

**Date: July 30, 2019**

**E- Tender No. SG/Rourkela/SGIA Date: 2nd May 2019**

**Clarifications to Pre-Bid Queries**

**with respect to**

**Request for Proposal (RfP)**

**for**

**Selection of Smart Grid Implementing Agency (SGIA)**

**for**

**Implementation of Smart Grid in Rourkela City**

**Clarifications with respect to RfP (Volume – I)**

<b>S.No</b>	<b>Reference Clause</b>	<b>Existing Provision</b>	<b>Queries raised by Bidders</b>	<b>Reply/Clarification</b>
1.	Volume-I, Section A Notice Inviting Tender	End date & time for Submission of Bids (Online and Offline) – 21 <sup>st</sup> June 2019, at 15:00 hrs at PFCCL HQ, Delhi	The bid submission date may be extended by 1 month	<b>The bid submission date has already been extended to <u>20.8.2019</u>. Please refer Amendment No. 4 to RfP issued on 18.7.2019.</b>
2.	Volume-I, Section C Clause 3.1 (Project Cost Details)	The total approved project cost is 98.45 cr. which includes the implementation of Field hardware, IT hardware, IT software, 1st year FMS charges, PMC Charges and Network Backhaul under different Smart Grid functionality namely: a. Smart Grid Control Centre (SGCC) b. AMI c. SCADA/DMS/ OMS d. Geographical Information System	Considering the scope of work as per the document SGIA has to implement Smart Grid Control Centre, AMI, SCADA/DMS/OMS and GIS. There are around 82000 consumers, 14 33kV Su-stations, 10 33kV Feeders, 31, 11kV feeders and around 1180 number of Distribution transformers in project area. Also SGIA has to consider growth rate of 7.5% while implementing the solution. Considering the above mentioned scope of work the project cost should be around 150 to 160 Cr. <b>We request OPTCL to review the project cost as the current project cost of 98 Cr is on lower side.</b>	<b>Please refer Amendment No. 5 to RfP for the project Cost.</b>  <b>The Project Cost has been approved by National Smart Grid Mission (NSGM), Govt. of India and release of Grant would be limited to 30% of NSGM approved DPR cost.</b>
3.	Volume-I, Section C Clause 3.3 & 3.4 (Project Cost Details)	NSGM will provide Grant equivalent to 30% of the project cost which includes first year FMS charges. The balance 70% of CAPEX needs to be invested by SGIA. The Bidder is required to provide an undertaking for commitment for investment of 70% of project cost. The O&M cost for the entire 8 years operation shall be borne by SGIA. The asset will be transferred at	The present proposal for revenue sharing is not practicable from investor's point of view as there are many grey areas such as complete meter bypassing, theft of power, no control on technical losses etc. <b>In view of this it is proposed to fix unit rate of Rs.1800/- per node for CAPEX and monthly OPEX cost per node as quoted by the bidder.</b>	<b>The provisions of the RfP shall prevail.</b>

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4.		<p>NIL value to Utility after completion of 8 years operation.</p> <p>The bidding parameter shall be the 'Percentage of Sharing of Incremental Revenue' with utility arising out of reduction in AT&amp;C loss. However, the sharing of incremental revenue with the Utility shall be minimum 25% in each year of operation.</p>	Current funding plan puts a huge financial burden on SGIA where apart from IT system implementation, there is no direct involvement of SGIA on business operations for AT&C loss reduction as well as increase of revenue realization by OPTCL. OPTCL should at least invest 20% CAPEX to have proper stake in the revenue improvement process	<b>The provisions of the RfP shall prevail.</b>
5.			<p>Please confirm whether project cost includes initial CAPEX cost during implementation of 22 months and 1 year FMS cost (warranty period). We understand there may be some additional CAPEX cost involved due to increase of meter deployment and other associated cost during FMS period. <b>We would like to understand whether 30% of project cost will be reimbursed for the incremental CAPEX cost and whether it will be the responsibility of Utility (OPTCL) or NSGM to reimburse.</b></p>	<p><b>The Project Cost has been approved by National Smart Grid Mission (NSGM), Govt. of India and release of Grant would be 30% of the Price quoted by the bidder limited to 30% of NSGM approved DPR cost.</b></p> <p>The balance funds required for implementation of the project need to be arranged by the selected SGIA.</p>
6.			The bidding parameter shall be "per meter per month cost"	The provisions of the RfP shall prevail.
7.			We understand it will be 7 years of operation post-handover or 6 years of operations after warranty period of 1 year. Please confirm our understanding as there seems to be discrepancy.	O&M/ FMS for 8 years shall be the responsibility of selected SGIA.
8.			<b>Please confirm when the revenue sharing be initiated</b> , will it be after the	<b>The Revenue Sharing mechanism shall</b>

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			warranty period i.e. from the 4th year or immediately after the operational acceptance and handing over. We would also like to understand what year on year or yearly average revenue increment anticipated for this project	<b>commence immediately after operational acceptance (phase wise) by the Utility (i.e. WESCO).</b>
9.	Volume-I, Section C Clause 5.2 (d)	<b>Volume-IV (BoQ and Price Schedule):</b> This volume provides details of Bill of Quantity for the project. The heads indicated in the BoQ of the financial bid is indicative. The Bidder shall add additional heads of equipment, services, etc. as deemed necessary by the Bidder to meet the SLA and as per the solution design. In this volume Bidder has to quote against the following price schedule <ul style="list-style-type: none"> <li>• Part A: Incremental Revenue to be shared with Utility on account of AT&amp;C loss reduction (minimum 25% in each year of operation)</li> <li>• Part B: Overall Project Cost as per BoQ and</li> <li>• Part C: Facility Management Charges for Year 1 and Year 2 to Year 8</li> </ul>	<b>Please clarify the significance of component wise prices asked as per BOQ format.</b>	<b>The release of Grant would be 30% of the Price quoted by the bidder limited to 30% of NSGM approved DPR cost.</b>  <b>Further, the component wise prices as per BOQ format would also be used for future scalability of the project.</b>
10.	Volume-I, Section D: Instruction to Bidders	The Bid may be submitted by a Single Bidder OR by the Lead member of the Consortium on behalf of the Consortium of maximum 3 members (including Lead Member). The single bidder or the consortium members (in case bidder is a consortium) jointly should have following experiences:	In order to have broader participation of the bidders, it is proposed that <b>QR as per RECPDCL may be followed.</b>	<b>Please refer Amendment No. 5 to RfP.</b>
11.	Clause 3.6 (Eligibility Criteria)		Please confirm whether <b>sub-contracting</b> is allowed and can be part of any one of these consortium partners	<b>Please refer Amendment No. 5 to RfP.</b>
12.			Please confirm whether experience of sub-contractors can be used for meeting	<b>Please refer Amendment No. 5 to RfP.</b>

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13.		a. Meter Manufacturing b. IT & Communication Service Provider c. System Integration	the QR.	<b>Please refer Amendment No. 5 to RfP.</b>
			The clause may be modified as: <i>"The bid can be submitted by an individual firm or the Lead Member on behalf of the Consortium of maximum 3 members including Lead Member or a JV Company <b>with credentials of its holding companies</b>"</i>	
14.			As per current condition it is mandatory to form consortium of minimum 3 members (Meter Manufacturer, IT & Communication provider and System Integrator) to meet qualification criteria. <b>We suggest OPTCL to allow System Integrator having relevant experience to participate as a Single Bidder.</b> The System integrator will submit MAF from relevant OEMs of Meter Manufacturer and IT & Communication Provider who will meet their respective qualification criteria as defined in the document. Our suggestion is pursuant to the tenders available in market. So, we request OPTCL to change the clause accordingly	<b>Please refer Amendment No. 5 to RfP.</b>
15.			Please allow Lead bidder to additionally use credentials of its <b>subsidiary companies in which it has major shareholding (more than 50%)</b> and management control, to meet qualifying requirements of the tender.	<b>Please refer Amendment No. 5 to RfP.</b>
16.			<b>A Single Bidder who has experience</b>	<b>Please refer Amendment</b>

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			and meets only its respective Pre-Qualifications should also be allowed to participate in this Tender and treated as eligible Bidder	No. 5 to RfP.
17.	Volume-I, Section D: Instruction to Bidders  Clause 4 G.1 (General Pre-Qualification Criteria)	The Sole Bidder/ Lead member/ Member of Consortium shall be a Company incorporated under the Companies Act 1956/ 2013.	<b>Joint venture (JV) Company may also be allowed</b>	Please refer Amendment No. 5 to RfP.
18.	Volume-I, Section D: Instruction to Bidders  Clause 4 G.2 (General Pre-Qualification Criteria)	The Sole Bidder / Lead member of Consortium Bidder should have presence in India for the last 5 financial years as on 31.3.2019.	The clause may be modified as: <i>"The Sole Bidder / Lead member of Consortium Bidder/ <b>at least One Holding Company of JV (In case of collaboration with a foreign company)</b> should have presence in India for the last 5 financial years as on 31.3.2019."</i>	Please refer Amendment No. 5 to RfP.
19.	Volume-I, Section D: Instruction to Bidders  Clause 4 G.3 (General Pre-Qualification Criteria)	The Sole Bidder / any Member of Consortium bidder shall not be blacklisted by any Central/ State Govt./ PSU or any entity controlled by them for providing similar services	The clause may be modified as: <i>"The Sole Bidder / any Member of Consortium bidder/ <b>JV and its Holding Companies</b> shall not be blacklisted by any Central/ State Govt./ PSU or any entity controlled by them for providing similar services"</i>	Please refer Amendment No. 5 to RfP.
20.	Volume-I, Section D: Instruction to Bidders	The sole Bidder/ Consortium members together must have successfully executed & implemented at least one Smart Grid/ AMI/ AMR/ SCADA/ DMS/ OMS projects in an Indian Power Distribution Utility in the last 5 financial years (i.e. FY 2014-15 onwards).  Proof of Work order & performance	In order to have broader participation of the bidders, it is proposed that <b>QR as per RECPDCL may be followed.</b>	Please refer Amendment No. 5 to RfP.
21.	Clause 4 G.4 (General Pre-Qualification Criteria)		<b>Please include Global Power Distribution &amp; Transmission Utility along with Indian Power Distribution Utility.</b> We would also request to allow self-certification for Global Clients.	Please refer Amendment No. 5 to RfP.  Global Experience shall not be considered.

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22.		certificate/ work order completion certificate to be submitted. For Distribution Franchisee / Distribution Licensee: Self-experience certificate duly signed by MD/CEO of the company	The clause may be modified as: <i>"The sole Bidder/ Consortium members/ <b>JV or Holding Companies of JV together</b> must have successfully executed &amp; implemented at least one Smart Grid/ AMI/ AMR/ SCADA/ DMS/ OMS projects in any Global Power Distribution Utility in the last 5 financial years (i.e. FY 2014-15 onwards)."</i>	<b>Please refer Amendment No. 5 to RfP.</b>
23.			For Documentary proof, in case the Lead bidder or consortium partner is a <b>Distribution Licensee/ Distribution Franchisee, Regulatory approval and self-experience certificate dully signed by the Authorized Signatory may be considered</b>	<b>Please refer Amendment No. 5 to RfP.</b>
24.			In case of Distribution Franchisee / Distribution Licensee, <b>kindly accept signature of Authorised Signatory who is authorized to sign the Bid document instead of MD/CEO of the Company.</b>	<b>Please refer Amendment No. 5 to RfP.</b>
25.	Volume-I, Section D: Instruction to Bidders  Clause 4 G.5 (General Pre-Qualification Criteria)	Undertaking from the Bidder for investment of 70% of project cost	<b>We understand this is applicable for the Lead Bidder of the Consortium.</b> Please clarify	<b>In case of Consortium, the Lead Bidder shall provide the Undertaking on behalf of all Consortium Members.</b>
26.	Volume-I, Section D: Instruction to Bidders  Clause 4 G.7(a) (General Pre-Qualification Criteria)	The Sole Bidder/ Lead member of Consortium Bidder should have following certificates which should be valid as on date of bidding: 1. ISO 9001:2008/2015 2. ISO 27001 3. ISO 50001	The clause may be modified as: <i>"The Sole Bidder/ Lead member of Consortium Bidder/ <b>JV or any of its Holding Companies</b> should have these certificates which should be valid as on date of bidding."</i>	<b>Please refer Amendment No. 5 to RfP.</b>
27.		4. CMMI Level 3 DEV or above for	Sub-Contractors' experience may be	<b>Please refer Amendment</b>

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		Software Development.	considered	<b>No. 5 to RfP.</b>
28.		OR CMMI level 3 SVC (Service delivery project from IT & OT	In order to have broader participation of the bidders, it is proposed that <b>QR as per RECPDCL may be followed.</b>	<b>Please refer Amendment No. 5 to RfP.</b>
29.			<b>ISO 50001 does not have any relevance for Smart Grid implementation and may be removed.</b>	<b>Please refer Amendment No. 5 to RfP.</b>
30.			Please consider ISO 50001 or 14001 and amend the clause as below: <b><i>The Sole Bidder/ Lead member of Consortium Bidder should have following certificates which should be valid as on date of bidding:</i></b> <b><i>1. ISO 9001:2008/2015</i></b> <b><i>2. ISO 27001</i></b> <b><i>3. ISO 50001/14001</i></b> <b><i>4. CMMI Level 3 DEV or above for Software Development.</i></b> <b>OR</b> <b>CMMI level 3 SVC</b>	<b>Please refer Amendment No. 5 to RfP.</b>
31.			CMMI focuses strictly on Software whereas ISO 9001 includes Hardware, Software, Processed Material and Services, Hence, ISO 9001 is a high certification. <b>Either of ISO 9001 or CMMI should be allowed</b>	<b>Please refer Amendment No. 5 to RfP.</b>
32.	Volume-I, Section D: Instruction to Bidders  Clause 4 G.7(b) (General Pre-Qualification Criteria)	The Sole Bidder / Lead member of Consortium Bidder should possess minimum Class 'B' or above electrical contractor licenses issued by Electrical Inspectorate of any State Govt.	<b>Please delete this clause as the same is applicable for Distribution Franchisee/ Distribution Licensee and not applicable for IT Service Provider</b>	<b>Please refer Amendment No. 5 to RfP.</b>
33.			<b>License of Subcontractor who shall be</b>	<b>Please refer Amendment</b>



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			carrying out the field activity, should also be considered OR the Lead Bidder should be allowed to obtain desired electrical contractor license before commencement of supply.	No. 5 to RfP.
34.	Volume-I, Section D: Instruction to Bidders  Clause 4 G.7(c) (General Pre-Qualification Criteria)	The Bidder / Consortium member having meter manufacturing experience shall have BIS certification for IS: 16444 with latest amendments for the meter to be supplied against this bid.	The Bidder / Consortium member having meter manufacturing experience shall have BIS certification for IS: 16444 with latest amendments for the meter to be supplied against this bid <b>or bidder can submit the Type Test Reports and BIS within 6 months of Lol or start of meter installation work, whichever is earlier.</b>	<b>Please refer Amendment No. 5 to RfP.</b>
35.			The clause may be modified as: <i>"The Bidder / Consortium/ <b>Sub Contractor</b> member having meter manufacturing experience shall have BIS certification for IS: 16444 with latest amendments for the meter to be supplied against this bid."</i>	<b>Please refer Amendment No. 5 to RfP.</b>
36.			<b>The clause may be modified as:</b> <i>"The Bidder/ Consortium member having Meter Manufacturing experience <b>shall submit any one Meter variant BIS Licence as per IS:16444 along with the Bid and rest of the Meter variant's BIS Licence before commencement of Supply for the Meters offered against this Tender</b>".</i>	<b>Please refer Amendment No. 5 to RfP.</b>
37.	Volume-I, Section D: Instruction to Bidders	The Minimum Average Annual Turnover (MAAT) requirement of the bidder (The	MAAT requirement may be changed to Rs. 50 Crores.	<b>Please refer Amendment No. 5 to RfP.</b>

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38.	Clause 4 F1 (General Pre-Qualification Criteria)	Average of Best Three Financial Years out of the Last Five Financial Years preceding i.e. FY 2013-14) as indicated in the following Table-Fin-1 shall not be less than Rs. 100 Crores.	MAAT requirement has been mentioned is much lesser as the Project Cost (CAPEX + OPEX) over 9 years horizon will be much more than that. <b>It is suggested to change it to at least 3-4 times of the total Project cost</b>	<b>Please refer Amendment No. 5 to RfP.</b>
39.		The bidder has to furnish the certificate from the Statutory Auditor of the Bidder(s) certifying the Project related Annual Turnover of the company only (excluding its Associated Companies on Standalone Basis) based on audited accounts of the last Five Financial Years. In case the bidder has executed any project in Consortium, the project related turnover certified by the Statutory Auditor of the Bidder(s) should reflect his share of the project related turnover only.	<b>Please accept CA certificate</b> supported by Financial Statements audited by Statutory Auditor	<b>The provisions of the RfP shall prevail.</b>
40.			<b>We request you to kindly define/elaborate the word 'Project'.</b>  <b>However, we request to consider the Total Turnover of the Company for MAAT requirement</b>	<b>Please refer Amendment No. 5 to RfP.</b>
41.	Volume-I, Section D: Instruction to Bidders  Clause 4 F2 (General Pre-Qualification Criteria)	The latest Un-Utilised credit facility as per the Banker's Certificate as per the proforma (Annexure-VII) at the end of Month preceding to the Month of Tender shall be considered.	<b>Please provide Annexure-VII</b>	<b>Please refer Amendment No. 5 to RfP.</b>
42.	Volume-I, Section D: Instruction to Bidders	The Bidder or a member of consortium bidder should have experience of manufacturing or supply of Static Electricity Meters for power distribution utilities in India in the last 5 financial years (i.e. FY 2014- 15 onwards) as per the following: • Minimum 2,50,000 Single-phase meters.	<b>Sub-Contractors' experience may be considered</b>	<b>Please refer Amendment No. 5 to RfP.</b>
43.	Clause 4 B1 (Experience as a Meter Manufacturer)		<b>JV's experience may be considered.</b> Further, allowing <b>Global Experience</b> will allow the specifications and Eligibility Criteria be open & generic in nature and, accordingly, more experienced and knowledgeable bidders with global reput will participate in the tender.	<b>Please refer Amendment No. 5 to RfP.</b>  <b>Global Experience shall not be considered.</b>

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		<ul style="list-style-type: none"> <li>Minimum 1,00,000 Three phase Whole Current meters.</li> <li>Minimum 10,000 LTCTTVM/ HTCTTVM.</li> </ul> <p>All these meters shall either be AMR Meters or shall have Communication port</p>		
44.	Volume-I, Section D: Instruction to Bidders  Clause 4 B2 (Experience as a Meter Manufacturer)	The Bidder or a member of consortium bidder must have successfully supplied or implemented AMR or AMI projects in an Indian Power Distribution Utility during the last 5 financial years (i.e. FY 2014-15 onwards). The Bidder should have either supplied or implemented Meters with inbuilt/ modular/ external communication module and associated DCU /Gateway/ Router (as applicable) and MDAS/ HES application.	<p><b>Please include Global Power Distribution &amp; Transmission Utility along with Indian Power Distribution Utility.</b></p> <p>We would also request to allow self-certification for Global Clients.</p>	<p><b>Please refer Amendment No. 5 to RfP.</b></p> <p><b>Global Experience shall not be considered.</b></p>
45.		<p>inbuilt/ modular/ external communication module and associated DCU /Gateway/ Router (as applicable) and MDAS/ HES application.</p> <p>a) One (1) project completed with &gt;= 70,000 meters <b>OR</b></p> <p>b) Two (2) Projects completed with &gt;= 50,000 meters each <b>OR</b></p> <p>c) Three (3) projects completed with &gt;= 30,000 meters each</p>	<p>The clause may be modified as:</p> <p><i>"The Bidder or a member of consortium bidder must have successfully <del>supplied</del> <b>or implemented</b> AMR or AMI projects in an Indian Power Distribution Utility during the last 5 financial years (i.e. FY 2014-15 onwards). The Bidder should have implemented Meters with inbuilt/ modular/ external communication module and associated DCU /Gateway/ Router (as applicable) and MDAS/ HES application.</i></p> <p><i>a) One (1) project completed with &gt;= 70,000 meters OR</i></p> <p><i>b) Two (2) Projects completed with &gt;= 50,000 meters each OR</i></p> <p><i>c) Three (3) projects completed with &gt;= 30,000 meters each</i></p> <p><b><i>In case Bidder or consortium member is a Distribution Licensee or</i></b></p>	<p><b>Please refer Amendment No. 5 to RfP.</b></p>

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			<b><i>Distribution Franchisee, self-certificate duly signed by the Authorized signatory of the company shall be submitted as Documentary proof</i></b>	
46.			As there are not many such high magnitude AMR/ AMI Projects completed in India in last 5 financial years, the clause may be modified as: <i>"The Bidder or a member of consortium bidder must have successfully supplied or implemented/ <b>under implementation</b> AMR or AMI projects in an Indian Power Distribution Utility during the last 7 financial years (i.e. FY 2012-13 onwards). The Bidder should have either supplied or implemented/ <b>under implementation</b> Meters with inbuilt /modular /external communication module and associated DCU/Gateway/Router (as applicable) for minimum 40% of Tender quantity i.e. 33,000 Meters".</i>	Please refer Amendment No. 5 to RfP.
47.			<b>Please accept Performance Certificate as well as documentary proof</b> as every Discom follows its own practice in issuing in Certificates. Some Discoms issue Completion Certificate while other issue Performance Certificate.	Please refer Amendment No. 5 to RfP.
48.	Volume-I, Section D: Instruction to Bidders	The Bidder or a member of consortium bidder must have Supplied or implemented a project of minimum 1000 Smart Meters with GPRS or RF communication in India in last 5 financial years (i.e. 2014-15 onwards).	<b>JV's experience may be considered.</b>	Please refer Amendment No. 5 to RfP.
49.	Clause 4 B3 (Experience as a Meter Manufacturer)		As Smart Meter concept is new and very few Orders have been finalized in India.  <b>So, it is suggested to accept Smart Pre-Paid Meters with Inbuilt or</b>	Please refer Amendment No. 5 to RfP.

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			<b>External communication in place of ‘Smart Meters’ and amend the clause as:</b> <i>“The Bidder or a member of consortium bidder must have Supplied or implemented/ under implementation project of minimum 16,000 nos. (i.e 20% of Tender quantity) of Smart Meters with GPRS or RF communication/ Smart Pre-Paid Meters with Inbuilt or External communication in India in last 5 financial years (i.e. 2014-15 onwards).</i>	
50.	Volume-I, Section D: Instruction to Bidders  Clause 4 B5 (Experience as a Meter Manufacturer)	The Bidder or a member of consortium bidder should be an authorized implementation Partner of OEM products proposed in the bid and should possess all the necessary authorizations of the OEM to supply, customize, implement and support their OEM solutions	<b>This clause should be part of General qualification criteria as Meter Manufacturer is OEM of one of the equipment of AMI system.</b> Please modify accordingly	<b>Please refer Amendment No. 5 to RfP.</b>
51.	Volume-I, Section D: Instruction to Bidders	The Bidder or a member in case of consortium Bidder must have successfully implemented AMR or AMI in an Indian Power Distribution Utility with minimum 80,000 consumers in the last 5 financial years (i.e. FY 2014-15 onwards).	In order to enable wider participation in the bidding process, please change the minimum no. of consumers to 20,000.	<b>Please refer Amendment No. 5 to RfP.</b>
52.	Clause 4 C1 (AMI/ AMR Experience)		In order to enable wider participation in the bidding process, please change the minimum no. of consumers to 10,000.	<b>Please refer Amendment No. 5 to RfP.</b>
53.			The clause may be modified as: <i>“The Bidder or a member in case of consortium Bidder must have successfully implemented / under implementation AMR or AMI in an Indian Power Distribution Utility with <b>minimum 40% of Tender quantity i.e. 33,000 Meters</b> in the last 5 financial years (i.e.</i>	<b>Please refer Amendment No. 5 to RfP.</b>

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			<i>FY 2014-15 onwards)</i> ".	
54.			<b>Please include Global Power Distribution &amp; Transmission Utility along with Indian Power Distribution Utility.</b> We would also request to allow self-certification for Global Clients.	<b>Please refer Amendment No. 5 to RfP.</b>  <b>Global Experience shall not be considered.</b>
55.			The condition in this clause is already being considered in Clause B.2, so this clause can be deleted.	<b>Please refer Amendment No. 5 to RfP.</b>
56.	Volume-I, Section D: Instruction to Bidders  Clause 4 D1 (IT & Communication Service Provider Experience)	The Bidder or a member of consortium bidder must have successfully implemented RF Mesh Technology (NIC and Network Component along with respective software i.e. HES/NMS) and/ or GPRS Technology for smart metering project with connect/ disconnect facility in any Indian or Global Power Distribution Utility in the last five (5) financial years (i.e. 2014-15 onwards) meeting any one of the following criteria: a) One project completed with >= 1,00,000 nodes <b>OR</b> b) Two projects completed with >= 70,000 nodes in each project <b>OR</b> c) Three projects completed with >= 50,000 nodes in each project d) At least one project should be in operation for at least 1 year as on Bid Due Date.	Request to allow Sub Contractor to meet this experience	<b>Please refer Amendment No. 5 to RfP.</b>  <b>Global Experience shall not be considered.</b>
57.	Volume-I, Section D: Instruction to Bidders  Clause 4 D3 (IT & Communication Service Provider Experience)	The Bidder or a member of consortium bidder should have implemented an AMI Project of minimum 1000 nos. of Smart Meters in India and scope must include Supply, Installation of AMI, Head End	The clause may be modified as: <i>"The Bidder or a member of consortium/ JV bidder should have implemented an AMI Project of minimum 1000 nos of Smart Meters in India or Globally and</i>	<b>Please refer Amendment No. 5 to RfP.</b>  <b>Global Experience shall not be considered.</b>

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		System (HES) and Meter Data Management System (MDMS) and integration with existing MDMS and Data Analytics of any Indian Power Distribution Utility.	<i>scope must include Supply, Installation of AMI, Head End System (HES) and Meter Data Management System (MDMS) and integration with existing MDMS and Data Analytics of any <b>Global Power Distribution Utility.</b>"</i>	
58.	Volume-I, Section D: Instruction to Bidders  Clause 4 E1 (Experience as System Integrator)	The Bidder or the lead member of the consortium bidder should have system integration experience of AMI/ AMR with MDM and Billing application for minimum 40,000 meters and the same should be in successful operation for at least one year as on Bid Due Date.	In order to enable wider participation in the bidding process, <b>please change the minimum no. of meters to 20,000</b>	<b>Please refer Amendment No. 5 to RfP.</b>
59.	Volume-I, Section D: Instruction to Bidders  Clause 5.1	In case Bidder does not manufacture or produce any major equipment or component of the overall Solution to be provided as the Scope of Work, then the Bidder is required to submit the Manufacturer's/ OEM's Authorization stating the required support from the Manufacturer/ OEM with respect to supply, support, etc for a period of ten (10) years from the date of operational acceptance of the system by PFCCL/ OPTCL	Kindly relax the supportability duration to 7 years maximum as it is not possible to commit supportability for up to 10 years for IT equipment.	<b>The provisions of the RfP shall prevail.</b>
60.	Volume-I, Section D: Instruction to Bidders  Clause 5.2	For start-up firms, gazette notification dated 17 Feb 2016, G.S.R. 180 (E) and policy circular No. 1(2)(1)/ 2016-MA dated 10th March 2016, and the subsequently issued guidelines shall be considered for waiving off respective qualifying requirements for sourcing of meters subject to mandatorily meeting quality and	<b>Please elaborate on the quantity entitlement and list of document to be submitted for a start-up company</b>	<b>Please refer Amendment No. 5 to RfP.</b>

Clarifications to Pre-Bid Queries against the Request for Proposal (RfP) for Selection of Smart Grid Implementing Agency (SGIA) for implementation of Smart Grid in Rourkela City

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
		technical specifications as specified in Volume-1 and Volume-2 of this RFP.		
61.	Volume-I, Section D: Instruction to Bidders Clause 5.4.3	All consortium members shall jointly meet the qualifications criteria specified at para 4 or at any other section mentioned in this document	It is proposed that <b>QR as per RECPDCL may be followed.</b>	<b>The provisions of the RfP shall prevail.</b>
62.	Volume-I, Section D: Instruction to Bidders Clause 5.4.4	The bid shall be signed so as to legally bind all members, indicating the role and responsibility of lead member and other Consortium members which cannot be altered later on. A copy of Consortium undertaking on non-judicial stamp paper duly notarized with sub registrar office of appropriate value satisfying the above condition shall be submitted with the bid indicating role and duties of each Consortium member	<b>There should be provision for changing the consortium arrangement</b> for the supporting bidders in case there is an extreme need where the consortium partners defaults in delivery. The entire responsibility and liability of execution should rest on the Lead Bidder only.	<b>Before changing any Consortium Partner, the SGIA would have to take prior approval of PFCCCL/ OPTCL subject to the condition that the new partner shall meet all the qualification criteria mentioned in the RfP.</b>
63.	Volume-I, Section D: Instruction to Bidders Clause 5.4.5	In case of such Consortium becoming a successful Bidder, the contract shall be signed so as to be legally binding on all members of Consortium. All members of the Consortium shall, be liable jointly and severally for execution of the job and fulfilling the terms and conditions of the agreement	We request to change the clause so that <b>Lead Bidder should have the sole responsibility and liable to execute the project and provide undertaking on behalf of the other consortium bidders for successful execution of the project.</b> All other bidders of the consortium are responsible to the Lead Bidder for their respective portions of delivery	<b>The provisions of the RfP shall prevail.</b>
64.	Volume-I, Section D: Instruction to Bidders Clause 7.1	The bidder is required to submit a Bid Security of Rs. 2 cr. as per the format prescribed in <b>Error! Reference source not found.</b>	<b>Bid Security amount may be changed to Rs. 1 Crore</b>	<b>The provisions of the RfP shall prevail.</b>
65.	Volume-I, Section D: Instruction to Bidders	The Bidder shall make independent	As the project duration is very long, there	<b>The provisions of the RfP</b>



Clarifications to Pre-Bid Queries against the Request for Proposal (RfP) for Selection of Smart Grid Implementing Agency (SGIA) for implementation of Smart Grid in Rourkela City

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Clause 8.1	enquiry and satisfy itself with respect to all the required information, inputs, conditions (including site conditions) and circumstances and factors that may have any effect on its Bid. Once the Bidder has submitted the Bid, the Bidder shall be deemed to have examined the laws and regulations in force, and fixed its price taking into account all such relevant conditions and also the risks, contingencies and other circumstances which may influence or affect the services performed within the scope of work, as provided in this RFP. Accordingly, the Bidder acknowledges that, on being selected as Project Implementing Agency, it shall not be relieved from any of its obligations under the RFP Documents nor shall be entitled to any extension of time for commencement of supply or financial compensation for any reason whatsoever	is every possibility of changes in project site conditions, scope changes, etc. during the entire project duration. <b>It will be not be possible to provide a blanket undertaking from Bidders perspective and should be examined as appropriate.</b>	<b>shall prevail.</b>
66.	Volume-I, Section D: Instruction to Bidders Clause 9.1	No member of a consortium Bidder can be an independent Bidder or a member of another consortium Bidder.	It is proposed that <b>QR as per RECPDCL may be followed.</b>	<b>The provisions of the RfP shall prevail.</b>
67.	Volume-I, Section D: Instruction to Bidders Clause 9.9	OPTCL/PFCCL reserves the right to remove any proposed subcontractor of the Bidder prior to award of any work related to either the Bidding or Project, or during the work, without assigning any reason thereof	<b>The clause may be deleted.</b>	<b>The provisions of the RfP shall prevail.</b>
68.	Volume-I, Section D: Instruction to Bidders	The Smart Grid Project Area details of Rourkela are as follows:.....	The Smart Grid Project Area details of Rourkela are as follows:.....There are	<b>Please refer the Baseline KPI Report (Addendum No.</b>

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Clause 10.2		discrepancies of BoQ in the Price Bid Schedule e.g. Total Consumer Numbers (Selected bidder will propose & establish the solution for approx. 82,000 consumers but it should be scalable to cover the entire OPTCL consumers).....Please confirm whether we need to consider the quantities mentioned in the Price Bid Schedule only	<b>2 to RfP) for the details.</b>
69.	Volume-I, Section D: Instruction to Bidders  Clause 10.4	The details of baseline KPI study for FY 2018-19 will be shared with the bidders before the bid submission date. The bidder has to reduce the AT&C loss to 10% within 10 years from the Date of issuance of Letter of Intent (LoI) to the successful bidder	The total project duration is 106 months (9 years) from the date of signing the contract out of which 2 years is the implementation period. Also AT&C loss reduction will also depend on some of the activities which SGIA does not have any control e.g. payment connection or technical losses, theft, political issues and considerations. <b>Hence, sole responsibility of AT&amp;C loss reduction can't be guaranteed by deploying AMI, SCADA/ DMS/ OMS system.</b> <b>SGIA can be responsible for AT&amp;C loss reduction to the extent linked to those KPIs only that are directly linked with implementation of Smart Grid.</b>	<b>The provisions of the RfP shall prevail.</b>
70.			The clause may be modified as: <b><i>"The details of baseline KPI study for FY 2018-19 will be established jointly by the Utility and the successful bidder shared with the bidders before the bid submission date. The bidder</i></b>	<b>The provisions of the RfP shall prevail.</b>

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
			<del>has to reduce the AT&amp;C loss to 10% within 10 years from the Date of issuance of Letter of Intent (LoI) to the successful bidder."</del>	
71.			The project duration should be 20 years.	The provisions of the RfP shall prevail. NSGM has approved the Project with an implementation period of 2 years and FMS period of 8 years.
72.			Smart meters will identify the reasons of AT&C losses and the loss reduction can be achieved through upgradation of defective equipment, cable etc. and also by regularizing identified illegal connections and penalizing the defaulters. <b>The implementing agency would share the details with utility and in-turn the utility has the responsibility to take the necessary remedial action</b>	The provisions of the RfP shall prevail.
73.			Please provide detailed baseline figures.	Please refer the Baseline KPI Report (Addendum No. 2 to RfP).
74.	Volume-I, Section D: Instruction to Bidders  Clause 17.3	The Financial Bid will be evaluated based on Percentage of Incremental Revenue to be shared with utility arising out of reduction in AT&C loss, quoted by the Bidder which shall be minimum 25% in each year of operation. Financial bids of bidders quoting below 25% shall be rejected	The clause may be modified as: <i>"The Financial Bid will be evaluated based on Percentage of Incremental Revenue <b>and cost reduction</b> arising out of reduction in AT&amp;C loss, quoted by the Bidder <del>which shall be minimum 25% in each year of operation. Financial bids of bidders quoting below 25% shall be</del></i>	The provisions of the RfP shall prevail.

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
75.			<b><i>rejected</i></b> We would like to understand whether the Commercial or Total Financial bid value as per the Price Bid Schedule has any relevance towards evaluation process apart from that fact that Financial bids of bidders quoting below 25% shall be rejected	<b>The release of Grant would be 30% of the Price quoted by the bidder limited to 30% of NSGM approved DPR cost.</b>  <b>However, Financial Bid will be evaluated based on Percentage of Incremental Revenue to be shared with utility arising out of reduction in AT&amp;C loss, quoted by the Bidder which shall be minimum 25% in each year of operation. Financial bids of bidders quoting below 25% shall be rejected.</b>
76.	Volume-I, Section D: Instruction to Bidders  Clause 17.5	The Bidder shall quote the charges for Facility Management Services (FMS). However, these charges will be applicable only after the Operational Acceptance testing. Any link charges before the operation acceptance test shall be in the Bidder's scope	Is the Bidder supposed to consider the link charges as per the details provided in the Price Bid Schedule only? Whether the existing optical fiber network of OPTCL can be leveraged? If so, what links can be used out of the given scope?	<b>The same would be provisioned by Utility in the existing Optical fibre network.</b>  <b>However, all link charges before the operation acceptance test shall be in the Bidder's scope.</b>  <b>The Cost as per Price Bid Schedule is as per approval given by NSGM, GoI and</b>

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
				<p>release of Grant would be limited to 30% of NSGM approved DPR cost.</p> <p>The balance funds, if required, need to be arranged by the selected SGIA.</p>
77.	Volume-I, Section E: Tender Opening & Bid Evaluation  Clause 4.4	If Bidder desires to take any non-material deviation from the terms & conditions of the tender, it should be mentioned specifically in the deviation sheet as per the format prescribed in <b>Error! Reference source not found.</b> unless such deviations are mentioned in this deviation sheet, the same will not be taken into consideration	Please clarify how PFCCL/ OPTCL would evaluate the bids with deviations on legal & commercial terms & conditions that may not be of material deviation or impacting the Smart Grid scope of delivery.	Please refer Volume-I, Section E, clause 4.2 regarding definition of “material deviations”
78.	Volume-I, Section E: Tender Opening & Bid Evaluation  Clause 6.5.1 (Technical Evaluation Criteria)	..... The Bidders scoring equal to or more than 70 (seventy) marks out of 100 as described in technical bid evaluation detailed Technical Evaluation Methodology given below shall qualify for the next stage of evaluation.	The basis of scoring should be aligned appropriately for all stakeholders.	Please refer Amendment No. 5 to RfP
79.	Volume-I, Section E: Tender Opening & Bid Evaluation  Clause 6.5.1(2) (Technical Evaluation Criteria)	The Bidder must have successfully executed & implemented Smart Grid/AMI/AMR projects in an Indian Power Distribution Utility in the last 5 years (i.e. FY 2014-15 onwards). 1,00,000 <= No. of meters <= 2,50,000: 5 Marks No. of meters >2,50,000 : 10 Marks	<p><b>Please include Global Power Distribution &amp; Transmission Utility along with Indian Power Distribution Utility.</b></p> <p>We would also request to allow self-certification for Global Clients.</p>	<p>Please refer Amendment No. 5 to RfP.</p> <p>Global Experience shall not be considered.</p>
80.			In Pre-qualification criteria clause 4.B.2, minimum quantity for AMR or AMI experience is 70,000. So if a bidder or consortium member satisfies this	Please refer Amendment No. 5 to RfP.

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
			<p>requirement, he will not get any marks in technical evaluation criteria. Hence, the clause may be modified as:</p> <p><b><i>“The Bidder must have successfully executed &amp; implemented Smart Grid / AMI / AMR projects in an Indian Power Distribution Utility in the last 5 years (i.e. FY 2014-15 onwards). 70,000 &lt;= No. of meters &lt;= 1,50,000: 5 Marks No. of meters &gt;1,50,000 : 10 Marks”</i></b></p>	
81.			<p>The clause may be modified as:</p> <p><b><i>“The Bidder or a member of consortium bidder must have successfully supplied or implemented/ under implementation AMR or AMI projects in an Indian Power Distribution Utility during the last 7 financial years (i.e. FY 2012-13 onwards). 10,000 &lt;= No. of meters &lt;= 33,000: 5 Marks No. of meters &gt;33,000 : 10 Marks”</i></b></p>	Please refer Amendment No. 5 to RfP.
82.	<p>Volume-I, Section E: Tender Opening &amp; Bid Evaluation</p> <p>Clause 6.5.1(4) (Technical Evaluation Criteria)</p>	<p>The Bidder should have implemented a project involving minimum 1000 Smart Meters with GPRS / RF communication technology in India in last 5 financial years (i.e. 2014-15 onwards). 1,000&lt;= No. of meters &lt;= 5,000: 10 Marks No. of meters &gt;5,000 : 20 Marks</p>	<p>The clause may be modified as:</p> <p><b><i>“The Bidder or a member of consortium bidder must have supplied or implemented/ under implementation project of minimum 16,000 nos. (i.e 20% of Tender quantity) of Smart Meters with GPRS or RF communication /Smart Pre-Paid Meters with Inbuilt or External communication in India in last 5 financial years (i.e. 2014-15 onwards). 5,000&lt;= No. of meters &lt;= 16,000: 10 Marks No. of meters &gt;16,000 : 20 Marks”</i></b></p>	Please refer Amendment No. 5 to RfP.

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
83.	Volume-I, Section E: Tender Opening & Bid Evaluation  Clause 6.5.1(5) (Technical Evaluation Criteria)	The Bidder must have successfully implemented RF Mesh Technology (NIC and Network Component along with respective software i.e. HES/NMS) and/ or GPRS Technology for smart metering project with connect/disconnect facility in any Indian or Global Power Distribution Utility in the last 5 (five) financial years (i.e. 2014-15 onwards) meeting any one of the following criteria: a. One project completed with $\geq 1,00,000$ nodes ; <b>OR</b> b. Two projects completed with $\geq 70,000$ nodes in each project ; <b>OR</b> c. Three projects completed with $\geq 50,000$ nodes in each project	<b>Please include Global Power Distribution &amp; Transmission Utility along with Indian Power Distribution Utility.</b> We would also request to allow self-certification for Global Clients.	<b>Please refer Amendment No. 5 to RfP.</b>  <b>Global Experience shall not be considered.</b>
84.	Volume-I, Section E: Tender Opening & Bid Evaluation  Clause 7.1 (Opening of Financial Bid)	Financial Bids in prescribed formats of Volume IV of only those Bidders who qualify the technical evaluation will be opened. Bidders shall submit the Financial Bid online in the format given in Vol. IV ("Financial Bid") clearly indicating prices item-wise in INR and percentage of incremental benefit revenue to be shared with Utility arising out of AT&C loss reduction and FMS charge for Year 1 to 8, both in figures and words.  <b>Note:</b> At the time the Contract is awarded, the quantity indicated in the BoQ of the Financial Bid shall not be modified. However, OPTCL/ PFCCL reserves the	Please confirm whether the <b>quantity variation subject to overall variation in price of <math>(\pm)10\%</math> is applicable during the initial contracting phase and not during the period of execution of 9 years.</b>	<b>The overall variation in price of <math>(\pm)10\%</math> is applicable during the implementation period of 2 years only.</b>

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
		right to increase or decrease the quantity subject to overall variation in price of (±)10% without any change in the unit prices or other terms and conditions of the RFP and the Bid.		
85.	Volume-I, Section E: Tender Opening & Bid Evaluation  Clause 14.3 (Payment & Revenue Sharing)	The revenue from this project would be credited to an escrow account. OPTCL will have the first right to take away the incremental revenue as per the Award of Contract on account of AT&C loss reduction with respect to the baseline KPIs based on TPIEA study at the end of every financial year and balance will be paid to successful bidder. In the event, no AT&C loss reduction takes place at the end of a particular financial year, then payment will be released after deduction of incremental revenue	The clause may be modified as: <i>"The revenue from this project would be credited to an escrow account. <b>Bidder will have the first right to take away the incremental revenue</b> as per the Award of Contract on account of AT&amp;C loss reduction with respect to the baseline KPIs based on TPIEA study at the end of every financial year <b>and balance will be paid to OPTCL.</b> In the event, no AT&amp;C loss reduction takes place at the end of a particular financial year, then payment will be released after deduction of incremental revenue"</i>	<b>The provisions of the RfP shall prevail.</b>
86.			Please clarify the situation, <b>under what circumstances there will be revenue increase in any financial year without AT&amp;C loss getting impacted and also what KPI gets impacted through the Smart Grid solution that SGIA is responsible for such circumstances</b>	<b>The Incremental Revenue will be calculated every year with respect to AT&amp;C loss value of the Base Year. Hence, there could be scenario wherein there is no AT&amp;C loss reduction from year 'n' to year 'n+1'. But, there would still be incremental revenue with respect to the AT&amp;C loss value in the Base Year.</b>
87.	Volume-I, Section F:	Scope of Work & Proposed Features of	SCADA is a specialized Solution,	<b>The provisions of the RfP</b>



Clarifications to Pre-Bid Queries against the Request for Proposal (RfP) for Selection of Smart Grid Implementing Agency (SGIA) for implementation of Smart Grid in Rourkela City

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	General Conditions of Contract  Clause 13.1(b) (Scope of Work)	implementation of Smart Grid in Rourkela a. To set up AMI for LT and HT Consumers with HES, MDMS across Smart City Rourkela Area. b. To set up SCADA DMS for the Entire System including Outage Management System c. Formation of CC (Control Centre) and Disaster Recovery Centre d. Integration of CC and DR with Urja Mitra (Power Outage Information System) e. Creation of a Web Based Customer Portal f. Creation of DTMU (Distribution Transformer Monitoring Unit) g. Metering Billing and Collection h. 3-seater Call Centre (upgradable up to 10-Seater)	incorporating specialized hardware, software & integration skills. <b>Hence, there should be separate tender for the same &amp; should not be intermixed with Smart Metering Solution.</b>	<b>shall prevail.</b>
88.			<b>The scope of work is not consistent with rest of the RfP.</b> Either there is addition of some requirements/ features or there are some requirements/ features missing. The scope of work of following Smart Grid components is not given in the tender document: a. Creation of DTMU (Distribution Transformer Monitoring Unit) b. Metering Billing and Collection c. 3-seater Call Centre (upgradable up to 10-Seater) Also, the above components are not mentioned in BOQ Please clarify whether these are included in scope of work or not.	<b>The BoQ items mentioned in the RfP are in line with the DPR approved by NSGM.</b>  <b>Bidders are required to evaluate the need for any extra item which they might require for successful implementation of the project and quote the same in the Price Bid.</b>  <b>However, the release of Grant would be 30% of the Price quoted by the bidder limited to 30% of NSGM approved DPR cost.</b>
89.			<b>Please consider cloud based data centre for better up time &amp; availability</b>	<b>The provisions of the RfP shall prevail.</b>
90.			<b>The scope of work requires implementation of Metering, Billing and Collection System as well as 3-seater Call Centre system whereas at other place in the RfP, it has been mentioned that integration of the AMI system should be done with the</b>	<b>The entire Metering, Billing and Collection System would be in the scope of the selected SGIA.</b>  <b>Further, R-APDRP has not been implemented in</b>

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
			<b>existing billing systems deployed under RAPDRP project. Please clarify</b>	<b>Rourkela.</b>
91.	Volume-I, Section F: General Conditions of Contract  Clause 19.1 (Payment Schedule)	The amount corresponding to the sum of Grant from NSGM (i.e. 30% of CAPEX) would be paid to the SGIA in line with the payment terms as per NSGM's Guidelines	Payment terms for 30% Grant from NSGM have been provided in RfP, but for remaining 70% investment, payment terms have not been clearly defined. We understand that payment terms for 70% investment cost are linked to AT&C Loss Reduction. However, there are factors like Network Management, Billing, collection etc. that are to be monitored & controlled for reduction of AT&C Loss reduction which are not attributable to SGIA as per current scope of work defined in RfP. <b>Please change the payment terms and pay the 70% cost of the project in the form of monthly EMI, independent of AT&amp;C loss reduction.</b>	<b>Please refer Amendment No. 5 to RfP.</b>
92.			<b>The entire 30% of the CAPEX (NSGM Grant) may be disbursed on Operational Acceptance and not link to Completion of 1-year warranty period (1st year FMS)</b>	
93.			<b>Mobilization Advance should be provided to the successful bidder.</b>	
94.			The payment terms may be modified as: <b>a. Advance Payment: 10% of total value of contract including GST (Supply &amp; Installation) as "Mobilization Advance" after signing the contract with PFCCL / OPTCL.</b>	

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
			<b>b. Supply Payment: Balance 90% including GST against delivery of material in OPTCL Stores.</b> <b>c. Installation &amp; Commissioning Payment: Balance 90% including GST on Prorata basis against Installation and Commissioning.</b> <b>d. FMS: 100% including GST on Monthly basis against submission of bills.</b>	
95.			<b>The remaining 70% payment may be released on rental per meter per month basis for the period of O&amp;M</b>	
96.	Volume-I, Section F: General Conditions of Contract  Clause 20.1 (Performance Security)	The Contractor shall, within fourteen (14) days of the notification of Contract award, provide a Performance Security equivalent to 10% of estimated contract cost of Rs 100 Crore. i.e. Rs 10 Crore for the due performance of the Contract in the amounts and currencies specified in the RFP based on the format prescribed in <b>Error! Reference source not found.</b>	Based on the OPEX (revenue sharing model) nature of the project, <b>we would request performance security should be on 30% of the CAPEX (NSGM Grant) and also to be reduced progressively.</b> Also there are SLAs attached to the project for the entire duration where SGIA will be penalized sufficiently for non-performance.	<b>Please refer Amendment No. 5 to RfP.</b>
97.			<b>Performance Security should be kept during project deployment stage for amount equivalent to 3-months service fee for quantities given in RfP.</b>	<b>The provisions of the RfP shall prevail.</b>
98.			Please clarify the <b>validity period</b> of the bid and Performance Security	<b>The bid shall be valid for a period of 180 days from the bid submission deadline. The Performance Security shall be valid for 90 days beyond the end of validity period of the bid.</b>

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
99.	Volume-I, Section F: General Conditions of Contract  Clause 23.1 (Sub-Contracting)	The Contractor shall not be permitted to subcontract its obligations under the Contract with OPTCL. However, scope of work related to auxiliary supply and services may be subcontracted after seeking prior approval of PFCCL and OPTCL	Please clarify <b>for what all services sub-contracting is permitted and to what extent.</b>	<b>Please refer Amendment No. 5 to RfP.</b>
100.	Volume-I, Section F: General Conditions of Contract  Clause 30.1 (Liquidated Damages, Penalty and Incentive)	Except as provided under Clause <b>Error! Reference source not found.</b> below, if the Contractor fails to deliver any or all of the Goods or perform the Related Services within the period specified in the Contract, OPTCL shall without prejudice to all its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to 0.5% of the value of the Goods or Related Services of contract value for each week or part thereof of delay until actual delivery or performance, subject to a maximum of 10% of contract value, cumulatively for entire sum of Liquidated Damages across entire contract	Please clarify <b>whether Liquidated Damages should be applicable to 10% of NSGM Grant which is 30% for the Contract Value</b>	<b>Please refer Amendment No. 5 to RfP.</b>
101.			<b>It is suggested that aggregate liability of the Supplier to the Purchaser for all claim under the Contract whether direct or indirect, shall not exceed the amount which is 100% Grant to be disbursed to the SGIA towards implementation of the project that is 30% of the Total Contract Value</b>	<b>Please refer Amendment No. 5 to RfP.</b>
102.			<b>In case of delay, LD should be applicable on undelivered/ delayed portion only instead of on whole Contract value</b>	<b>Please refer Amendment No. 5 to RfP.</b>
103.	Volume-I, Section F: General Conditions of Contract  Clause 30.2 (Liquidated Damages, Penalty and Incentive)	In addition, the Contractor is liable to OPTCL for payment of penalty as specified in Volume II of this RFP	<b>Since the provision for penalty is already under clause 30.1 of RfP (i.e. Liquidated Damages, Penalty and Incentive), additional penalty should not be levied.</b>	<b>The provisions of the RfP shall prevail.</b>
104.	Volume-I, Section F: General Conditions of Contract	If the Goods and Related Services supplied do not meet the minimum specifications as per the Contract, and the	<b>The clause may be deleted.</b> With the existing provision, the project may not appear bankable to investors.	<b>The provisions of the RfP shall prevail.</b>

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Clause 30.3 (Liquidated Damages, Penalty and Incentive)	same is not replaced/ modified by the Contractor to meet the requirements within fourteen (14) days of being informed by OPTCL, OPTCL shall reserve the right to terminate the contract and recover liquidated damages by forfeiting the Performance Security submitted to OPTCL		
105.	Volume-I, Section F: General Conditions of Contract  Clause 36.1 (Force Majeure)	The Contractor shall not be liable for forfeiture of its Performance Security, liquidated damages, or termination for default if and to the extent that it's delays in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure	<b>If the contract is terminated due to any Force Majeure event, Discom shall pay to the vendor for the outstanding debt and 100% of equity.</b> <b>Additionally, if contract is terminated due to direct political Force Majeure (including but not limited to events such as expropriation/ takeover by the Govt.), an additional compensation to the extent of 20% of the equity should be provided to the vendor.</b>	<b>The provisions of the RfP shall prevail.</b>
106.	Volume-I, Section F: General Conditions of Contract  Clause 37.1(c)	Quantity variation for items under this contract subject to the limit of (±)20% of the existing number of items, covered under the Contract, at same per unit cost	<b>Quantity variation may be limited to maximum of 5% to 10%.</b>	<b>The provisions of the RfP shall prevail.</b>
107.	Volume-I, Section F: General Conditions of Contract  Clause 39 (Termination)	OPTCL may, without prejudice to any other remedy ..... However, the Contractor shall continue performance of the Contract to the extent not terminated.	It is suggested that the circumstances of termination be limited to instances of material breach only. Either party may terminate the Contract with a written notice of 60 (sixty) days	<b>The provisions of the RfP shall prevail.</b>
108.	Volume-I, Section F: General Conditions of Contract  Clause 39.4 (Consequences of	Upon Termination of the Contract, the Contractor shall: a) Prepare and present a detailed exit plan within five (5) calendar days of termination notice receipt to CEO, OPTCL ("Exit Plan").....	Please define the termination value of the project under various scenarios	<b>Please refer Amendment No. 5 to RfP.</b>

Clarifications to Pre-Bid Queries against the Request for Proposal (RfP) for Selection of Smart Grid Implementing Agency (SGIA) for implementation of Smart Grid in Rourkela City

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Termination)	..... The Contractor and the Authorized Personnel from OPTCL will sign a completion certificate at the end of successful completion (all points tracked to closure) of the exit Plan		
109.	Volume-I, Annexure 21 (Contract Agreement)  Clause 8.1	If due to any reason or decision of the Client/ Govt./ the Regulator, the Assignment is dropped and the Bidder is directed to discontinue work, the “Drop Dead Fee” would be limited to the payments received by the Bidder and the claims already raised, as per the payment terms relating to the Assignment, till the point of calling off the Assignment or as mutually agreed	The clause may be modified as: <i>“If due to any reason or decision of the Client/ Govt./ the Regulator, the Assignment is dropped and the Bidder is directed to discontinue work <b>after paying outstanding debt and 80% of the equity deployed by the bidder the Drop Dead Fee would be limited to the payments received by the Bidder and the claims already raised, as per the payment terms relating to the Assignment, till the point of calling off the Assignment or as mutually agreed”</b>”</i>	<b>The provisions of the RfP shall prevail.</b>
110.	New Clauses to be Added	-	Payment Security Mechanism through Escrow account should be there having amount equivalent to 2 months monthly bills at any time.  Further, it may be backed by state support agreement in case Discom fails to transfer its share in the Escrow account within the stipulated time.	<b>The provisions of the RfP shall prevail.</b>
111.			Please add necessary clauses of Critical Event of Default due to the Discom	

**Clarifications with respect to RfP (Volume – II)**

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
112.	Volume-II	Table -1: Details of Project Area.	Please provide <b>GIS data of consumers</b> covered under this RFP	<b>A GIS mapping of consumers has already been carried out. The GIS Data would be shared with the selected SGIA. However, the SGIA, if required, may verify the same independently.</b>
113.	Clause B.4 (About OPTCL)		Please clarify <b>whether consumer indexing is in the scope of bidder or not</b>	
114.	Volume-II  Clause C.1 (General Responsibilities and Obligations)	The Bidders must conform to the requirements and provide a list of equipment (including any special equipment) necessary to meet the functional & performance requirements stated herein. It should be noted that preliminary design information and Bill of Quantity (BoQ) specified in this specification are indicative only except the quantities of smart meters. The Bidders shall verify the design data during the site surveys & detail engineering and finalize the BOQ as required for ultimate system	It seems that bidder can modify the BOQ and provide the cost of revised BOQ but cost has to be borne by the bidder <b>The requirement of cost as per BOQ is not clear.</b>	<b>The release of Grant would be 30% of the Price quoted by the bidder limited to 30% of NSGM approved DPR cost.</b>  <b>Further, the component wise prices as per BOQ format would also be used for future scalability of the project.</b>
115.	Volume-II  Clause C.3 (Responsibilities for the Implementation Plan)	The bidder's technical proposal shall include a project implementation plan and schedule spread over 24 months from date of commencement that is consistent with the implementation plan detailed in this specification along with FMS period of 8 years. The Implementation plan shall include the activities of both the Bidders and the PFCCL/OPTCL, showing all key	It may be considered that the standard warranty of equipment and IT hardware provided by OEMs is for maximum 5 years. Further, duration of 8 years will increase burden of Finance Charges on the bidder, which will in turn increase the project cost Accordingly, <b>please keep duration of project as 5 years.</b>	<b>The provisions of the RfP shall prevail.</b>

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
		milestones and clearly identifying the nature of all information and project support expected from the PFCCL/OPTCL. The PFCCL/OPTCL and Bidders together shall finalize the detailed implementation plan following award of the contract.		
116.	Volume-II  Clause C.4(u) (Responsibilities for the Implementation Plan)	To provide storing, maintenance of storing area and security including full responsibility for protection from theft and fire for all the items to be supplied. The warehouse may be a temporary storage area to be constructed by contractor or the same may be taken on rent in OPTCL premises	In this clause, it has been mentioned that storage space will be provided by the SGIA. <b>However, in Volume-II, Clause C.6(I) (PFCCL/ OPTCL's Responsibilities and Obligations), it is mentioned that equipment storage space will be provided by PFCCL/OPTCL.</b> Please clarify.	<b>The same has been clarified in Amendment No. 5 to RfP (Volume-II - Clause C.4(u) (Responsibilities for the Implementation Plan))</b>
117.	Volume-II  Clause C.7 (General Bidding Requirements)	The Bidder shall be responsive to the technical requirements as set forth in this specification. The bidder's proposal shall include the compliance for Technical Proposal including the documents listed in the Table below shall be provided in the bid.	Annexure-D (Table of Compliance) and Annexure-G (System Sizing Requirements) have not been provided.	<b>For Annexure-D, please refer Amendment No. 5 to RfP.</b>  <b>Annexure-G is not applicable.</b>
118.	Volume-II  Clause D.1.1 (General Scope of work)	Selected bidder to establish proposed Advanced Metering Infrastructure System in Project Area i.e. operation subdivision no. 5 of OPTCL within 12 months from the award of contract	In this clause, the no. of sub-divisions in Rourkela has been mentioned as 5. However, in Volume-I, Clause 10.2, the number of sub-divisions in Rourkela has been mentioned as 7. <b>Please clarify the same and provide project area details</b>	<b>Please refer the Baseline KPI Report (Addendum No. 2 to RfP) for the project area details.</b>
119.	Volume-II  Clause D.1.2 (General	Selected bidder to provide 12 months "Warranty support" after Go-Live of project area and 36 months "Post implementation	There is some discrepancy regarding 36 months "Post implementation support". Please validate the same	<b>Please refer Amendment No. 5 to RfP.</b>



S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Scope of work)	support” after the end of warranty period		
120.	Volume-II  Clause D.1.4 (General Scope of work)	For the maintenance phase, selected bidder to dedicatedly post at-least one (01) support engineer (Diploma in Electrical Engineering with at-least 2 years relevant experience) per circle for resolving field related matters and at-least one (01) dedicated Project – In-charge (B. Tech / B. E. in Electrical Engineering with at-least 5 years relevant experience) at the Data Centre for application management and overall system maintenance.	Please provide the number of circles in the project area	<b>Please refer the Baseline KPI Report (Addendum No. 2 to RfP) for the project area details.</b>
121.	Volume-II  Clause D.1.8 (General Scope of work)	Proposed AMI Software should be scalable in nature taking into consideration an average growth rate of consumers and associated infrastructure to be 7.5 % per annum for the complete project duration from the date of award of contract to selected bidder. Enterprise Wide License for the software components is a mandatory requisite. Proposed AMI Software and associated equipment's should be capable of handling at-least 50000 connections, without any additional infrastructure and cost implication to OPTCL	From BoQ it is understood that the <b>quantity is much higher than 50,000.</b> Please clarify.	<b>Please refer Amendment No. 5 to RfP.</b>
122.			Here, it has been mentioned that Enterprise Wide License for the software components is mandatory whereas <b>Price Bid Schedule states that Head End System and MDMS systems are required with license for 135,000 end points.</b> Please clarify.	<b>Please refer Amendment No. 5 to RfP.</b>
123.	Volume-II  Clause D.1.8 (General Scope of work)	The proposed AMI solution / AMI system should have complete interoperability for accommodating all types of FRTU/MFM and communication H/W and vice-versa should also be there for any future up gradation of hardware/ software	We understand that all types of meters are as per IS 16444. Kindly specify the details of other devices which needs to be integrated in the system	<b>The provisions of the RfP shall prevail. The Bidder has to ascertain requirement of other devices which needs to be integrated in the system by</b>

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
				itself for successful operation of the project.
124.	Volume-II Clause D.1.15 (General Scope of work)	The Bidder in consultation with PFCCL Project in charge and OPTCL local in-charge shall determine the exact positioning of equipment installation, housing of equipment.	Location of Smart meters will be decided by Utility/ OPTCL/ PFCCL, however, <b>location of gateway will be based on network planning</b> which is complex process based on smart meter GIS data & backhaul connectivity/ availability at location	<b>The provisions of the RfP shall prevail.</b>
125.	Volume-II Clause D.1.16 (General Scope of work)	Insurance of all equipment from manufacturer's site till installation, commissioning, handing over and user acceptance will be borne by the bidder.	This Insurance is not available in market. Hence, please remove this clause.	<b>The provisions of the RfP shall prevail.</b>
126.	Volume-II Clause D.1.26 (General Scope of work)	The equipment models shall be supported by the OEM for a minimum period of next five years	<b>How to address the total contract period of 9 years.</b> The total contract cost CAPEX portion will be doubled. Please clarify	<b>Please refer Amendment No. 5 to RfP.</b>
127.	Volume-II Clause D.4 (Timelines for Delivery and Implementation)	The bidder is expected to complete the Enterprise Wide-implementation of AML system on all connections within 12 months from the date of award of contract by the PFCCL..... The detailed BOQ is given in Annexure E..... The contractor shall have to maintain the system for Eight (8) years after operational acceptance by <OPTCL>. During the seven years of maintenance, Contractor shall maintain system availability as mentioned in this document.	<b>In Volume-I, Clause C.3, it has been mentioned that the project is to be implemented in 24 months. Please clarify.</b>	<b>Please refer Amendment No. 5 to RfP.</b>
128.			<b>Annexure E has not been provided in the RfP</b>	<b>Please refer Amendment No. 5 to RfP.</b>
129.			<b>Please clarify the period of maintenance whether is 7 years or 8 years.</b>	<b>The FMS period would be for 8 years after operational acceptance by OPTCL</b>
130.	Volume-II Clause D.4.2 (Timelines	Capturing the baseline parameters /KPIs that are proposed for improvement (as defined in section 3.7.11)	<b>We understand that capturing of baseline data is in the scope of TPIEA. Please clarify. Please provide the</b>	<b>Baseline KPIs Study has already been completed. Please refer the Baseline</b>

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	for Delivery and Implementation)		details of section 3.7.11	KPI Report (Addendum No. 2 to RfP). SGIA is not required to capture the Baseline KPIs.
131.	Volume-II  Clause D.4.5 (Timelines for Delivery and Implementation)	System Security and access with due consideration of data privacy, confidentiality cyber security guidelines	Currently security requirement is limited to Antivirus & Network Security/ Firewall requirement. In order to provide level playing solution stack, please provide necessary requirements for security considerations at various layers of entire Smart Grid systems being planned	Please refer RfP Volume-II, Clause K.2.2.6 (Operation & Maintenance - Security Management) which states <i>“The protection from unauthorized usage, detection of intrusions, reporting as required and proactive prevention actions are to be provided by the SGIA”</i>
132.	Volume-II  Clause E(4) (Advanced Metering Infrastructure (AMI))	Automatic meter recording would mitigate requirement of manual process of meter reading, which would make billing system more accurate efficient and fast. Using two-way communication system pricing signals may also be sent to consumer participating in demand response mechanism.	Scope of work for demand response is not defined and hardware and software requirements have not been provided in BOQ.  Please clarify whether Demand response is included in scope of work.	Demand Response Module is not in the scope of the RfP. However, if Demand Response Module is implemented by OPTCL/ WESCO in future within the contract period, the bidder has to integrate the same with the MDMS.
133.	Volume-II  Clause E.1.2 (Scope of Work)	Selected bidder will propose & establish the solution for approx. 82,000 consumers but it should be scalable to cover the entire OPTCL consumers	Please clarify the number of consumers for which the AMI solution will be scalable.	The system should be designed to accommodate 5% growth in no. of consumers per annum.
134.	Volume-II  Clause E.1.12 (Scope of Work)	It would be the responsibility of the bidder to integrate their NIC module with various (any 2 meters complying IS16444) meter OEM's. Necessary agreement must be	The meters should be as per IS16444/ CEA compliant for integration. Please specify the kind of application/ equipment to be integrated in future as	The applications that are required to be integrated would be IEC104 Compliant Equipment/ Modbus

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
		executed at their end as per requirement. In future, it would be bidders' responsibility to integrate new meter or other application/equipment operating on IEC104 / modus as decided by OPTCL, in RF canopy network.	<b>bidder has to consider cost of components accordingly.</b>	<b>Operating.</b>
135.	Volume-II Clause E.1.14 (Scope of Work)	The bidder shall confirm that offered RF canopy solution and associated network elements including NIC should be tuneable over unlicensed sub GHz frequency range.	<b>Kindly define frequency band at RFP stage only. At present DoT has defined 865-867 MHz as free and for ISM use.</b>	<b>The frequency band should be as per the DoT approved Sub GHz frequency range which at present has been defined as 865-867 MHz.</b>
136.	Volume-II Clause E.1.15 (Scope of Work)	Interoperability for AMI shall be achieved through incorporation of the communication modules (NICs) of the technology service provider inside the Smart meters of various makers of Smart Meters short listed for this purpose as of now & in future also for next 15 years.	<b>Please specify the kind of application/ equipment to be integrated in future as bidder has to consider cost of components accordingly.</b>	<b>The communication module should be interoperable with different make of smart meters. In addition to smart meters, the applications that are required to be integrated should be IEC104 Compliant Equipment / Modbus Operating.</b>
137.	Volume-II Clause E.1.16 (Scope of Work)	The bidder shall ensure the possibility of up-gradation of the Firmware/ Software in the communication modules/ devices from remote from time to time to meet the increasing demand of the system in operation/ overcoming system limitations/ bugs. The bidder shall also ensure incorporation of new hardware (communication devices, meter, NIC etc.) if required in future.	<b>Please elaborate the requirement of hardware upgrade. Does this mean that any hardware from any manufacturer should be able to integrate in the existing system?</b>	<b>Any hardware changes made by the OEMs should be in sync with the existing system. If the same is not in sync with the existing system, SGIA needs to ensure that necessary changes are carried out by the OEMs.</b>
138.	Volume-II	The bidder shall guarantee for providing	<b>These clauses contradict each other.</b>	<b>Please refer Amendment</b>

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Clause E.1.20 (Scope of Work)	service & expansion support in the aforesaid area (at least for backward compatibility) for at least 15 years.	<b>Further, expected life of typical electronic equipment is 10 years. The bidder can provide backward compatible hardware and software up to the expected life.</b>	<b>No. 5 to RfP.</b>
139.	Volume-II Clause E.1.22 (Scope of Work)	The offered solution including (H/w, s/w, OS, licenses & others) shall have life cycle of 5 years from post go Live.		<b>Please refer Amendment No. 5 to RfP.</b>
140.	Volume-II Clause E.1.38 (Scope of Work)	Failure Rate: Less than 0.75% failure rate per annum for all network communications equipment over the required operating life (i.e. 7 years) of the system. (Failure is defined as any occurrence when the equipment is not functioning per design specification).		<b>Please refer Amendment No. 5 to RfP.</b>
141.	Volume-II Clause E.1.26 (Scope of Work)	Bidder shall replace upgrade or replace third party equipment free of cost in case the support on said equipment is withdrawn by respective OEM during this period i.e. declared as End of support by OEM.	<b>Future upgradation of Technology is highly unpredictable. Hence, cost of the same cannot be estimated. Therefore, technology prevailing at the time of bidding shall only be applicable. Any change of technology, if required, will have a cost implication will be decided on mutually agreed basis.</b>	<b>The Bidder would have to replace the equipment with higher configuration of the same OEM (i.e. OEM proposed replacement), with no additional cost to the Utility during the entire contract period.</b>
142.	Volume-II Clause E.1.29 (Scope of Work)	Offered solution to comply with the existing IS standards for applications as mentioned in RFP & its Feasibility to change/ modify the offered solution based on changes happened in standards in future	<b>Please mention what changes are expected in current standards. If the changes are minor and doable through minor software changes, the same can be done.</b>	<b>The provisions of the RfP shall prevail.</b>
143.	Volume-II Clause E.1.31 (Scope of	OPTCL reserve the right to review integration mechanism along with prices of NIC card with Smart meters after every 2	<b>There is no different line item provided in BoQ for integration charges. Please confirm the point of reference of</b>	<b>The BoQ items mentioned in the RfP are in line with the DPR approved by</b>

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Work)	years	reviewing integration charges.	<b>NSGM.</b> Bidders are required to evaluate the need for any extra item which they might require for successful implementation of the project and quote the same in the Price Bid. However, the release of Grant would be 30% of the Price quoted by the bidder limited to 30% of NSGM approved DPR cost.
144.	Volume-II  Clause E.1.43(d) (Scope of Work)	The bidder to submit relevant certification in order to validate the conformance and interoperability of their IEEE 802.15.4 an IEEE 802.15.4g or equivalent implementations	<b>A self-certification on bidders' letter head should be allowed</b>	<b>Accepted</b>
145.	Volume-II  Clause E.2.2.4.1 (Advanced Metering Infrastructure (AMI))	Single phase and three phase whole current Smart meter shall be type tested for all the type tests as per IS: 16444 (latest version) and three phase CT operated Smart Meter shall be type tested for all the type tests as per IS: 16444 Part-2 (latest version) in a government approved laboratory. The number of sampling for testing of meters and criteria for conformity would be as per IS 16444 and IS 16444 Part-2. The supplier shall have to submit all type test certificates along with the bid	<b>Please allow to submit all type test certificates within 6 months of LoA or before start of meter installation work.</b>	<b>Please refer Amendment No. 5 to RfP.</b>
146.	Volume-II	..... RF canopy network should be	<b>There is no Bill of Quantity/ Materials</b>	<b>Please refer Amendment</b>

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Clause E.2.3 (Communication Canopy)	designed to cater data requirements of 2,00,000 Smart meters.....	for RF Canopy pricing in the Price Bid Schedule. Please confirm.	No. 5 to RfP, Volume-II, Clause D.1.8 (General Scope of work). The BoQ items mentioned in the RfP are in line with the DPR approved by NSGM. Bidders are required to evaluate the need for any extra item which they might require for successful implementation of the project and quote the same in the Price Bid. However, the release of Grant would be 30% of the Price quoted by the bidder limited to 30% of NSGM approved DPR cost.
147.			Please confirm whether 200000 HES/MDM software license are required or system should be scalable on purchase of additional licenses & IT infra.	Please refer Amendment No. 5 to RfP, Volume-II, Clause D.1.8 (General Scope of work)
148.	Volume-II Clause F.4(a) (Items of Special Interest)	The project shall be implemented in the time schedule described in vol-I.	The time schedule for SCADA / DMS/OMS System is not clearly mentioned in Volume-I. Please clarify	The entire project is to be implemented in a period of 2 years.
149.	Volume-II Clause F.8.28(c) (SCADA DMS OMS)	.....Suitable GIS interface adaptor to enable the compatibility with GIS software/ data format /model shall be provided. The Graphic data import from GIS systems	Please confirm whether the bidder needs to implement a full scale GIS platform under current scope & needs to migrate data pertaining to Rourkela	A GIS mapping of consumers has already been carried out. The GIS Data would be shared with

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Functional Requirement – Data Exchange with GIS system)	shall support native formats of GIS systems which shall be potentially used for data import. The data shall be transferred on global & incremental basis on manual request & automatically, once in a day....	<b>into the same and whether any update to this data would be transferred to the existing GIS system.</b> <b>It is recommended to extend the scope to include an enterprise GIS system where agency is able to control data exchange protocols &amp; formats.</b> It is also imperative to ensure that project is not depending on a GIS system outside project purview for SCADA/ MDM integration.	<b>the selected SGIA.</b> <b>However, the SGIA, if required, may verify the same independently.</b>  <b>Further, bidders are required to evaluate the need for any extra item which they might require for successful implementation of the project and quote the same in the Price Bid.</b>
150.	Volume-II  Clause F.11.47 (SCADA DMS OMS Functional Requirement – GIS Integration)	..... Operator shall be able to perform all functions & have features as envisaged in the specification. Suitable GIS adaptor shall be provided to import the distribution network model & GIS information from GIS system.....	<b>Please clarify ‘suitable GIS adaptor’ with respect to the integration &amp; capabilities.</b> We understand that distribution network data is already available in GIS format and to maintain parity, the same data structure and format would be maintained. As GIS system is already implemented under RAPDRP, the suggested GIS system should be compatible with the same and should exchange data with the GIS system. <b>It is recommended that GIS data procurement format, size and type be specified upfront to survey agencies for seamless integration with other systems. The existing data model and format may be used as reference.</b> <b>In an implementation of such scale &amp; complexity, GIS should also be used</b>	<b>However, the release of Grant would be 30% of the Price quoted by the bidder limited to 30% of NSGM approved DPR cost.</b>  <b>The provisions of the RfP shall prevail.</b>



S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification																								
			<p>for analytics options with Dashboard functionality. Various GIS based analysis can be carried out e.g.</p> <ul style="list-style-type: none"><li>Identifying area with high number of outages</li><li>Maximum billing &amp; recovery patterns</li><li>Areas with low penetration of utility with respect to population</li></ul> <p>The GIS system should have at least the following components with standard functionalities required for execution of Smart Grid projects:</p> <table><tr><th>S. No</th><th>Item Description</th><th>Unit</th><th>Qty</th></tr><tr><td colspan="4">GIS System</td></tr><tr><td>1</td><td>Enterprise GIS Server Software</td><td>Nos.</td><td>1</td></tr><tr><td>2</td><td>GIS Desktop Software</td><td>Nos.</td><td>1</td></tr><tr><td>3</td><td>Utility Mapping Server Software</td><td>Nos.</td><td>1</td></tr><tr><td>4</td><td>Utility Mapping Desktop Software</td><td>Nos.</td><td>1</td></tr></table>	S. No	Item Description	Unit	Qty	GIS System				1	Enterprise GIS Server Software	Nos.	1	2	GIS Desktop Software	Nos.	1	3	Utility Mapping Server Software	Nos.	1	4	Utility Mapping Desktop Software	Nos.	1	
S. No	Item Description	Unit	Qty																									
GIS System																												
1	Enterprise GIS Server Software	Nos.	1																									
2	GIS Desktop Software	Nos.	1																									
3	Utility Mapping Server Software	Nos.	1																									
4	Utility Mapping Desktop Software	Nos.	1																									
151.	Volume-II  Clause I.1(f) (Training Requirements)	The Contractor shall quote training prices individually for each of the courses.	<b>There is no provision given in BOQ for Quoting the training prices. Please clarify</b>	<b>The BoQ items mentioned in the RfP are in line with the DPR approved by NSGM.</b> <b>Bidders are required to evaluate the need for any extra item which they might require for successful</b>																								

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
				implementation of the project and quote the same in the Price Bid. However, the release of Grant would be 30% of the Price quoted by the bidder limited to 30% of NSGM approved DPR cost.
152.	Volume-II  Clause J.2.1 (Service Level Agreement)	Vendor will have to ensure 100% billing data either through AMI or through CMRI Uploading - Deduction of 1% of the billed amount will be done for every 1% non-availability of billing data	<b>Please modify the clause as:</b> <i>"Vendor will have to ensure 100% billing data either through AMI or through CMRI Uploading - Deduction of 1% of the billed amount will be done for every 1% non-availability of billing data if lesser than 90% through AMI"</i>	The provisions of the RfP shall prevail.
153.		-	<b>There exists no provision of incentive for better performance. Incentive of 1% of the billed amount should be provided for every percentage of data availability higher than 90% through AMI.</b>	The provisions of the RfP shall prevail.
154.	Volume-II  Clause K.2.2.1 (Operation & Maintenance-Obligation) SGIA's	Any modification of software/ Operating System required to restore functionality due to hardware upgrades, patches, or arising out of a necessity to fix FPRs, would be done by the SGIA at no extra cost to Utility. Also, any software updates/upgrades released till the completion of warranty period /AMC shall be provided and installed & commissioned free of cost as per instructions from Utility.	<b>Upgradation and modification will be on the chargeable basis.</b>	The provisions of the RfP shall prevail.

**Clarifications with respect to RfP (Volume – III)**

<b>S.No</b>	<b>Reference Clause</b>	<b>Existing Provision</b>	<b>Queries raised by Bidders</b>	<b>Reply/Clarification</b>
155.	Volume-III Section A (1.1) (Scope)	The specification covers the design, manufacturing, testing, supply and delivery of AC whole current 1 phase 2 wires Smart Energy Meter with bi directional communication facility. The meter shall be suitable for Advanced Metering Infrastructure (AMI). The meter shall communicate with DCU/Access Point/HES on any one of the communication technologies mentioned in IS16444, as per the requirement of the utility.	<b>NB-IoT technology is a part of 4G family. Hence, Smart Meters with NB-IoT Communication Module can be offered.</b>	<b>Bidders may explore NB-IoT technology.</b>
156.	Volume-III Section A (1.4) (Communication)	Meter shall have ability to communicate with DCU/ Access Point/ HES on any one of the technologies mentioned in IS16444 in a secure manner, as per the site conditions and as per design requirement of AMI Implementing agency. In case of GPRS/3G/4G based meter, the meter shall accommodate SIM card of any service provider. In case of Plug in type communication module, the meter shall log communication module removal/ non-responsive event with snapshot.		
157.	Volume-III Section A (1.5) (AMI Hardware & Software – Other Specifications)	Current Rating: 5-30A/ 10-60A (as per the requirement of the utility)	<b>Please accept rating for Single Phase Meter with 5-30A and for 3 Phase Meter with 10-60A.</b>	<b>Please refer Amendment No. 5 to RfP.</b>
158.	Volume-III	General	<b>Seems some of the specifications seem to be missing as the serial</b>	<b>This is a typo error. No specifications are missing.</b>

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
159.	Section A (AMI Hardware & Software – Network Items)		<b>number starts with 20. Please clarify.</b>	<b>Bidders need to suggest as per their solution</b>
160.			<b>There is no port requirements mentioned in the RfP. Please clarify. Solution sizing depends on the ports requirement.</b>	
161.	Volume-III  Section A (AMI Hardware & Software – Network Items - S.No. 24)	Transparent Interconnection of Lots of Links (TRILL) support to increase the scale of enterprise data centres	<b>Please provide Specification of Meter Box</b>	<b>Please refer Amendment No. 5 to RfP.</b>
162.	Volume-III  Section A (AMI Hardware & Software – Network Items - S.No. 35)	Routing table size of minimum 100K (IPv4) and 50K (IPv6) entries	The clause may be modified as: <i>"Transparent Interconnection of Lots of Links (TRILL) <b>or equivalent</b> support to increase the scale of enterprise data centres".</i>	<b>Please refer Amendment No. 5 to RfP.</b>
163.	Volume-III  Section A (AMI Hardware & Software – Network Items - S.No. 51)	OEM of the proposed solution should be listed in Leaders Quadrant of Gartner's latest report for Enterprise LAN or DC Networking. All switches and routers must be of the same OEM.	Same size of routing table should be considered. Hence, the clause may be modified as: <i>"Routing table size of minimum 100K (IPv4) and <b>100K 50K</b> (IPv6) entries"</i>	<b>The provisions of the RfP shall prevail.</b>
164.	Volume-III  Section A (AMI Hardware & Software – Network Items - Core	Router shall have multi-core processors providing robust routing and security	To ensure consistency and quality of OEM products, the clause may be modified as: <i>"OEM of the proposed solution should be listed in Leaders Quadrant of Gartner's latest report for Enterprise LAN or DC Networking <b>for last 2 years</b>. All switches and routers must be of the same OEM."</i>	<b>The provisions of the RfP shall prevail.</b>
			To ensure better reliability & performance, clause may be modified as: <i>"Router shall have multi-core processors providing robust routing and security. <b>It should have dedicated management</b></i>	<b>The provisions of the RfP shall prevail.</b>

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Router – S.No. 1)		<b>module / CPU"</b>	
165.	Volume-III  Section A (AMI Hardware & Software – Network Items - Core Router – S.No. 6)	The router forwarding performance shall be minimum 10 Mpps	To ensure better Return on Investment and future scalability, the clause may be modified as: "The router forwarding performance <del>shall be minimum 10 Mpps</del> should be scalable upto 20 Mpps"	<b>Please refer Amendment No. 5 to RfP.</b>
166.	Volume-III  Section A (AMI Hardware & Software – Network Items - Core Router – S.No. 10)	Minimum 4000K IPv4 and 2000K IPv6 route entries	Same sizing should be considered. Hence, the clause may be modified as: "Minimum 4000K IPv4 and <del>4000K 2000K</del> IPv6 route entries"	<b>The provisions of the RfP shall prevail.</b>
167.	Volume-III  Section A (AMI Hardware & Software – Network Items - Core Router – S.No. 24)	OEM of the proposed solution should be listed in Leaders Quadrant of Gartner's latest report for Enterprise LAN or DC Networking. All switches and routers must be of the same OEM.	To ensure consistency and quality of OEM products, the clause may be modified as: "OEM of the proposed solution should be listed in Leaders Quadrant of Gartner's latest report for Enterprise LAN or DC Networking <b>for last 2 years</b> . All switches and routers must be of the same OEM."	<b>The provisions of the RfP shall prevail.</b>
168.	Volume-III  Section A (AMI Hardware & Software – Network Items – Field Office Router – S.No. 1)	Router shall have RISC-based processors providing robust routing and security	<b>RISC-based processor technology is obsolete. Please change to multi-core processor.</b>	<b>Please refer Amendment No. 5 to RfP.</b>
169.	Volume-III  Section A (AMI Hardware & Software – Network Items – Field	Router shall have two 10/100/1000 Mbps routed ports (RJ- 45) and one Giga bit SFP Routed Port	The clause may be modified as: "Router shall have at least <del>two</del> <b>four</b> 10/100/1000 Mbps routed ports (RJ-45) and <del>one</del> <b>four</b> Gigabit SFP Routed Port."	<b>Please refer Amendment No. 5 to RfP.</b>

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Office Router – S.No. 2)			
170.	Volume-III  Section A (AMI Hardware & Software – Network Items – Field Office Router – S.No. 3)	The router shall have three WAN Interface card slots supporting LAN/WAN/Voice interface cards-Ethernet, V.35, E1, FXS/FXO, 3GModule etc.	FXS/FXO is not required as Voice is not part of project. To ensure wider participation, clause may be modified as: <i>"The router shall have three WAN Interface card slots supporting LAN/WAN/Voice interface cards-Ethernet, V.35, E1, <del>FXS/FXO</del>, 3GModule etc."</i>	<b>Please refer Amendment No. 5 to RfP.</b>
171.	Volume-III  Section A (AMI Hardware & Software – Network Items – Field Office Router – S.No. 6)	The router forwarding performance shall be minimum 2 Mpps	The router forwarding performance should be <b>minimum 700 Kpps</b> , which can accommodate 2000 Mbps routing of IMIX packet.	<b>The provisions of the RfP shall prevail.</b>
172.	Volume-III  Section A (AMI Hardware & Software – Network Items – Field Office Router – S.No. 8)	The router shall have an encryption performance of 1 Gbps	As only 2 Mbps link is asked for the substations, <b>please reduce encryption performance to 200 Mbps for IMIX packets.</b>	<b>The provisions of the RfP shall prevail.</b>
173.	Volume-III  Section A (AMI Hardware & Software – Network Items – Field Office Router – S.No. 9)	The router should have Field-Programmable Gate Array (FPGA) to improve the uplink performance and router should have the ability to ease utilization of the main processor by transmitting Layer 2 packets directly via the Multi Gigabit Fabric.	<b>Please remove FCGA feature.</b> This OEM specific feature would restrict participation of leading networking OEM.	<b>Please refer Amendment No. 5 to RfP.</b>
174.	Volume-III  Section A (AMI Hardware & Software –	OEM of the proposed solution should be listed in Leaders Quadrant of Gartner's latest report for Enterprise LAN or DC Networking. All switches and routers must	To ensure consistency and quality of OEM products, the clause may be modified as: <i>"OEM of the proposed solution should be</i>	<b>The provisions of the RfP shall prevail.</b>

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Network Items – Field Office Router – S.No. 24)	be of the same OEM.	<i>listed in Leaders Quadrant of Gartner's latest report for Enterprise LAN or DC Networking <b>for last 2 years</b>. All switches and routers must be of the same OEM."</i>	
175.	Volume-III  Section A (AMI Hardware & Software – Network Items – Field Office Switch – S.No. 25)	Find-Fix-Informor EAA or equivalent	<b>Please delete this clause to ensure wider participation.</b>	<b>The provisions of the RfP shall prevail.</b>
176.	Volume-III  Section A (AMI Hardware & Software – Network Items – Field Office Switch – S.No. 26)	The switch should support RMON, XRMON, and sFlow	The clause may be modified as: "The switch should support RMON /, XRMON, and sFlow"	<b>Please refer Amendment No. 5 to RfP.</b>
177.	Volume-III  Section A (AMI Hardware & Software – Network Items – Field Office Switch – S.No. 30)	The switch should support encapsulation (tunneling) protocol for over lay network that enables amore scalable virtual network deployment	<b>Please delete this clause to ensure wider participation.</b>	<b>Please refer Amendment No. 5 to RfP.</b>
178.	Volume-III  Section A (AMI Hardware & Software – Network Items – Field Office Switch – S.No. 34)	The switch should support Access control lists (ACLs) – Minimum 3K ACLs to be supported	To ensure wider participation, the clause may be modified as: "The switch should support Access control lists (ACLs) – Minimum <b>2K</b> <del>3K</del> ACLs to be supported"	<b>Please refer Amendment No. 5 to RfP.</b>
179.	Volume-III  Section A (AMI Hardware & Software –	The switch should support Identity-driven ACL	The clause may be modified as: "The switch should support <b>L2-L4</b> <del>Identity-driven</del> ACL"	<b>The provisions of the RfP shall prevail.</b>

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Network Items – Field Office Switch – S.No. 37)			
180.	Volume-III  Section B Clause 1.3 (SCADA Field Hardware & Software – Network Items – Filed Office Router)	Contractor shall provide cubicle mounted servers. The main & standby servers shall be provided with separate cubicles where each cubicle can be provided with one set of TFT monitor, keyboard, and mouse through KVM switch with retraceable tray	<b>Kindly allow bidders to quote desired servers in bladed architecture for better optimization of their solution design and efficiency in terms of power, cooling and rack U space.</b>	<b>The provisions of the RfP shall prevail.</b>
181.			<b>Kindly consider rack mounted servers or server chassis as requirement is for Enterprise category.</b>	<b>The provisions of the RfP shall prevail.</b>
182.	Volume-III  Section B Clause 1.3 (SCADA Field Hardware & Software – Software Maintenance and Development Tools – Tracking Database Changes)	.... Population and maintenance of the distribution network model should be possible by using the database maintenance tools to build the database from scratch. In addition if required data already exists within the Employer's/Purchaser corporate Geographic Information System (GIS) as a part of any scheme or otherwise, the SCADA/DMS database functions should leverage this effort by providing an interface/adaptor to extract GIS data using the CIM international standard IEC 61970/61968 and automatically generate the complete Network Operations Model.....	<p>It seems that GIS systems, if available with OPTCL, may be used for accessing GIS database with regular data syncing and checking for data updates and data correctness.</p> <p>It is suggested that such practice be avoided due to following reasons:</p> <ul style="list-style-type: none"> <li>• GIS systems at OPTCL have not been sized to cater to additional users and may result in overall degraded performance of existing systems.</li> <li>• In case of data being updated at OPTCL end as a result of usual survey activity, Rourkela authorities will have to keep syncing and checking for data updates and data correctness.</li> </ul> <p><b>Thus, it is recommended to have local GIS system under scope which should be compatible to existing GIS system to enable two-way data exchange.</b></p>	<p><b>A GIS mapping of consumers has already been carried out. The GIS Data would be shared with the selected SGIA.</b></p> <p><b>However, the SGIA, if required, may verify the same independently.</b></p> <p><b>Further, bidders are required to evaluate the need for any extra item which they might require for successful implementation of the project and quote the same in the Price Bid.</b></p> <p><b>However, the release of Grant would be 30% of the Price quoted by the bidder limited to 30% of NSGM approved DPR cost.</b></p> <p><b>The provisions of the RfP shall prevail.</b></p>



S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
183.	Volume-III  Section C Clause 8 (IT Component – Servers)	General	<b>Please make specifications open instead of hardcoding.</b> Minimum performance requirements may be specified in order to enable Bidder to quote respective OEM products meeting minimum performance criteria. Similar considerations may be provided for all server hardware requirement in RfP.	<b>The provisions of the RfP shall prevail.</b>
184.	Volume-III  Section C Clause 8 (1.3a) (IT Component – Servers – SAN Switch)	Offered SAN switches shall be highly efficient in power consumption. Bidder shall ensure that each offered SAN switch shall consume less than 100 Watt of power.	<b>Not all OEMs have the same design.</b> Hence, to ensure wider participation, please relax by few additional watts modify the clause as: <i>"Offered SAN switches shall be highly efficient in power consumption. Bidder shall ensure that each offered SAN switch shall consume less than <del>100</del> 125 Watt of power."</i>	<b>Please refer Amendment No. 5 to RfP.</b>
185.	Volume-III  Section C Clause 9 (IT Component – Storage Items - SAN Storage)	The Storage system should be unified (Block and File), with minimum X TB usable capacity in RAID 5 (4+1). Bidders must include 1 Hot Spare drive for every 12 drives. It should contain at least 64 GB cache per controller.	<b>Kindly revise the clause as per latest industry practices and also allow RAID 5/6.</b> Further, cache type also need to be clearly mentioned without ambiguity. Hence, the clause may be modified as: <i>"The Storage system should be unified (Block and File), with minimum X TB usable capacity in RAID 5 /6 5 (<del>4+1</del>). Bidders must include 1 Hot Spare drive for every <del>24</del> 12 drives. It should contain at least 64 GB DRAM cache."</i>	<b>Please refer Amendment No. 5 to RfP.</b>
186.	Volume-III  Section C Clause 9 (IT Component – Storage	Disk types are 600/900 GB (10K/15K SAS Drives). Flash Drives - 200/400 GB	The clause may be modified as: <i>"Disk types are 600/900 GB/<del>1200/1800GB</del> (10K/15K SAS Drives). Flash Drives - 200/400 GB/ <del>920 GB/ 1.92</del>"</i>	<b>Please refer Amendment No. 5 to RfP.</b>

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	Items - Disk Type)		<b><i>TB or higher"</i></b>	
187.	Volume-III  Section C Clause 9 (IT Component – Storage Items - Host Interface)	Storage should contain minimum 4 No. of FC 8/16 Gb/s ports and 2 No. of 1/10GbE iSCSI ports. These ports must have backward compatibility. Storage should have at least 4 ports of 12 Gbps SAS backend across controllers.	Kindly clarify that backward compatibility is only applicable for FC ports and not for iSCSI ports. Accordingly, the clause may be modified as: <i>"Host Interface: Storage should contain minimum 4 No. of FC 8/16 Gb/s ports and <del>4</del> 2 No. of 1/10GbE iSCSI ports. <b>FC</b> <del>These</del> ports must have backward compatibility. Storage should have at least 4 ports of 12 Gbps SAS backend across controllers."</i>	<b>The provisions of the RfP shall prevail.</b>
188.	Volume-III  Section C Clause 9 (IT Component – Storage Items Service Support & Warranty)	Storage should have comprehensive 7 years onsite warranty	<b>Both the clauses are contradictory.</b>	<b>Storage should have comprehensive 8 years onsite warranty</b>
189.	Volume-III  Section C Clause 9 (IT Component – Storage Items – Storage – Scope of Work)	Support & warranty to be co-terminus and in line with existing storage.		
190.	Volume-III  Section C Clause 10 (j) (IT Component – Tape Library)	Tape Library should be supplied with 16 I/O interfaces as per the quoted 4 number of drives	The interface and drive combination is non-standard. Please revise and allow the bidder to size as per solution requirement. The clause may be modified as: <i>"Tape Library should be supplied with <del>16</del> I/O interfaces as per the quoted 4 number of drives"</i>	<b>The provisions of the RfP shall prevail.</b>

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
191.	Volume-III  Section C Clause 11 (IT Component – Router)	At least 512 MB DRAM and 512 MB Flash.	The clause may be modified as: <i>"At least 512 MB DRAM and <del>256 512</del> MB Flash."</i>	<b>The provisions of the RfP shall prevail.</b>
192.		The router must be modular. The router shall support 8 port 10/100/1000 switching module	Please clarify whether router ports are required.	<b>The same would be required from day one.</b>
193.	Volume-III  Section C Clause 12 (1.1) (IT Component – Firewall)	The Firewall shall be a non-ASIC based firewall and should have Multi core architecture to mitigate against the sophisticated threats	Different OEMs have different architecture. Some use one single multicore processor, whereas some use multiprocessor architecture (can be ASIC based) for much faster performance along with Multicore processor. Hence, clause may be modified as: <i>"The Firewall shall be <del>a non-ASIC based firewall</del> and on multiprocessor or should have Multi core architecture to mitigate against the sophisticated threats"</i>	<b>Please refer Amendment No. 5 to RfP.</b>
194.	Volume-III  Section C Clause 12 (1.3) (IT Component – Firewall)	Firewall shall deliver IMIX throughput of minimum 15 Gbps and must deliver 1 Gbps of NGFW (FW+IPS+App Control) throughput in production environment with real world traffic blend enabling logging, Natting and recommended security.	Different OEMs have different parameters for measuring their performance. The given measurement parameters of NGFW Throughput is specific to a single vendor. Further, there is no meaning of considering Natting & recommended security while measuring NGFW throughput because Natting is a basic functionality of a Firewall & doesn't require much resource & there is no definition of recommended security & IPS + Application Control has already been considered while measuring NGFW performance. If we consider Anti-Malware inspection as additional security, then	<b>Please refer Amendment No. 5 to RfP.</b>

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
			<p>that should be considered under Threat Protection Throughput which is measured on FW+IPS+App Control+Anti-Malware. So it is suggested to seek minimum 4Gbps (4 Gbps as a future expansion of 4x 10G interfaces has been asked) of Threat Protection Throughput for getting the optimum solution.</p> <p>To ensure maximum participation, the clause may be modified as:  <i>"Firewall shall deliver IMIX throughput of minimum 15 Gbps and must deliver <del>4</del> 4 Gbps of NGFW (FW+IPS+App Control+<b>Anti-Malware</b>) throughput in production environment with real world traffic blend enabling logging, <del>Natting and recommended security.</del>"</i></p>	
195.	Volume-III  Section C Clause 12 (1.9) (IT Component – Firewall)	The appliances must be supported with hardened OS with field upgradable options of RAM and I/O interface options	<p>Different OEM have different architecture. Some provide option for field upgradation of RAM, whereas some provide high amount of Memory (RAM) from day one which is sufficient to complement the optimum performance of processors on the proposed solution.</p> <p>To ensure wider participation, the clause may be modified as:                      "The appliances must be supported with hardened OS with field upgradable options of <del>RAM and</del> I/O interfaces"</p>	<b>The provisions of the RfP shall prevail.</b>
196.	Volume-III  Section C Clause 12	Proposed appliances must have local storage capacity of min 500 GB from Day one (per appliance)	As an industry best practice, it is recommended to store the logs outside the NGFW appliance.	<b>The provisions of the RfP shall prevail.</b>

Clarifications to Pre-Bid Queries against the Request for Proposal (RfP) for Selection of Smart Grid Implementing Agency (SGIA) for implementation of Smart Grid in Rourkela City

S.No	Reference Clause	Existing Provision	Queries raised by Bidders	Reply/Clarification
	(8.5) (IT Component – Firewall)		Hence, the clause may be modified as: <i>"Proposed appliances must have local / <b>external</b> storage capacity of min 500 GB from Day one (per appliance)"</i>	