bidder proposes New Panel in place of existing panels.  | Noted.   |
| 6              | 8.8              | 10 of 78       | Bidder shall supply redundant rack mounted Auto Transfer switches for catering UPS power to single chored instruments like Media Convertors , Monitors etc to ensure redundancy.   | Offering Dual Power Supply for all Workstations & Servers   | Noted.   |
| 7              | 8.10             | 11 of 78       | All interconnecting cables which are not entirely routed within the cabinets shall be preferably armored & run in minimum 2 mm thick GI metallic trays with covers. All the cables shall be identified with heat shrink type ferrules with proper cable dressing by providing permanent tags.  | Bidder prefers to lay interconnection within staked cabinet as the present control room floor is concrete. Incase of cable laying required outside for CAT6 Cable through cable gallery. Request CPCL to provide support on CIVIL structure opening in below panel mounting area. | Noted. CPCL Scope of work as per section 9.0 of tender document. |

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| 8       | 8.13      | 11 of 78 | Bidder shall provide support for all the hardware & software (except Windows) components and services of the upgraded system for a period of 15 (Fifteen) Years after up-gradation. | Bidder confirm that in case of placement of order by M/s CPCL on us we shall continue to support M/s CPCL in providing back-up engineering, maintenance support, and spare part support for a period of (10) years on Bidder Hardware and (10) years for Bidder Software which is being supplied under this contract from the date of placement of order. Commercial Off shelf Product is based on OEM support. Offered ESD System support Windows 10 2019 LTSC and Microsoft OS is support till January 9, 2029. However if extended patch update provided by microsoft later then the same supprot shall be extended back to CPCL. | Noted.<br>Refer Corrigendum.   |
| 9       | 12.1.12   | 16 of 78 | All bought out hardware like safety barriers, isolators, trip amplifiers, relays, etc., shall be approved for SIL3 applications.  | BIDDER Proposes SIL2 Barrier for Intrinsic Safe Signals. Request CPCL to approve as it 2oo3 Input with SIL2 Barries complies with Pipe to Pipe calculation for SIL3 Logic Solver.  | Bidder shall provide SIL-2/3 Barriers as per Datasheet Annexure-4A. Refer corrigendum. |

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| 10      | 12.1.31   | 18 of 78 | Bidder shall indicate with documentary proof any restriction / time limits for which such a crippled mode operation (Failure of Single Processor / any one signal leg of any multi channel I/O module) can be continued without endangering safety.   | No Degradation / Cripple Mode in Prosafe RS SIL3 System.  | Noted.   |
| 11      | 12.1.32   | 18 of 78 | Crippled mode operation shall be alarmed on DCS / ESD OS along with balance time available for repair. In case no redundant component is specified failure of primary shall cause a shut down of the system with all outputs going to their safe values.  | No Degradation / Cripple Mode in Prosafe RS SIL3 System. Non Redundant System is also SIL3 in Bidder Prosafe RS   | Noted.   |
| 12      | 12.4.2.1  | 23 of 78 | PLC Communication (PLC Switch Engineering Workstation/ SOE Station/HMI-SCADA). 12.4.2.1) Communication of PLC Controllers with Engineering Work Station EWS (Engineering Software, System Diagnostics Software, SOE) , SOE Station (Sequence of Events Recorder & Alarm Management software) , HMI-SCADA ( Graphics Display – Analog & Digital Value Monitoring, Trend Recording & alarm Viewing & Archiving) shall be through TCP/IP protocol. | Communication between Controllers, EWS and HMI are through Vnet/IP Bus  | Noted.   |
| 13      | 12.4.3.7  | 24 of 78 | Communication with PLC shall be not be directly connected to DCS controller card. Communication with PLC shall be done through separate communication cards only.   | We presume Redundant Modbus RS485 Module to be provided for each System Viz, GT-1, GT-2, Boiler-1, Boiler-2, Boiler-3. Each PLC is provided with 2 Nos of Modbus Modules. Please confirm. | Noted. Bidder shall provide suitable firewall for Modbus communication with Owner's DCS. |

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| 14      | 12.4.3.8  | 24 of 78 | Bidder's PLC shall also communicate through Ethernet with Owners DCS , if necessary communication modules are provided at the DCS End.   | Existing TDC3000 HAIL DCS System at present HPM doesn't have serial device interface processor at site. The same is propriety hardware of HAIL who is also the bidder in the tender thus Bidder excludes the Communication modules at DCS end and it shall be in CPCL scope as per Clause 9.2 Page 11 of 78. | Noted.  |
| 15      | 12.5.6.5  | 33 of 78 | OPERATING SYSTEM , ANTI-VIRUS SOFTWARES & MISC SOFTWARES.<br>12.5.6.5) The Anti-Virus shall have life time license validity and shall provide updates / patch to overcome cyber threat detected at any part of the global communication network. These patches shall be available throughout warranty and 5 years of CPWAMC contract also. | Anti-Virus Patch update shall be done manually through AMC AV Server is not offered.   | Bidder to provide AV license and updates as per tender specifications.                          |
| 16      | 12.5.6.7  | 34 of 78 | OPERATING SYSTEM , ANTI-VIRUS SOFTWARES & MISC SOFTWARES.<br>The Anti-Virus patching shall have the capability to be done online through secure gateway with suitable Servers & Firewalls.   | Manual Updation of patches through PWAMC is included in scope of supply. AV WSUS Servers & Cybersecurity Proposal excluded   | Bidder to provide necessary hardware & software to carryout online patching. Refer corrigendum. |

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| 17      | 12.6                          | 34 of 78  | <p>Control system security:</p> <p>12.6.1) Bidder shall be responsible for designing PLC systems to address cyber threat vulnerabilities and provide system security updates during warranty also. Unused USB ports on Workstations &amp; HMI shall be disabled and locked using USB Hardware locks.</p> <p>12.6.2) Bidder is responsible to deliver systems that are able to survive cyber attack without compromising critical functionality of the total control system. Any additional hardware or software required to achieve the above objective shall be in Bidder's scope of supply.</p> <p>12.6.3) Bidder shall ensure that security of the system is addressed from both and IT and control System perspective. Bidder shall design multiple layers of network, system and application security and shall ensure that industry, regulatory and international standards are taken into account while designing the security system.</p> <p>12.6.4) The use of any unauthorized CDs, DVDs, floppy disks, USB memory sticks, or similar removable media on any node that is part of or connected to the PLC system should not be permitted in order to prevent the introduction of malware or the inadvertent loss or theft of data.</p> | <p>The CENTUM VP &amp; ProSafe-RS systems use the Vnet/IP network provided with built-in features to deal with various security threats. The following table shows the countermeasures and the corresponding components:</p> <p>Table Vnet/IP built-in security features</p> <table border="1"> <thead> <tr> <th>Section</th> <th>Countermeasure</th> <th>Component</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Against Spoofing attacks</td> <td></td> </tr> <tr> <td>2.</td> <td>Against Falsification attacks</td> <td></td> </tr> <tr> <td>3.</td> <td>Against DoS attacks</td> <td></td> </tr> <tr> <td>4.</td> <td>Against miscellaneous threats</td> <td></td> </tr> </tbody> </table> | Section      | Countermeasure | Component | 1. | Against Spoofing attacks |  | 2. | Against Falsification attacks |  | 3. | Against DoS attacks |  | 4. | Against miscellaneous threats |  | <p>Noted. Bidder to comply with tender requirement.</p> |
| Section | Countermeasure                | Component |  |  |              |                |           |    |                          |  |    |                               |  |    |                     |  |    |                               |  |   |
| 1.      | Against Spoofing attacks      |           |  |  |              |                |           |    |                          |  |    |                               |  |    |                     |  |    |                               |  |   |
| 2.      | Against Falsification attacks |           |  |  |              |                |           |    |                          |  |    |                               |  |    |                     |  |    |                               |  |   |
| 3.      | Against DoS attacks           |           |  |  |              |                |           |    |                          |  |    |                               |  |    |                     |  |    |                               |  |   |
| 4.      | Against miscellaneous threats |           |  |  |              |                |           |    |                          |  |    |                               |  |    |                     |  |    |                               |  |   |

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| 18      | 12.6.5           | 34 of 78 | Recommendations of the National Institute of Standards and Technology, NIST Special Publication 800-82 "Guide to Industrial Control Systems (ICS) Security" may be followed for developing the security system.   | Cyber security proposal is not quoted.   | Bidder to consider NIST guidelines for security objectives for ICS implementations and Patch Management.           |
| 19      | 12.6.6           | 34 of 78 | Bidder's security system shall fully comply with ISA99 Industrial Automation and Control Systems Security Standards. Bidder shall submit the architecture of control system security network.   | Offered System meets ISASecure™ Embedded Device Security Assurance Program 2010.1 And meets the requirements for: LEVEL 1 and it is LEVEL 1 Certified. Certificate - ISASecure Embedded Device Security Assurance Program is attached part of proposal.  | Noted.   |
| 20      | 15.2.1<br>15.2.2 | 39 of 78 | Specification for Power Distribution cabinets:<br>15.2.1) Each PLC shall have separate PBD Cabinet for 110VAC UPS Supply . The 110 VAC UPS Power distribution to associated PLC's Marshalling and System cabinets shall be done through MCB's of suitable ratings mounted in the Power Distribution cabinet.<br>15.2.2) 02 Nos PLC's in CPP (GT-01 & GT-02 ) shall have common 230VAC Non-UPS PDB and 3 Nos. PLC's in Cogen (Boiler-01,02,03) shall have common 230VAC Non UPS PDB. | Please note that the present Rack Room doesn't have enough space to mount these 7 Nos of PDB cabinet. Request CPCL to provide the space for the same.<br>Based on site survery- As an alternate Bidder Proposes<br>1 UPS PDB Cabinet for GT-1, GT-2 Rack Room<br>1 UPS PDB Cabinet for Boiler-1,2,3 Rack Room<br>Non UPS PDB Cabinet existing shall be reused. Please confirm.<br>Bulk power supply for powering each marshalling cabinet will be mounted in respective cabinet. | Bidder to provide PDB's as per tender specifications. Bulk PSU's shall be placed in respective marshalling panels. |

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| 21             | 11               | 4 of 29        | Liquidated Damage @0.5% per week or part of week delayed period as pre-estimated damages not exceeding 10% of Contract Value   | BIDDER proposes @0.5% per week or part of week delayed period as pre-estimated damages not exceeding 5% (five percent) of the total Purchase Order value (excluding duties & taxes) though part supplies, if any made within contractual delivery date(CDD) | AS PER TENDER TERMS |
| 22             | 15. iii          | 28 of 44       | Liquidated Damage @ 0.5% of the contract value of delayed quantity per week or part of the week of delayed period as pre-estimated damages not exceeding 10% of the contract value of delayed quantity without any controversy/dispute of any sort whatsoever. | BIDDER proposes @0.5% per week or part of week delayed period as pre-estimated damages not exceeding 5% (five percent) of the total Purchase Order value (excluding duties & taxes) though part supplies, if any made within contractual delivery date(CDD) | AS PER TENDER TERMS |



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| 1       | 2.3          | 4 of 78 | Allelectronic components / modules for controllers & I/O data acquisition system for the PLC shall be suitable & comply with ISA G3/GX level corrosive environment as per ANSI/ISA-S71.04 or equivalent | All PLC Cards shall be G3 as per ISA - S71.04 . Operator Stations or Switches & other items are excluded from this compliance .Please confirm our understanding is correct                             | Noted.   |
| 2       | 2.4.2.2 & 26 | 5 of 78 | All the barriers, isolators shall be suitable for classified area and shall have electrical classification EEx (ia) Gr. IIC, T3.  | As per standards provided by vendors in vendor list for this item . SIL2 barriers are also and use of the same does not affect the SIL rating of the system. Request CPCL acceptance for SIL2 Barriers | Bidder to provide Barriers & Isolators suitable for hazardous area classification as per tender specifications.            |
| 3       | 2.4.2.3      | 5 of 78 | Certification for the SIL-3 (AK-6) (as per IEC 61508) requirements for the PLC system, from TUV (with detailed SIL 3 report).   | We understand that TUV Certification shall be from TUV Rhineland . Please confirm  | Bidder to follow tender requirements   |
| 4       | 7            | 9 of 78 | The PLC bidder has to co-ordinate with DCS bidder (Honeywell Automation India Ltd) for technical issues to interface PLC with DCS, at CPCL site.  | Noted . But CPCL has to co- ordinate with DCS OEM. Please confirm  | Noted.   |
| 5       | 7.14 to .17  |         | Removal of Existing Cabinets , Cables & installation of New Panels & Inter Panel Cables   | Any site clearances or obstacle clearances or removal of panels above Ground Floor will require CPCL assistance . Existing Field cabling details with documentation in CPCL scope. Please confirm      | Noted. Hard copy of existing documents shall be shared during detail engineering.  |
| 6       | 7.24         | 9 of 78 |   | Earth pit shall be 3nos. for System Earth and 3nos. for Electrical Earth. Please confirm   | Noted. 6 Nos each shall be constructed at Cogen & CPP Areas (total 12 nos.).Bidder to follow tender document Point No 16.1 |

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| 7       | 7.27      | 10 of 78 | Erection, Testing & Commissioning of the entire system at site during the shutdown period of 15 days   | Shut Down days can be arrived and agreed as per mutual discussion during Engg Stage  | Shutdown period for each PLC system installation, testing & commissioning shall be 10 days as per clause 18.3.1. Bidder shall plan and execute pre-shutdown activities accordingly as per clause 18.3.2. Refer Corrigendum |
| 8       | 8.8       | 10 of 78 | Bidder shall supply redundant rack mounted Auto Transfer switches for catering UPS power to single chored instruments like Media Convertors , Monitors etc to ensure redundancy    | Auto Transfer Switch may be excluded from scope in case of workstations with Dual Power Supply. Please confirm   | Noted. Refer Annexure-03 (Note-02)   |
| 9       | 8.10      | 11 of 78 | All interconnecting cables which are not entirely routed within the cabinets shall be preferably armored & run in minimum 2 mm thick GI metallic trays with covers                 | All Interconnecting cables are Fiber Optic (FO) . Since the FO cables are inside the control room our understanding is that the same will be unarmoured w/o conduits. Existing Trays will be used . No New Trays will be required since no new signals are added in the system. Please confirm our understanding | Unarmored cables are accepted subject to laying them in Flexible GI/SS Conduits to avoid any damage during other activities.   |
| 10      | 8.13      | 11 of 78 | Bidder shall provide support for all the hardware & software (except Windows) components and services of the upgraded system for a period of 15 (Fifteen) Years after up-gradation | As per Logistic support Letter . For Non OEM hardware it will be as per support letter of OEM's specified in Mandatory vendor List . For Windows based Systems it will be 3 years from PO date.  | Bidder to support the system as per tender specification for 10 Years. Refer Corrigendum.  |
| 11      | 12.1.1    | 16 of 78 | The PLC shall be QMR – Dual Redundant Processor & Dual I/O's or TMR with Triple modular redundant Processors ...   | TMR PLC shall be configured for 3-2-1-0 mode configuration & QMR PLC for 4-2-0 mode configuration. Please confirm  | Bidder to follow tender requirements   |

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| 12      | 12.1.10   | 16 of 78 | The system engineering, integration and manufacturing shall be carried out by agency which is certified by TUV as per IEC 61508 guidelines for carrying out such an activity. Bidder to submit the TUV certificate substantiating the above.  | We understand that System Engineering & FAT shall be carried by FSM Certified Location by TUV Rhineland. Latest Valid Certificate shall be produced for such activity   | Noted.                                |
| 13      | 12.1.30   | 18 of 78 | Redundancy shall be provided in such a way that in case of failure of the main processor, the standby shall take over automatically. The changeover shall be bumpless and the system shall be fail proof. The System shall not be a standby system and there shall not be any Switchover /takeover time | In case of QMR PLC shall be at least quadruple redundant for Processor system and Dual redundant for IO and all other subsystem. However, in case of failure of any IO card in any of the two redundant control section, the processors of both the channels should continue getting the IO data of failed IO card from its redundant pair. Shutting down of complete control section due to failure of an IO card or any other card is not acceptable. Similarly if any Processor fails then the redundant processor shall continue to receive data from both primary and redundant IO cards. Please confirm | Bidder to follow tender requirements  |
| 14      | 12.3.1    | 19 of 78 | If Single I/O card is TMR Certified, 25% or 2 Nos I/O cards of each type (AI,DI,DO) whichever is higher shall be equipped with redundant I/O cards in spare slots in each of PLC system.  | As per 12.1.1, Triplicated Signal conditioner for each IO Channel is specified, which provides higher MTBF & low MTTR for system. The installed spares and mandatory spares also add to the availability of the system which is already multiple fault tolerant. Also find herewith the TUV recommended Degraded mode operations for SE Triconex System for your kind perusal. We request CPCL to accept TMR with only one card extra per subsystem as per other IOCL projects .  | Bidder to follow tender requirements. |

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| 15      | 12.4.3.5  | 24 of 78 | Communication protocol would be Redundant Modbus RS485 serial communication.   | Connectivity with PLC to existing DCS shall be on Modbus TCP/IP. Please confirm  | Noted. Bidder shall be capable of communicating with Modbus RS-485 if owner's DCS does not support TCP/IP. However bidder to provide suitable Firewall to communicate with Owner's DCS. Refer Corrigendum. |
| 16      | 12.5.5.4  | 33 of 78 | The A&E Software shall be able to communicate with other PLC's and Third part systems for future expansion . This shall be done using OPC-UA platform  | AIMS/OPC UA shall be supplied as Single Workstation. Kindly confirm  | Noted.   |
| 17      | 12.5.6.5  | 33 of 78 | Bidder shall provide reputed Anti-Virus Software of latest Virus Scan Engine which is capable of being upgraded with patches from the OEM Vendor   | Patch update of each Workstation shall be carried out manually during PWAMC. Please confirm  | Bidder to provide AV license and updates as per tender specifications.   |
| 18      | 12.6.2    | 34 of 78 | Bidder is responsible to deliver systems that are able to survive cyber attack without compromising critical functionality of the total control system. Any additional hardware or software required to achieve the above objective shall be in Bidder's scope of supply | Bidder will provide the Cyber compliance for offered System as a standard. CPCL needs to provide specific requirement if any compliance of its own cyber policies. This is required for proper estimation. Please confirm. | Bidder to ensure compliance to tender specifications. Refer Corrigendum  |
| 19      | 17.1      | 41 of 78 | The time synchronization with external clock i.e. GPS shall be provided by Bidder for the PLC. The frequency of time synchronization shall be configurable   | PLC usually will time sync with DCS Clock. Request you to delete GPS Time sync from Bidder scope   | Bidder to provide GPS clock for time sync. as per tender requirement.  |

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| 20      | 21.3                    | 51 of 78             | CAMC shall be fully comprehensive including all hardware spares supply and support services as per scope   | The major portion of Hardware supply is PLC, Scope of CAMC for spares and support will be for Bidder make items only. Balance shall be CPCL scope. The vendors can give support only till 2 years of warranty after supply.                 | Bidder to follow tender requirements |
| 21      | 21.8.3                  | 54 of 78             | Any minor software modifications and any other corrections in the existing software will be carried out by the Bidder at no extra cost to CPCL. Bidder shall ensure that the software modification shall in no way degrade the system performance  | No Software modifications are envisaged during PWAMC for a system which has already undergone FAT & SAT. If there is any Global Customer Support Recommendations like minor patch releases the same shall be done as part of PWAMC activity | Bidder to follow tender requirements |
| 22      | 24                      | 55 of 78             | Supply of New SIL-3 PLC's for replacement of obsolete GT-01/HRSG-01- (PLC-01) , Boiler -01- (PLC-03) & Boiler -02 - (PLC-04). Supply of Startup & Testing Equipments. Supply of Complete set of Mandatory spares & bought out items for all 5 Nos PLC's.24 Weeks from PO / FOA   | Request to Grant Delivery Period of 32 weeks from PO/FOA  | Bidder to follow tender requirements |
| 23      | Clause No 9 / Clause 25 | pg 3 of 7 / 56 of 78 | in case commissioning and Site Acceptance Test (SAT) is delayed for more than 6(Six) months from the date of supply of the item for reasons not attributable to bidder, then this payment (balance 15% against supply) shall be released on the expiration of such period (6 months) against invoicing and submission of Bank Guarantee of equivalent amount valid for a period of six months initially, which shall be extendable maximum up to 36 months or till commissioning of the system whichever is earlier. | We request that PBG be kept valid for max months 12 months from supply date or till commissioning date whichever is earlier .   | Bidder to follow tender requirements |

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| 24      | 26            |          | Bulk power supplies & Diode O-ring Modules -24 V DC – All Current Ratings  | Request CPCL to accept Bidder Make Power Supply  | Bidder to follow tender requirements .  |
| 25      | Annexure – 03 | 65 of 78 |  | Workstation shall be Tower type with Dual power supply   | Noted   |
| 26      | 11.2          |          | The existing PLC's are powered by 110 VAC/50 Hz floating power supply  | Schneider system accepts grounded power supply. Schneider request CPCL to provide Grounded power supply. If not, please provide number of feeders quantity at PDB to consider Isolation transformer. | Each PLC shall be provided with 5 Nos Redundant Feeders . Hence 10 Nos Isolation transformer shall be provided by bidder.   |
| 27      | 12.5.4.1.4    |          | Real time and historical trend of parameters, with cursor facility for arriving at an exact value at any given time on the trend page. | Historian requirement is not part of the RFQ. Kindly confirm.  | We had mentioned the archiving of Historian Datas as a part of Tender specification in Point No 12.5.4.19.1. Bidder to consider separate Historian if it is required. |
| 28      | 12.5.4.6      |          | Operator Keyboard  | Kindly confirm on operator keyboard requirement.   | Operator Keyboard requirement mentioned in Tender Specification 12.5.4.6 & Annexure-02&03 Datasheets.   |
| 29      | Clause No 11  | 4 of 78  |  | LD shall be the sole & exclusive remedy for Delay attributable to bidder in the supply of material. The max limit shall be 5% of supply value only. LD is not applicable on Service & PWAMC portion. | AS PER TENDER TERMS   |

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| <b>Sl. No.</b> | <b>Clause No</b>   | <b>Page No</b> | <b>Description</b>   | <b>Bidder-02 Clarifications</b> | <b>CPCL Replies</b>                            |
|----------------|--------------------|----------------|--|---------------------------------|--|
| 30             | Due Date Extension |                | Request you to extend the due date by 3 weeks from the receipt of Pre Bid replies. |                                 | PLEASE REFER CORRIGENDUM FOR EXTENDED DUE DATE |

**Tender Ref No : GEM/2022/B/2109340 dt 21/04/2022 – Pre-Bid Query Replies**

| Sl. No. | Clause No    | Page No  | Description   | Bidder-03 Clarifications  | CPCL Replies                                  |
|---------|--------------|----------|---|---|---|
| 1       | Table - 08 - | 57 of 78 | <p>Mandatory Vendor List for Sub-Items &amp; Components. -</p> <p>SIL-3 Relay - Phoenix, P&amp;F<br/>                     DIN rail mounted 2PDT / 4PDT relays with relay base - OMRON / Phoenix<br/>                     Rack mounted Static Auto Transfer Switch – 110VAC - Bidder-02-APC, Legrand, ABB<br/>                     Workstation / Printer Tables , Chairs Furniture - Godrej<br/>                     Ethernet /Fiber Optic/ Modbus Cables &amp; Connectors /Jacks /Patch cords - Belden/Kerpen<br/>                     Terminal blocks –Fused terminal with LED / Knife Disconnect etc - WAGO / Phoenix</p> | <p>Request you to accept below make considering lead time &amp; standard design practice.</p> <ol style="list-style-type: none"> <li>1. SIL-3 Relay - GM International.</li> <li>2. DIN rail mounted 2PDT / 4PDT relays with relay base - Paramount</li> <li>3. Rack mounted Static Auto Transfer Switch – 110VAC - Emerson Vertiv , Sane Electronics.</li> <li>4. Workstation / Printer Tables , Chairs Furniture - Pyrotech, Bidder-03 Std.</li> <li>5. Ethernet /Fiber Optic/ Modbus Cables &amp; Connectors /Jacks /Patch cords - Finolex /RR Cables/ Polycab.</li> <li>6. Terminal blocks –Fused terminal with LED / Knife Disconnect etc - Connect well, Elmex</li> </ol> | Bidder to follow tender specifications.       |
| 2       | 12.3.3. 5    |          | <p>The Analog Input module shall be capable of processing the following signals.<br/>                     4-20 mA DC HART , Active &amp; Passive – Input resistance 250 ohm max</p>   | <p>Please confirm existing Field devices are HART compatible .</p>  | All Analog Field Devices are HART Compatible. |
| 3       | 10.1.1       |          | <p>Minimum of 15 Nos Triplicated Analog Input tags will be configured in 2-o-o-3 (2 out of 3) configuration in 3 Distinct AI cards in each PLC.</p>   | <p>We understands that triplicated signals are already part of IO summery. i.e 15x3 in each PLC. Hence we are considering any additional apart from IO summery. Please confirm.</p>   | Noted.  |



**Tender Ref No : GEM/2022/B/2109340 dt 21/04/2022 – Pre-Bid Query Replies**

| Sl. No. | Clause No | Page No | Description  | Bidder-03 Clarifications  | CPCL Replies  |
|---------|-----------|---------|--|---|---|
| 4       |           |         | PC/Server Count -<br>Engineering Stations - 5nos<br>SOE Stations - 5Nos<br>HMI - PLC 1/2 -2Nos & PLC 3/4/5 -2Nos.                            | System is capable for Common Engineering Station & HMI with SOE Station(Separate SOE Station not required).<br>Can we propose below configuration, Engineering Station - 2nos (1 for PLC1/PLC2 & 1no for PLC3/4/5)<br>HMI with SOE Station - 4Nos ( 2 Nos for PLC1/PLC2 & 2Nos for PLC3/4/5)<br>We can discuss this point for More clarification. | Not Accepted. Bidder to supply the Workstations & Servers as per Tender Requirement only  |
| 5       |           |         | Supply and laying of power cables between PDB panel and system , Network and marshalling panels within control room.                         | Existing power cable , Earthing cable, Modbus communication cable would be used at site . Request to accept.  | Not Accepted. Bidder to supply the required cables and carryout the necessary laying and termination as per specification point 7.11. |
| 6       | 15.2.1    |         | Each PLC shall have separate PBD Cabinet for 110VAC UPS Supply .   | We can propose below option -<br>1. Existing PDB cabinet would be used. Please confirm spare feeder & sapce<br>2. Considering Space constraint 1no 110 VAC UPS PDB cabinet for CPP (GT-01 & GT-02 ) & 1no 110 VAC UPS PDB cabinet for Cogen (Boiler-01,02,03) would be offer.Request to confirm Option.   | Bidder to consider PDB as per Tender specification only.  |
| 7       | 5.13      |         | Digital Output -<br>24VDC @ 2A for Non-IS Solenoid valves - Relays<br>230 VAC @ 5A for Contactor for LT Motors<br>110VDC @ 5A for HT Feeders | Please provide below details -<br>1. 24VDC SOV Qty & wattage requirement to calculate power supply requirement.<br>2. 110VDC@5A HT Feeder quantity for HT relay calculation.  | The Rating of SOV's is already mentioned in the Specifications. The Actual Quantity will be arrived during detailed engineering.      |

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| Sl. No. | Clause No | Page No | Description   | Bidder-03 Clarifications   | CPCL Replies   |
|---------|-----------|---------|---|--|--|
| 8       | 21.3.1    |         | Emergency Maintenance services - As and when required.  | Request to quantify Emergency Maintenance services Visits & days for offering.   | Emergency Services pertain to conditions mentioned in Point No 21.4.1, which depends on the quality and reliability of the system. Bidder to visit site as and when required as per specification. |
| 9       | 12.3.3.7  |         | All analog input shall have possibility of HART Parameter analysis through either HART Pass through I/O cards or HART Multiplexers. | We understands that Existing Hart Management server is available at site & same would be configure by customer/OEM. Please confirm understanding.                              | Noted. Bidder to provide necessary hardware and software for future interface with Owner's Asset Management System .Bidder to clarify the methodology of HART Management communication.            |
| 10      |           |         | Digital Input - Single Input - Dual Output with Line monitoring   | <b>Single Input-Single output</b> barrier would be offer with line monitoring. Please confirm number of line monitoring los per PLC to considered module & relays accordingly. | Bidder to provide Single Input & Dual Output barrier with Line monitoring for all I/O's which are required with IS Barriers. Deviation not accepted.   |
| 11      |           |         | Digital Output - Single Input - Single Output with Line monitoring  | Please confirm number of line monitoring los per PLC to considered module & relays accordingly.  | Bidder to provide Line monitoring for all I/O's which are required with IS Barriers.   |

**Tender Ref No : GEM/2022/B/2109340 dt 21/04/2022 – Pre-Bid Query Replies**

| Sl. No. | Clause No | Page No | Description   | Bidder-03 Clarifications  | CPCL Replies  |
|---------|-----------|---------|---|---|---|
| 12      |           |         | NonSILRelay-Zone-1 , Gas Group-IIC, T4  | Relay would be mount in safe location & Hence safe zone relays are offering. Request to accept.   | Accepted . However other specifications should be complied by the offered relay.  |
| 13      | 7.12      |         | Supply of all accessories for installation including trays, conduits  | Existing cable would be used. Request to accept.  | Bidder to supply all new items as per specification only. Deviation not accepted.   |
| 14      |           |         | Earth pit construction  | We understands that Existing earth pit would be used & Hence new earth pit construction is not applicable.  | New Earth pits need to be constructed and cable to laid as per Tender specification 16.1.   |
| 15      |           |         | <p>S.No            Unit            PLC            Duration</p> <p>1 GT-01/HRSG-01 – PLC-01 10 Days – 1st Phase</p> <p>2 Boiler-01 – PLC-03 10 Days – 1st Phase</p> <p>3 Boiler-02- PLC-04 10 Days – 1st Phase</p> <p>4 GT-02/HRSG-02 – PLC-02 10 Days – 2nd Phase</p> <p>5 Boiler-03 – PLC-05 10 Days – 2nd Phase</p> | Please confirm 10days shutdown for Phase-1 for PLC1/3/4 at same time or interval between 10days shutdown. How much time duration between Phase-1 & Phase-2. | <p>Phase-1 (PLC-01,03,04) - All PLC's to be completed within 10 Days.</p> <p>Phase-2 (PLC-02,05) - All PLC's to be completed within 10 Days.</p> <p>Bidder to ensure Separate commissioning teams to be deployed at site to carry out each PLC upgrade.</p> <p>The PLC shutdown period for upgrade shall be concurrent for maximum of two PLC's or individually.</p> <p>Also refer corrigendum.</p> |

**Tender Ref No : GEM/2022/B/2109340 dt 21/04/2022 – Pre-Bid Query Replies**

| Sl. No. | Clause No | Page No | Description   | Bidder-03 Clarifications  | CPCL Replies   |
|---------|-----------|---------|---|---|--|
| 16      | Table-8   |         | Barrier SIL3  | Contradicting statement in SIL requirement, Bidder understands that SIL2 barriers are acceptable to M/S CPCL.   | Bidder shall provide SIL-2/3 Barriers as per Datasheet Annexure-4A. Refer corrigendum.   |
| 17      |           |         | Annexure-04A- Barriers - SIL3/ SIL-2 Certified - TUV  |   |  |
| 18      | 17        |         | GPS & Time Synchronization :                          | Kindly provide,<br>1. Height of building from control room to consider Antenna cable.<br>2. Distance between Network cabinet & Slave clock to calculate communication cable.  | 1. Height of the building - 10 Meters Approx<br>2. Distance between Ntk & Slave clock - 150 Meters. However Bidder shall make site visit for the exact requirement |
| 19      |           |         | PDB, NW cabinet space                                 | PDB, NW cabinet space not shown in control room. Please mark in control room.   | Space will be provided at the time of commissioning. However the existing PDB Cabinets are shown in the Drawing  |
| 20      |           |         | 7.15) Dismantling of existing PLC Controller Cabinets | We understand that below mentioned exiting cabinets are need to be removed.<br>Annexture8A - 20 Nos<br>09-MA-01, 11-MA-02 to 11-MA-07, LM-11-01, LM-11-02, LM-11-03.<br>13-MA-01 to 13-MA-07, LM-11-01 to LM-11-03.<br>Annexture8B - 15 Nos<br>Boiler-1 SYS cab, Boiler-1 MAR cab (4Nos),<br>Boiler-2 SYS cab, Boiler-2 MAR cab (4Nos),<br>Boiler-3 SYS cab, Boiler-3 MAR cab (4Nos), | Noted.   |

**Tender Ref No : GEM/2022/B/2109340 dt 21/04/2022 – Pre-Bid Query Replies**

| Sl. No. | Clause No | Page No | Description  | Bidder-03 Clarifications   | CPCL Replies  |
|---------|-----------|---------|--|--|---|
| 21      |           |         | Ferruling in Multi-core side of the field Junction Box/ Panel etc in the field, all of which are anticipated to get changed because of reengineering in new PLC system, is in the scope of bidder. | We understands that field cable location & quantity will not be changed hence field cable ferruling changes (considering both termination name unchanged ) are not applicable.<br>Please confirm understanding.                              | Bidder shall replace all old ferrules as per tender clause 7.22 .   |
| 22      |           |         | The cabinets / consoles shall be installed on base frames. Supply & installation of Base frames required for cabinets / consoles are in the scope of the Bidder.                                   | Please confirm existing base frame is available or not & same can be use for new system, marshalling Rittal make cabinets.   | Not Accepted. Bidder to supply base frame as per tender specification 7.18  |
| 23      | 7.20)     |         | Cable laying between Field Instruments / Junction Boxes shall be done by CPCL. However, cables shall be terminated to the marshalling rack by the bidder with proper ferrules details.             | Is there any new field cables will be laid? Existing cables are already laid & terminated to existing marshalling. Bidder will remove only existing field cable & terminate in new marshalling cabinet.<br><br>Please confirm understanding. | Noted. However there may be addition of few new cables (Max of 5 to 10 - 12 Pair cables in each PLC) as we are going to install analog signals in all the PLC's which were earlier configured as switch |
| 24      | 8.7)      |         | All the New System and Marshalling cabinets shall be installed in the Existing Control room in place of old system & Marshalling panels only . No additional space will be provided.               | Considering space constraint, we are proposing double deccor terminals for Field wire connections.<br>Request to accept  | Not accepted. Bidder shall comply as per clause 14.21.4   |

**Tender No.: GEM/2022/B/2109340 dt 21/04/2022 - "TECHNICAL CORRIGENDUM"**

The following scope/specification, terms and conditions stands modified to the extent indicated under the column "Additions/Deletions/ Modifications". All other scope/specifications, terms and conditions of the bidding document shall remain unaltered.

| S. No | Tender clause No.   | Page No. | Subject                      | Additions/Deletions/ Modifications  |
|-------|---|----------|------------------------------|---|
| 1.    | <b>7) Bidder's Scope of Work &amp; Supply for PLC Replacement.</b><br><b>7.27)</b> Erection, Testing & Commissioning of the entire system at site during the shutdown period of 15 days. (Date of shutdown will be informed later.)               | 10       | Installation & Commissioning | The clause is modified as<br><b>7.27)</b> Erection, Testing & Commissioning of the entire system at site during the shutdown period of 10 days. (Date of shutdown will be informed later.)  |
| 2.    | <b>8) Special Instructions to the Bidder:</b><br><b>8.13)</b> Bidder shall provide support for all the hardware & software (except Windows) components and services of the upgraded system for a period of 15 (Fifteen) Years after up-gradation. | 11       | Other mandatory requirements | The clause is modified as<br><b>8.13)</b> Bidder shall provide support for all the hardware & software components and services of the upgraded system for a period of 10 (Ten) Years after up-gradation.<br>The following clause is added.<br><b>8.18)</b> Bidder to supply and support the latest edition of Windows OS till the maximum support period offered by Microsoft as per LTSC policy or till the end of the PWAMC period, whichever is later. |
| 3.    | <b>8.15)</b> Bidder to submit Logistic Support Letter for Supporting the OEM Make of Hardware for next 10 (TEN) years from the date of receipt the purchase order. Format attached as Annexure-01   | 11       | Other mandatory requirements | The clause is modified as<br><b>8.15)</b> Bidder to submit Logistic Support Letter for Supporting all the OEM & Non-OEM Make of Hardware for next 10 (TEN) years from the date of receipt the purchase order. Format attached as Annexure-01.   |

| S. No | Tender clause No.  | Page No. | Subject                       | Additions/Deletions/ Modifications   |
|-------|--|----------|-------------------------------|--|
| 4.    | <p><b>12.1) Minimum Hardware Requirements</b></p> <p><b>12.1.12 )</b> All bought out hardware like safety barriers, isolators, trip amplifiers, relays, etc., shall be approved for SIL3 applications.</p> <p><b>26) Mandatory Vendor List</b></p> | 16 & 57  | Barrier SIL Certification     | <p>The clause is modified as</p> <p><b>12.1.12 )</b> Bidder shall supply Barriers certified for SIL2/ SIL3.</p>  |
| 5.    | <p><b>12.4.3 PLC Communication (PLC Existing DCS).</b></p>   | 24       | Modbus Communication with DCS | <p>The following clause is added:</p> <p><b>12.4.3.12)</b> Bidder shall supply suitable Redundant firewall with adequate bandwidth capabilities for each PLC to establish Modbus Communication with Owner's DCS.</p>   |
| 6.    | <p><b>12.6) Control system security:</b></p>   |          | Online Patching               | <p>The following clause is added:</p> <p><b>12.6.8)</b> Bidder to supply necessary Hardware &amp; Softwares to carryout online patching of the Workstations. However, the Patching through Internet will be subjected to CPCL IT policy at a later stage as per our IT Policy, till then manual loading of patches on AV Server for deployment shall be provided. No Additional Hardware/Software will be procured by Owner for implementation of Online patching.</p> |

| S. No | Tender clause No.   | Page No. | Subject                           | Additions/Deletions/ Modifications   |
|-------|---|----------|-----------------------------------|--|
| 7.    | <b>18.3) SITE INSTALLATION, TESTING AND COMMISSIONING</b>     | 44       | Site Installation & Commissioning | <p>The following clause is added:</p> <p><b>18.3.12)</b> Bidder shall deploy PLC wise separate team for installation and commissioning of the system.</p> <p><b>18.3.13)</b> The PLC shutdown period for upgrade shall be concurrent for maximum of two PLC's or individually. The shutdown period shall be intimated 2 weeks in advance for deployment of installation and commissioning team.</p> <p><b>18.3.14)</b> Bidder to ensure all necessary pre-shutdown activities are completed before shutdown.</p> |
| 8.    | <b>12.5.5 Alarm &amp; Events (A&amp;E) Recorder Software.</b> |          |                                   | <p>The following clause is added:</p> <p><b>12.5.5.6)</b> The package shall contain following modules as a minimum:</p> <ul style="list-style-type: none"> <li>a. Alarm Analysis module with Frequency Analysis, Duration Analysis etc.</li> <li>b. Alarms and Events should be stored for minimum period of 1 year and also facility of archival of data on the disc.</li> </ul>  |



| S. No | Tender clause No. | Page No. | Subject | Additions/Deletions/ Modifications   |
|-------|-------------------|----------|---------|--|
|       |                   |          |         | <p>c. Computed Alarms Engine Module</p> <p>d. Information Analysis</p> <p><b>12.5.5.7)</b> One client PC shall be provided each at Cogen and GT control Room</p> <p><b>12.5.5.8)</b> Remote Client -The captured data are to be web enabled and made available in the existing CPCL LAN with security policy provided by CPCL. All User's PC on the same LAN must be able to READ the data through Internet Explorer in their PC's without any other additional software or hardware up gradation required in their PCs. CPCL LAN Users should not require Administrative Privileges for running client software of AIMS. Minimum 5 numbers of concurrent user license to be provided.</p> <p><b>12.5.5.9)</b> The analytical tools shall be such that it can analyze the entire database at a time as well as part of database at a time.</p> |

# CHENNAI PETROLEUM CORPORATION LIMITED

( A group company of IndianOil)

## GENERAL PURCHASE CONDITIONS (INDIGENOUS)

### 1. DEFINITIONS

The following expressions used in these terms and conditions and/or in the Purchase Order shall have the meaning as detailed hereunder against each of them:

- Owner : Chennai Petroleum Corporation Limited having its Registered Office at 552 Anna Salai, Teynampet, Chennai-600018 including its successors or assignees.
- Order : Supply and delivery of the material in accordance with the requirements defined in Purchase Order (including all attachments and exhibits thereto) together with any subsequent modifications thereof.
- Seller/Supplier : A firm or Company to whom the Order is issued and includes its successors or assignees.
- Goods/Materials : Any Articles, Machinery, Equipment, Items or supplies/work specified or required to complete the Order.
- Project Site : CPCL Site, Manali, Chennai-600068 (Unless otherwise specified).

### 2. ACCEPTANCE OF ORDER

This Order is expressly conditioned on Seller's acceptance of all the terms and conditions hereof and constitutes the entire agreement between parties hereto. With the acceptance of the order, Seller waives and considers as void all his General Sales Conditions. The Seller shall sign, stamp, and date the copies of the Purchase Order and return the copies to Owner as token of having accepted the Order without reservations within a week of the date of order.

### 3. MODIFICATIONS & AMENDMENTS

Owner shall have the right to modify or amend this Order subject to an adjustment in the price and/or delivery date in accordance with the applicable provision of the Order, if any, or pursuant to mutual agreement. Modification to this Order shall be binding only with the written acceptance thereof by the Seller and Owner.

The Seller shall carry out such amendments to the Order and shall be bound by the same terms and conditions incorporated in the original Order.

Claims, if any, for adjustment in price/delivery date shall be made within fifteen (15) days from the date when revisions/changes are ordered. Such claims shall not prejudice the Owner's right to claim a refund of any amount advanced or paid to the seller.

### 4. DELAYS OR NON-DELIVERY

Time is the essence of this Order and the completion dates agreed to are binding on the Seller. Goods shall be delivered in accordance with the Order to such place(s) as is specified therein and at such time(s) as the Owner shall have notified to the Seller.

If upon receipt of the Order or at any time thereafter it is found that the Supply of goods or material called for can not be completed within the time specified in the Order, notice thereof must be given immediately by Fax/Telex/Telegram and confirmed by Registered Mail to Owner together with the best completion date that can be offered. Failure to deliver the goods or materials on or before the date specified in the Order under provisions stated in Article 5 without prejudice to any other rights Owner may have as a result thereof. In such an eventuality, Owner may make other alternate procurement arrangements as may be deemed necessary or desirable in the circumstances and any additional expenditure incurred by the Owner in connection therewith shall be reimbursed by the Seller on demand.

### 5. TERMINATION

Owner may, at any time, terminate any part of the work or all work remaining to be done in connection with this Order with effect from such dates as Owner may specify upon such terms and conditions as may be agreed to at the time of such termination. Owner shall have the right to buy at his option and at an agreed price from the Seller, the cancelled Goods and components and also to recover all materials supplied by Owner to seller for use on the Order.

In the event of a termination of the Order or part thereof, the seller shall forthwith carry out instruction of Owner in connection with such termination including the cancellation of sub-orders the Seller may have placed with others.

Owner and/or his authorised representatives shall have free access to the Seller's works and those of their suppliers to examine the materials and fabrication status reached at time of the Order cancellation and to agree to a reasonable price with the seller.

If cancellation of the Order whether in full or in part is caused by reasons directly attributable to the Seller, Seller shall agree to reimburse Owner, the extra cost incurred by Owner in procuring the cancelled goods from other sources.

6. ASSIGNMENT AND SUBLETTING

Except for raw materials or any part of this Order for which the makers are named in this Order the Seller shall not assign the Order or any part thereof, or any monies due hereunder or sublet this Order or any part hereof without prior written consent of Owner.

All sub orders shall bear Owner's Order Number and shall contain the following words.

"The Goods/materials being supplied against this Order are subject to inspection/expediting by CPCL and/or their assigned representatives."

The Seller agrees to furnish to Owner three unpriced copies of all sub-orders issued for raw materials and components within seven days of placement of such sub-orders.

7. FORCE MAJEURE

Shall mean and be limited to the following:

- a) Any War hostilities.
- b) Any riot or civil commotion.
- c) Any earthquake, flood, tempest, lightning or other natural physical disaster.
- d) Any strike, or lock-out (only those exceeding ten (10) continuous days in duration) affecting the performance of the seller's obligations.
- e) Any restriction imposed by the Government (Central or State) or other Statutory bodies which prevents or delays the execution of the Order by the Seller.

The Seller shall advise Owner by a registered letter duly certified by Local Chamber of Commerce or Statutory authorities the beginning and end of the above causes for delay within seven (7) days of occurrence and cessation of such Force Majeure conditions, in the event of delay lasting over one month, if arising out of causes of Force Majeure, Owner reserves the right to cancel the Order and provisions governing termination stated under Article 5 shall apply.

For delays arising out of Force Majeure, the Seller shall not claim extension in completion date for a period exceeding the period of delay attributable to the causes of Force Majeure and neither Owner nor Seller shall be liable to pay extra costs provided it is mutually established that Force Majeure condition did actually exist.

Seller shall categorically specify the extent of Force Majeure conditions prevalent in his works (such as power restriction etc.) at the time of submitting the bid and whether the same have been taken into consideration or not in the quotations.

8. INSPECTION AND EXPEDITING

All inspections and tests shall be made as required by the specifications attached to or made part of this Order and or amendments issued by Owner. All goods or materials shall be subject to inspection by Owner or their authorised representatives. Such tests and/or inspections by Owner may be held in conjunction with the representatives of the Seller. Seller shall advise the Owner, in writing, as the circumstances warrant at least fifteen (15) days in advance of the date of the final tests and/or inspection.

Owner's inspector shall be the authorised inspection spokesman and all matters including the owner's requirements shall be handled with the Seller directly. Such inspection or failure to inspect on the part of Owner shall in no way relieve the Seller of any responsibility or liability with respect to such, materials nor prejudice the right of Owner to reject unsuitable material after arrival at the destination. Unless specifically stated contrary in the Order, all expenses relevant to the preparation and performance of testing, inspection and expediting and the preparation of any test reports or certificates shall be borne by the Seller except for the salaries, fees, travelling, lodging and boarding expenses of Owner's representatives. The Seller shall submit to Owner within four weeks from the date of this Order a bar-chart showing start and finish dates for various activities forming part of the execution of this order and identifying the delivery dates of this activity schedule. Seller shall update this bar-chart every month showing the actual performance of the activities and how the delivery date has been affected thereby. Copies of the updated bar-charts will also be submitted to Owner for review of the progress of the Order.

When deemed advisable by Owner the Order and Seller's sub-order shall be subject to personal expediting by Owner's representatives. Such expediting shall in no way relieve the Seller of the time or delivery obligations under the terms of the Order. At all reasonable times and places, before, during and after manufacture, the seller shall grant and provide access to Owner or their representatives to all parts of the

Seller's works and its sub-Supplier's works involved in the manufacture or processing of the goods or materials.

9. GUARANTEE

All goods or materials shall be supplied strictly in accordance with the specifications, drawings, data sheets, other attachments and conditions stated in the order. No deviations from such specifications or alterations of these conditions shall be made without Owner's agreement in writing which must be obtained before any work against the order is commenced. All materials furnished by the Seller pursuant to this Order (irrespective of whether engineering, design data or other information has been furnished, reviewed or approved by Owner) are guaranteed to be of the best quality of their respective kinds (unless otherwise specifically authorised in writing by Owner) and shall be free from faulty design (to the extent such design is not furnished by Owner) workmanship and materials, and to be of sufficient size and capacity and of proper materials so as to fulfill in all respects all operation conditions, if any, specified in this order.

If any troubles or defect originating with the design, material, workmanship or operating characteristics, of any materials arise at any time covering a period of twelve (12) months from the date of the first commercial operation of the Plant for which the materials supplied under this Order form a part or twenty four (24) months from the date of last shipment of goods/materials whichever period shall first expire, and the Seller is notified thereof, Seller shall, at his own expense and as promptly as possible make such alterations, repairs and replacements as may be necessary to permit the materials to function in accordance with specifications and to fulfill the foregoing guarantees.

Owner may, at his option remove such defective material, at Seller's expense in which event Seller shall, without cost to Owner and as promptly as possible furnish and install proper materials. Repaired or replaced materials shall be similarly guaranteed for a period of not less than twenty four (24) months from the date of shipment.

In the event that the materials supplied do not meet the specifications and/or are not in accordance with the drawings, data sheets or the terms of this order, and rectification is required at site, Owner shall notify the Seller giving full details of differences. The Seller shall attend the Site within seven (7) days of receipt of such notice to meet and agree with representative of Owner the action required to correct the deficiency. Should the Seller fail to attend meeting at Site within the time prescribed above, Owner shall immediately rectify the work/materials and Seller shall reimburse Owner all costs and expenses incurred in connection with such trouble or defect.

10. PATENT INDEMNITY

The Seller shall fully indemnify Owner, Vendors and users of the materials furnished hereunder, against any action, claim or demand, costs and expenses, arising from or incurred by reasons of any infringement or alleged infringement of any letters patent, Registered Design, Trade Mark or name, Copy Right or any other protected rights in respect of any material supplied or any arrangements, system of methods of using, fixing or working used by the Seller.

The Prices quoted by the Seller shall include all charges for Royalties payable in respect of the use of any letters patent, registered design, Trade Mark or name, drawing or technical information which may be involved in the performance of this order or in the construction or use of any plant, material or apparatus supplied by the Seller.

In the event of any claim or demand being made or action brought against Owner in respect of any of the aforesaid matters, the Seller shall be notified thereof, immediately and the Seller shall at its own expense with (if necessary) the assistance of Owner (whose all expenses shall be reimbursed by the Seller) conduct all negotiations for the settlement of the same and/or any litigation which may arise therefrom.

11. LIABILITY AGREEMENT

Seller shall defend and hold Owner, harmless from all claims and liability for injuries to and/or death of any and all persons, and for loss of and/or damage to property caused in whole or in part by the negligence or willful acts of the Seller, arising under or by reasons of materials furnished hereunder including without limitation, the installation, erection, repair, rectification, adjustment or operation of the materials covered by this order.

In addition, Seller shall, if it elects to utilize materials, tools, equipment or facilities made available to Seller by Owner for use by the Seller and not to be incorporated in the work, as additional consideration therefor, defend and hold Owner harmless from all claims and liability for injuries to, and/or death of, any

and all persons and/or loss of and/or damage to property resulting from or by reasons of the Seller's utilisation thereof, whether or not caused partially or totally by the negligence of Owner's employees, contractors, sub-contractors, agents or representatives.

In any case where it is necessary for employees or representative of Seller to go upon the premises of Owner, Seller agrees to assume full responsibility for the proper conduct of such employees/representatives while on said premises and to comply with all applicable workmen's Compensation Laws, other applicable Government regulations and ordinances and all Plant Rules and regulations particularly in regard to safety precautions and fire hazards. If this Order required Seller to furnish labour at Site, Seller shall furnish to Owner a Certificate or other evidence satisfactory to Owner indicating that such labour is adequately covered by Workman's Compensation Insurance and Employer's Liability Insurance with limits acceptable to Owner.

12. FIRM PRICES

Unless otherwise specified in the Order, the Order price shall remain firm and will not be subject to escalation of any description during the pendency of the order, notwithstanding the change in the cost materials, labour and/or variations in taxes, duties and other levies on raw materials and components that may take place while the order is under execution even if the execution of the order is delayed beyond the completion date specified in the order for any reasons whatsoever.

If any details shown on the drawings are omitted from the specifications or vice-versa, the Seller shall, notwithstanding such omissions supply in accordance with such details and shall be deemed to have included the cost for such work in the Price.

13. TAXES, DUTIES, UNEMPLOYMENT BENEFITS ETC

Sales tax and local taxes, such as town duties and octroi applicable at the destination on the finished goods alone will be payable by the Owner at actuals against documentary evidence to be furnished by the Seller. All other taxes, duties, levies and imposts will be to the Seller's account.

Seller shall adjust taxes, duties, cess or levies wherever required if the owner furnishes exemption certificates even retrospectively.

Seller hereby accepts exclusive liability for, and agrees to indemnify Owner against liability for, the payment of any and all contributions or taxes for unemployment, insurance, old age pensions or annuities or other purposes prevalent under the present legislation or hereafter imposed by the Government of India and/or by any unit or sub-division or authority thereof, which are in whole or in part measured by and/or based upon the wages, salaries or other remuneration paid to persons employed by Seller on work in connection with this Order.

14. TERMS OF PAYMENT

Payment against invoice shall normally be made as follows:

90% against despatch documents through bank specified in the Order and balance 10% within 30 days of receipt of materials at Site subject to Seller furnishing a Bank Guarantee. The Bank Guarantee shall be from a Scheduled/Nationalised bank as per the Performa enclosed for an amount of 10% of the order value as security for the due performance of all the Seller's liability in terms of and/or in connection with the Order. This security will be released after the expiry of the period of performance guarantee.

Delay in receiving invoices in the number of copies specified, or errors and omissions or failure or delay in providing the documents and/or certificates required in the order, or failure to comply with the provisions of Owner's invoicing instructions shall be considered just cause for withholding payment without loss of discount privilege, and any demurrage or wharfage resulting thereby shall be negotiated and borne by seller. Seller's invoices and documents shall be strictly in the manner specified in the Order and all banks charges, if any, shall be to the Seller's account.

Any costs, damages or expenses for which the Seller is liable under this Order may be deducted from monies due or becoming due to the Seller or may be recovered by action at law or arbitration pursuant to Article-25.

15. PRICE REDUCTION SCHEDULE (PRS) FOR DELAYED DELIVERY

Unless as otherwise specified delays in completion of the Order shall be subject to PRS as under:

Should the Seller fail to complete the Order on or before the completion date specified in the Order or any extension granted thereof in writing by Owner, Owner shall have the right to recover from the Seller ½% (half percent) of the Order Price of Goods or materials not supplied and/or unfinished, per week of delay or part thereof, subject to a maximum of 5% (five percent) of the total order price. For Packages involving

supply and erection, the price reduction per week shall be on the total order value and not on undelivered order value. Payment of PRS shall not relieve the Seller of its delivery obligations under the Order.

16. STATUTORY REQUIREMENT  
Seller warrants that all goods and materials covered by this Order have been produced, supplied, sold, despatched, delivered and furnished in strict compliance with all applicable laws, regulations, labour agreements, working conditions and technical codes and requirements as applicable from Time to time. Seller shall execute and deliver such documents as may be required to effect or to evidence such compliance. All laws and regulations required to be incorporated in agreements of this character are hereby deemed to be incorporated by this reference. The Seller shall furnish the Industrial License Number or pertinent details to show whether it has a valid license to manufacture the subject machinery, equipment and materials ordered on it under Industries (Development & Regulations) Act 1951 or whether it is an authorised representative of a licensed manufacturer who has a valid license. Owner disowns any responsibility for any irregularity or contravention of any of the statutory regulations in the manufacture or supply of goods covered by this Order.  
The Seller shall ensure compliance with the above by all its sub vendors/suppliers and shall indemnify Owner against any actions, damages, costs and expenses of any failure to comply as aforesaid.
17. TRANSIT RISK INSURANCE  
Transit Risk Insurance from Despatch point onward shall be covered by the Owner against its open General Policy. The seller shall advise the despatch particulars to owner by Fax/Telex/Telegram as stipulated in relevant Packing & Marking Conditions.
18. PACKING, CRATING AND CARTAGE  
The cost of all special packing, boxing, crating or cartage is included in the prices specified in the Order unless otherwise specifically agreed to in this Order.  
All packing, boxing, crating and cartage shall conform to the specifications or requirements detailed in respective attachments to the Order. The Seller shall be held liable for damage or breakage to the goods due to defective or insufficient packing for protection.
19. NON-CONFORMANCE  
Owner reserves the right to claim damages for use of defective or sub-standard goods supplied by the Seller irrespective of the fact whether goods were inspected by Owner or not.
20. NON-ASSIGNMENT  
The Seller shall act as an independent agency and not as an agent or employee of Owner and the Seller shall not assign or sub-contract this Order, or any part thereof, or any money to become due hereunder, without the prior written consent of Owner.  
Any such permitted assignment or sub-contracting shall not relieve the Seller of any of its obligations against this Order.
21. NON-WAIVER  
Failure of Owner to insist upon strict performance of any of the terms and conditions incorporated in this Order, failure to/delayed exercise of any rights detailed herein or failure to properly notify the Seller in the event of breach of any obligations contained herein, shall not constitute a waiver of any obligation contained herein. Any waiver, to be effective, must be in writing.
22. SECURITY AND TECHNICAL INFORMATION  
All information, design or drawings provided by Owner shall be the property of Owner and the Seller shall not use them for purposes other than for which they are provided for and Seller shall treat all these documents/information as confidential, and these shall not be reproduced in whole or in part for any other purpose.  
  
The Seller shall treat as confidential all information (whether written or otherwise) supplied by Owner hereunder and shall use its best endeavors to ensure that such information is not divulged to any third party except where necessary for the purpose of performance of this Order by the Seller, of course, with the consent of Owner. In such cases, seller shall ensure that parties in question undertake a similar obligation of confidence. This obligation does not apply to information, which, at the time of disclosure, is in the public domain or is in the Seller's Lawful Possession without restriction on disclosure.  
The Seller shall be required to sign a secrecy agreement for certain propriety items of equipment which will be specified by Owner.

23. MATERIALS FURNISHED BY OWNER

If specifically agreed to in the order Owner shall furnish to the Seller such materials/equipment (hereinafter called Owner's materials) as agreed, for incorporation into the manufacture, fabrication, testing or processing of the goods or materials.

Owner's materials shall be consigned on 'freight paid' basis to the nearest railway point to Seller's works to which Railways will accept the consignment depending upon the nature of the consignment (whether wagon load/small), Seller shall arrange to promptly collect such materials from the railways and transport to its works at Seller's own cost. Any town duty, octroi or local taxes levied by the local bodies at the Seller's end will be to the account of the Seller. Seller shall arrange to properly store and provide adequate security and protection to Owner's materials. Seller shall be solely responsible for the safe keeping of such materials and shall indemnify Owner against any loss or damage to, misuse or misappropriation whatsoever of Owner's material while in the possession of the Seller or its sub-suppliers.

The Seller shall arrange to provide at his own cost and expenses the necessary insurance cover against all risks for Owner's materials.

Seller shall, if required by Owner, furnish a Bank Guarantee equal to the total value of free issue materials and such guarantees shall remain valid till the material accounting towards satisfactory utilization and return of surplus free issue materials are completed.

The Seller shall maintain systematic records of receipt and issue of Owner's materials and shall be accountable at all times to Owner regarding the utilisation thereof.

Seller shall along with his offer submit price for keeping the surplus and scrap materials, separately on per tonne basis. For purpose of this article, scrap and surplus materials have the following definitions:

Scrap: C.S.Plates of maximum width below 225 mm and perimeter below 4000 mm or size below 500 x 500 mm and S.S.Plates of maximum width below 150 mm and perimeter below 2400 mm or size below 300 x 300 mm.

Surplus material: Plates of size higher than size mentioned above.

24. ORDER OF PRECEDENCE

In case of any difference between these conditions of order and special conditions, if any referred to or incorporated in a particular order, the latter shall prevail.

25. ARBITRATION

25.1 If at any time any question, dispute or difference whatsoever shall arise between Owner and the Seller upon or in relation to or in connection with the Order either party may forthwith give to the other notice in writing on the existence of such question dispute or difference and the same shall be referred to the adjudication of two arbitrators, one to be nominated by Owner and the other to be nominated by the Seller or in the case of the said arbitrators not agreeing then to the adjudication of an Umpire to be appointed by the Arbitrators in writing before proceeding with the reference. The award of the arbitrators or in the event of their not agreeing that of the Umpire appointed by them, shall be final and binding on the parties and the provisions of the Indian Arbitration and conciliation Act, 1996 and the Rules thereunder and any statutory modifications thereof shall be deemed to apply and be incorporated in the Order. The venue of such arbitration shall be in Chennai.

25.2 Upon every or any such reference, the costs of and incidental to the reference and answer respectively shall be in the discretion of the arbitrators or of the Umpire as the case may be who may determine the amount thereof, or direct the same to be taxed as between solicitor and client, or as between party and party, and shall direct by whom and in what manner the same shall be borne and paid.

Work under the order shall be continued by the Seller during the Arbitration proceedings, unless otherwise directed in writing by Owner or unless the matter is such that the works cannot possibly be continued until the decision of the arbitrators or the Umpire, as the case may be, is obtained and save as those which are otherwise expressly provided in the order, no payment due or payable by Owner shall be withheld on account of such arbitration proceedings unless it is the subject matter thereof.

26. GOVERNING LAW AND JURISDICTION

The respective rights, privileges, duties and obligations of the Owner and seller under this order shall be governed and determined by the laws of State of Tamil Nadu and the Republic of India, in Chennai.

27. TRANSFER OF PROPERTY

In the absence of any provision to the contrary, transfer of property in the goods shall be deemed to have taken place as follows:



- (i) F.O.R. DESPATCH POINT AND DESTINATION GOODS  
On handing over the goods to the carrier against a receipt and such receipt having been received by Owner.
  - (ii) GOODS COMMISSIONED BY SELLER  
On taking over by Owner for regular operation after test runs at maximum capacity for the specified period are satisfactorily performed.
  - (iii) GOODS ERECTED BY SELLER  
On temporary acceptance by Owner at Job Site.  
Transfer of property in the goods shall be without prejudice to any guarantee or liability of the Seller as to the quality, suitability or performance of the Goods.
28. PUBLICITY & ADVERTISING  
Seller shall not without the written permission of Owner refer to Owner or any Company affiliated with Owner or to the destination or the description of the goods or services supplied to this order in any publication, Publicity or advertising media.
29. VENDOR DATA REQUIREMENT  
The submission by the Seller to Owner of drawings and data documentation is an integral part of the Order. The number of copies (reproducible and prints) and time limits for submitting these documents by the Seller are specified in the order. These requirements must be respected failing which the order will not be deemed to have been duly executed for all purposes.
30. GENERAL
- 30.1 Except to the extent explicitly state, Seller shall in no event be liable to Owner for consequential or special damages in connection with the material furnished hereunder. Further, in consideration of the issuance of this Order, Seller hereby waives and releases any and all claims against Owner arising out of or in any way connected to with any action or claim made or brought against seller by owner in connection with the materials furnished hereunder.
- 30.2 Materials delivered in error, or in excess of the quantity called for may, at Owner's option be returned at Seller's expenses.

## **PACKING, MARKING SHIPPING AND DOCUMENTATION SPECIFICATIONS**

1. GENERAL  
This specification forms an integral part of the purchase order in additions to specification, drawings and instructions explicitly listed in the Purchase Order. These shall be strictly adhered to. Any loss arising out of non-compliance (unless authorised differently) shall be to Seller's account.
2. PACKING
- 2.1 Packing shall withstand hazards normally encountered with the means of transport for the goods of this Purchase Order including loading/unloading operations both by crane and by pushing off. All packaging shall be done in such a manner as to reduce volume as much as possible. All packing materials shall be new and unless otherwise specified, shall be of the packer's standard.
- 2.2 Fragile articles should be adequately packed with special packing materials depending on type of materials.
- 2.3 Chemicals in powder form, catalysts, refractories and like materials etc. shall be packed in drums.
- 2.4 The hazardous materials shall be packed in accordance with the applicable rules, regulations and tariff of all cognizant governmental authorities and other governing bodies. It shall be the responsibility of the seller of hazardous materials to designate the materials as hazardous and to identify each material by its proper commodity name and its hazardous material class code.
- 2.5 Pipes shall be packed as under:
- a) Below 50 mm dia in wooden cases/crates.
  - b) 50 mm dia and above but below 100 mm dia in bundles.
  - c) 100 mm dia and above-loose.
- Individual cases/bundles must contain the pipes of same size.
- 2.6 Pipes/tubes made of stainless steel, copper etc. shall be packed in wooden case irrespective of sizes.
- 2.7 All delicate surface on equipment/material should be carefully protected and painted with protective paint/compound and wrapped to prevent rusting and damage.
- 2.8 All mechanical and electrical equipment and other heavy articles should be securely fastened to the bottom of the case and shall be blocked and braced to prevent movement and damage.

- 2.9 All threaded fittings and pipes should be greased and provided with plastic caps.
- 2.10 Attachments and spare parts of equipments and all small pieces shall be packed separately in wooden cases with adequate protection inside the case and wherever possible should be sent along with the main equipment. Each item shall be tagged so as to identify it with the main equipment and part number and reference number shall be indicated.
- 2.11 All protrusions shall be suitably protected and openings shall be blocked by wooden/steel covers as may be required.
- 2.12 Wherever required equipment/materials shall be packed in polythene bags and silica gel or similar dehydrating compound shall be put inside the bags to protect them.
- 2.13 The Seller shall be held liable for all damages or breakages to the goods due to the defective or insufficient packing as well as for corrosion due to insufficient protection.
- 2.14 Detailed packing list in water proof envelope shall be inserted in each package together with equipment/material. One copy of "Detailed packing list" shall be fastened outside of the package in waterproof envelope and covered by metal cover. In case of bigger dia pipes and large equipment, documents contained in the envelope shall be fastened inside with an identifying arrow sign 'documents' applied with indelible paint.
- 2.15 Packaged equipment or materials showing damage, defects or shortages resulting from improper packaging materials or packing procedures or having concealed damages or shortages at the time of unpacking shall be subject to rejection and replacement at no additional cost to the buyer.

3. MARKING

- 3.1 Each package shall be marked on the three sides, with proper paint/indelible waterproof ink as follows:  
 VIA-Chennai (INDIA)  
 PURCHASE ORDER NO.....NET WT.....KGS.....  
 GR.WT.....KGS.....  
 DIMENSIONS.....X.....X.....CMS  
 PACKAGE NO.(Sl. No. Of total packages) viz. 1/25, 2/24 etc.  
 TAG/ITEM NO.....  
 COUNTRY OF ORIGIN .....
- 3.2 A distinctive colour splash in three stripes of green, yellow and red around each package and on corners of pipes and plates shall be given to facilitate identification.
- 3.3 Additional Marking such as "Handle with Care", "This side up", "Fragile" or any other additional indications for protection and safe handling shall be added depending on the type of materials. All cases will bear warning signs on the outside Center of Gravity and Sling Marks.
- 3.4 Letters, Figures, marks etc. used for marking shall be stencil printed. Handwriting should be avoided as far as possible. Size of letters shall be optimum for each package dimensions.
- 3.5 In case of Bundles or other packages wherever marking cannot be stenciled the same shall be embossed on metal or similar tag wired securely at minimum to convenient points.

4.0 SHIPPING

All shipping must be arranged under deck unless carriage on-deck is unavoidable, in first class direct vessels registered in countries who are members of International Development Association (World Bank). CPCL have engaged M/s. Balmer Lawrie & Co. Ltd (A Govt. of India Undertaking), India as their sea cargo consolidation agent. M/s.Balmer Lawrie have freight forwarders located in various countries in the world. Shipping arrangements on behalf of CPCL will be made by Seller through these freight forwarders. The addresses, contact person, phone no., fax no. details of the concerned freight forwarders will be furnished to the successful bidders in the Purchase Order for finalizing the shipping arrangements. Adequate notice of not less than 6 weeks about the readiness of the cargo for shipment should be given by the Seller to the authorized freight forwarder.

4.2 DESPATCH BY RAIL : (INDIAN VENDORS)

- 4.2.1 Unless otherwise specified in the purchase order, vendor SHOULD NOT despatch the materials by Rail.
- 4.2.2 The Vendor shall be responsible for:
  - A) Despatch by the shortest possible route. The Vendor shall as far as possible despatch the materials by the fastest goods train like OTS, Super Express Goods, wherever such facilities exist.
  - B) Correct classification of goods and freight charges.
  - C) Obtaining clean Railway Receipts without any qualifying remarks.  
 Should there be any restriction for movement by a particular route, the Railway authorities should be requested to move the goods by the next alternative route, subject to prior concurrence by CPCL.

4.2.3 As Smalls :

When the materials that are ready do not make up a wagon load by weight/volume for minimum freight payable for a wagon load, despatch should be effected as "Smalls".

Vendors should obtain from the Railways, the particulars of Road Van junction, Store Van etc. in which the smalls have been loaded, station to which sealed, Train No and date/time of movement and transmit same to Chief Manager (Materials) Chennai Petroleum Corporation Ltd., Manali, Chennai-600068, for monitoring their movement.

4.2.4 As Wagon Loads :

Consignments though of lesser weight, but otherwise constituting a 'wagon load' by volume should be despatched as "wagaon load" or at the smalls rate whichever is advantageous as per rule 164 or IRCA goods Tariff Part 1.

When consignments call for wagon(s), indents should be placed with Railway Station concerned after pre-determining accurately the type and number of wagons required. In case of covered wagons, it should be ensured that the same are water tight. If a particular type of wagon is in short supply, request should be made to the Railway Authorities to supply the next suitable type of wagon. Suitable packing in the wagon shall be done, wherever necessary to ensure maximum safety of the material in transit.

When ODC packages are involved, the vendor shall apply to the railway authorities with loading sketches showing overall dimensions and the wagon proposed to be utilized sufficiently in advance, for obtaining movement sanction and to establish firm transportability. Copies of all such correspondence together with loading sketches should be sent to Chief Manager (Materials), CPCL, Manali, Chennai – 600068.

ODC packages shall be loaded, packed and lashed strictly in accordance with the Railway regulations. Should there be any delay/difficulty in obtaining the required wagon(s) the vendor shall inform Chief Manager (Materials) Chennai Petroleum Limited, Manali, Chennai-600068 immediately giving details of the required number of wagons, type, carrying capacity etc, and indent number so that the matter may be taken up with Railway Authorities concerned. After despatch, Vendor shall obtain form the Railway Authorities, particulars of the wagon, train number, date of movement and destination junction for the particular train and furnish the same to the Chief Manager (Materials) : CPCL , Manali, Chennai – 600068, for follow-up action on movement as may be necessary.

4.3 DESPATCH BY TRUCKS : (INDIAN VENDORS)

A) The vendor shall be responsible for despatch of materials through a reliable Bank approved transport company unless otherwise transport company is named by Owner.

B) The vendor shall ensure with transport company the delivery of materials within a reasonable transit period. Vendor shall also obtain from transporter, particulars of Lorry No., Transporter's Challan No., Destination of lorry (if transshipment is involved), transporter's Agent at destination if any etc. and intimate same to the Chief Manager (Materials) Chennai Petroleum Corporation Limited Manali, Chennai – 600068.

**5.1 DOCUMENTATION**

5.2 All documents shall be in English language.

5.3 Documents required before shipment:

75 days (Seventy five) before the contractual delivery date, 6 copies each of Performa packing lists and sketches of over dimensional cargo shall be air mailed to Chief Manager (Materials), CPCL, Chennai – 600068

The over dimension cargo shall mean any package exceeding any of the following limits.

|        |               |
|--------|---------------|
| Weight | 40 MT         |
| Length | 13.716 Meters |
| Width  | 2.997 Meters  |
| Height | 2.743 Meters  |

5.4 Documents required after shipments:

The supplier shall air-mail the shipping documents stated here-in-below as quickly as possible after the shipment has been made so that the same are received at least two weeks prior to the arrival of vessel at destination port/consignment at destination.

The supplier shall be fully responsible for any delay and or demurrage that may become payable at destination port/Railway station on account of delay in transmittal of shipping documents.

| Copy of documents to be sent to Owner, Chennai | No. of Copies |
|--|---------------|
| Bill of Lading/RR/GR                           | 3             |
| Commercial Invoice                             | 3             |
| Detailed Packing List                          | 3             |
| Freight memo (where applicable)                | 4             |
| Test Certificate                               | 4             |
| Certificate of Origin                          | 4             |
| Certificate of Measurement & Weight            | 4             |
| Catalogue and/or drawing                       | -             |
| Final Payment Certificate                      | 2             |

Note : In addition to the above, complete set of Original documents are required to be sent to **Owner through Bank** in terms of Letter of Credit/Purchase Order.

5.5 Bill of Lading/RR/GR

Bill of Lading/RR/GR shall be clean made in favour of Owner or order of the Bank (and not Order of the shipper)

5.5 Commercial Invoices

Commercial Invoices shall, interalia, indicate (i) Import License Number, (ii) Customs contract Registration reference (to be intimated later) and (iii) Country of Origin. Besides the description in the invoice shall be in conformity with the Purchase Order and in case of Chemical/hazardous cargo, flash points is indicated in documents or a separate certificate giving composition and flash point shall be sent.

5.6 Packing List

Packing List must show, apart from other peculiars actual contents in each case, net and gross weights and dimensions and the total number of packages. In case of pipes and plates in bundles, number of pipes/plates in each bundle must be indicated.

6.0 SHIPPING ADVICE

6.1 In respect of shipment by sea.

Within 24 hours after shipment, the supplier shall send shipping advice by way of Telex/FAX/Cable to the Chief Manager (Materials) CPCL, Manali, Chennai – 600068, giving particulars of the shipment, Vessel's Name, Port of Shipment, Bill of Lading number and date, contents in brief, Purchase Order number, total F.O.B. and freight values, number of packages and total gross weight.

6.2 In respect of despatch by Rail/Road

Immediately after a shipment is made, vendor shall send advance information as to the particulars of materials, value, Purchase Order No./Goods Consignment No. Truck number, name of transport Company and their destination office/associate's address etc., by way of FAX/telegram or telex to the Chief Manager (Materials), CPCL, Manali, Chennai – 600068

7.0 ADDRESS

Chennai Petroleum Corporation Ltd.,  
Refinery House  
Manali  
Chennai – 600068 (INDIA)

Phone : 25944156  
Telex : 041-8455 MRL IN  
041-7858 MRL IN  
CABLE : MAREFIN  
Telefax : 25941247

8.0 TRANSIT RISK INSURANCE

All equipment/materials shall be insured against all marine and transit risk from Port of Shipment to Owner Warehouse by Owner. However, the vendor shall ensure that in effecting shipment clean bills of lading/RR/GR are obtained and the carrier's responsibility is fully retained on the carrier so that the consignee's interests are fully safeguarded and are in no way jeopardised.