

REPLIES TO QUERIES

Tender SITC of Dual Fuel Conversion Kit & Retrofit Emission control device (RECD) in Existing 500 kva x 2 Nos & 810 kva x 1 no DG sets at Indraprastha Institute of Information Technology (IIIT-Delhi) Campus, Okhla Phase-III, New Delhi.

TENDER NO: 18/ 2022 Dated 25th Aug 2023

Sr. No	Section/Clause no. in Tender		Query	Reply
1	Page No 3	Dual fuel operation systems and RECD works contractors in empanelment by IGL /OEM /authorized by the CPCB/DPCC	Dual Fuel Kit - We are empaneled by IGL, also we are in the approved make list of PWD – Delhi (CPWD). Also Kindly add PWD in the authorized agencies mentioned. RECD – As per CPCB guidelines devices should be Type Approved from the lab authorized by CPCB, it can't be authorized directly by either CPCB or DPCC. Also Kindly add PWD in the authorized agencies mentioned.	Dual fuel kit : Only OEM/ authorized dealers of Cummins / AGENCIES in empanelment list by IGL.The manufacturer must be authorized by the CPCB/DPCC and preferably registered with PWD /CPWD shall be allowed TO bid. Party MUST have to submit Valid Certificate for the same. Calibration certificates from CPCB also to be submitted. The certificate should be valid for entire project period. If not, it should be renewed & submitted to us before expiry. For RECD , TAC (Type Approval certificate from any of the 4 authorised labs by the CPCB as per orders of CAQM/ CPCB.
2	Page No 3	Earnest Money Deposit: Rs. 1,70,000/-	Can MSME or Start Ups get Relaxation in Earnest Money Deposit	It is also exempted for MSME.
3	Page No 3	The tenders shall be placed in sealed envelopes.	Is it Physical Tender and only hard copies will be submitted?	It is physical and to be submmited in the Hard copy
4	Page No 4	Only agencies with experience of having executed SITC of Dual fuel kit (70% gas + 30% Diesel) in existing DG set of minimum Capacity 500 KVA or more	Will Execution in private sector will be considered for this tender?	No
5	Page No 4	Shall have a solvency of Rs. 34.00 Lakhs. The applicant shall submit the solvency certificate, not older than six months prior to 31st July 2023, issued by any scheduled bank, in original	Can MSME or Start Ups get Relaxation in submitting solvency of 34.00 Lakhs.	It is also exempted for MSME.
6	Page No.3	Estimated cost of work put to tender – 85 Lakhs	Clarification is required. - Can we increase the rate while bidding as budget seems to conservative .	This is only estimated cost.
7	Ref: Page No 3	Estimated cost of work put to tender – 85 Lakhs	Clarification is required - GST will be extra or included in the estimated cost of work	Yes, Included
8	Page no 3 and pt. no 6	Only OEM/ authorized dealership of Cummins / AGENCIES in empanelment by IGL /authorized by the CPCB/DPCC are allowed to bid. Party must have submit Valid Certificate for the same. The certificate should be valid for entire project period. If not, it should be renewed & submit to us before expiry.	We are in the approved make list of PWD – Delhi (CPWD) for both the devices Dual Fuel Kit and RECD Specially for RECD – As per CPCB guidelines devices should be Type Approved from the lab authorized by CPCB, it can't be authorized directly by either CPCB or DPCC. Kindly add PWD in the authorized agencies mentioned.	As at 1 above
9			For DFK We are in the approved make list of PWD – Delhi (CPWD) for both the devices Dual Fuel Kit and RECD. Kindly add PWD in the authorized agencies mentioned. The kit is a plug-and-play type of system that requires very minimal work on the DG. We have also been empaneled by IGL for Duel fuel.	As at 1 above

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10	Page No.32	<p>Scope of Work - RECD- Retrofit emission control system should be as per latest DPCC/NGT notification to achieve minimum specified particulate matter capturing efficiency of at least 70% in 5 mode D2 cycle. The emission control device/ Equipment must be tested over an ISO-8178 5 mode D2 cycle for equivalent kVA rating at any one of the five Central Pollution Control Board (CPCB),</p> <p>i. Automotive Research Association of India, Pune (Maharashtra) ii. International Centre of Automotive Technology, Manesar (Haryana) iii. Indian Oil Corporation, Research and Development Centre, Faridabad (Haryana). iv. Indian Institute of Petroleum, Dehradun (Uttarakhand); orv. Vehicle Research Development Establishment, Ahmednagar (Maharashtra)</p>	<p>For RECD It should be Retrofit Emission Control Device should be 'Type Approved' as per the System and Procedure of Central Pollution Control Board for Emission Compliance Testing of Retro-fit Emission Control Devices (RECD) For Diesel Power Generating Set Engines, Dated 01/02/2022, wide Pollution Control Series PCLS/12/2021-22. Document Link - https://cpcb.nic.in/uploads/RECD_Procedure_Rev ised.pdf</p> <p>As per the document - Please refer page No. 19 "4.4 Type Approval":</p> <p>"4.4.1. No person or agency shall sale, import, install or use a RECD for in-use Genset application in India without valid Type Approval Certificate referred to in Clause 4.5. and 5.4 of this Regulation."</p> <p>Adhering to this, RECD to be 'Type Tested' for equivalent kVA rating from any one of the four Central Pollution Control Board, Govt, of India, recognized/approved test agencies / laboratories as given below:</p> <p>(a) Automotive Research Association of India (ARAI, Pune) (b) International Centre for Automotive Testing (ICAT, Manesar) (c) Indian Institute of Petroleum (IIP, Dehradun)</p>	As at 1 above
11	Page No.33	<p>Scope of work- DFK Dual Fuel Kit Scope Gas Train • Gas filter, Pressure regulator, Pressure Gauge, Zero Pressure regulator and Gas adjusting valve • Gas piping from gas train to Gas mixer and Gas mixer unit. Sensors • Gas pressure sensor, Intake pressure sensor, and Intake manifold temperature sensor • Exhaust gas temperature sensor. • Vibration sensor • Gas flow meter Controller Panel • PLC, input / output units • HMI and switches / buttons/ wirings etc Installation of kit • Assembly & installation of kit with all adapters, wiring assembly for kit sensors. All nipples, piping accessories for gas train & wire harness will be in agency scope. Apart from above points, below points are also considered in scope of work. • Pollution certification and emission measurements from autonomous body, if require. • Gas connections and piping up to the point of use. (Gas connection to be provided near DG set) • Fuel grade Natural Gas at 2 Bar maximum pressure, Pressure shall have a tolerance of +/- 0.1 Bar • Piping with isolation valve providing 2 Bar gas supply to fuel kit. (Gas Connection to be provided).</p>	<p>For DFK it should be Gas connection to be provided by IIIT Delhi to the DG set. Natural gas pressure should be in between 2 to 4 bar and ensuring of the same should be under the scope of the customer(IIITD).</p> <p>It is required to add Double solenoid valve, manual screw, emergency stop switch to enhance safety feature in the tender. It is necessary to add Load governor to control the gas flow as per engine load in the tender.</p> <p>Clarification is required whether separate gas flow meter is required for each DG sets? If "Yes" then cost will be increased.</p> <p>If any extra pipe work is needed outside of DG set then it is under the scope of the customer (IITD)</p>	The vendor will coordiante with IGL for the purpose. Yes it is required separate gas flow meters . Beyond the IGL meter contractor to be bear the cost of piping etc. All safety features to be prvided piping work is to be coordinated with IGL.

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12	Page No.32, pt. no e.	System should be certified from OEM of DG sets after installation of retrofit system. Prior installation NOC from DG set manufacturers should be obtained that there will no adverse effect on the performance and efficiency of DG sets. Any deviation in this regards must be made known to the Owner before award of works.	RECD should be Type Approved is the primary condition as per CPCB. Agency has Type approval certificate of 500 KVA and as per certification different DG makers engines are compatible if anybody has that equivalent capacity Type Approval certificate. We are under process to get the "Type approval certificate" for 810 kVA. In between we can share the Test Report / ISO-8178 5 mode D2 cycle certificate for equivalent kVA or say similar/compatible rating as evidence of certification is under process. For DFK no approval certification is required from any Government agency or the original equipment manufacturer. For DFK, we are IGL empaneled and we are in the approved	Type approval certificate is required for 500kva & 800 kva DG sets.
13	Page No.32, pt. no f.	Agency should obtain all the necessary approvals/Certificates from CPCB/Delhi Pollution Control Committee with regards to successful compliance to their latest notification. Statutory/Legal Fees/ Costs shall be reimbursed by IIITD after submission of original fees receipt and original document of certificate/approval. It is the responsibility of agency to take the approvals and liaison with concern department to get all the necessary approvals and certificates.	Asked necessary approvals/Certificates from CPCB/Delhi Pollution Control Committee with regards to successful compliance to their latest notification are not required as Devices should be Type Approved as per CPCB guidelines. For RECD only "Type approval certificate" required from any one of the four Central Pollution Control Board, Govt, of India, recognized/approved test agencies / laboratories as given below: (a) Automotive Research Association of India (ARAI, Pune) (b) International Centre for Automotive Testing (ICAT, Manesar)	As at 1 above
14			For DFK no approval certification is required from any Government agency or the original equipment manufacturer. For DFK, we are IGL empaneled and we are in the approved make list of PWD – Delhi (CPWD). Also Kindly add PWD in the authorized agencies mentioned.	As at 1 above
15	Page No.32, pt no i	Guaranty/Warranty against material and workmanship of the retrofit emission control device shall be of Five Years of operation from the date of successful testing at site/installation of Retrofit Emission Device and receipt of certificate from DPCC.	Receipt of certificate is not required from DPCC for RECD and DFK.	Guaranty/Warranty against material and workmanship of the retrofit emission control device shall be for Five Years of operation from the date of successful testing and commissioning at site/installation of Retrofit Emission Device & DFK.
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17	Page No.35 Point No. 2 Bill of Quantities RECD- Retro-fit emission control system should be as per Statutory Authorities recommendations to achieve minimum specified particulate matter capturing efficiency of at least 70%. The emission control system shall be type tested and approved from CPCB approved laboratories any one from the followings as per guideline of NGT and MoHUA. i i. Automotive Research Association of India, Pune (Maharashtra) ii ii. International Centre of Automotive Technology, Manesar (Haryana) iii Indian Oil Corporation, Research and Development Centre, Faridabad (Haryana) iv Indian Institute of Petroleum, Dehradun (Uttarakhand) v Vehicle Research Development Establishment, Ahmednagar (Maharashtra)	Retrofit Emission Control Device should be 'Type Approved' as per the System and Procedure of Central Pollution Control Board for Emission Compliance Testing of Retro-fit Emission Control Devices (RECD) For Diesel Power Generating Set Engines, Dated 01/02/2022, wide Pollution Control Series PCLS/12/2021-22. Document Link - https://cpcb.nic.in/uploads/RECD_Procedure_Rev ised.pdf Only four labs are authorized to issue Type approval certificate. i. Automotive Research Association of India, Pune (Maharashtra) ii. International Centre of Automotive Technology, Manesar (Haryana) iii. Indian Institute of Petroleum, Dehradun (Uttarakhand)	Bill of Quantities RECD- Retro-fit emission control system should be as per Statutory Authorities recommendations to achieve minimum specified particulate matter capturing efficiency of at least 70%. The emission control system shall be type tested and approved from CPCB approved laboratories any one from the followings as per guideline of NGT and MoHUA. i Automotive Research Association of India, Pune (Maharashtra) ii International Centre of Automotive Technology, Manesar (Haryana) iii Deleted iv Indian Institute of Petroleum, Dehradun (Uttarakhand) v Vehicle Research Development Establishment, Ahmednagar (Maharashtra)
18	Page No.32 Point No. e System should be certified from OEM of DG sets after installation of retrofit system. Prior installation NOC from DG set manufacturers should be obtained that there will no adverse effect on the performance and efficiency of DG sets. Any deviation in this regard must be made known to the Owner before award of works.	It is not Required to get any certifications from OEM as Type Approval Certifications are suffice to install RECD . RECD should be Type Approved is the primary condition as per CPCB. All the mentioned aspects are taken in to consideration while obtaining Type Approval Certificate, from the CPCB approved labs (any one of the four), no private firm can surpass these competent	Type approval certificate (TAC from approved labs) is required for 500kva & 800 kva DG sets.
19	Page No.34 Payment terms	5% payment after approval certificate from DPCC is not required as DPCC will not issue any such certificate. 5% payments after each maintenance period of 5 years also made our payment get delayed. As this is customer specific product so advance payment is required. Requesting 75% advance payment, 20% after installation and commissioning and rest 5% payments distribute equally after each maintenance period of 5 years.	After initial inspection (wherever specified)& delivery at site in good condition on pro rata basis- 75 % , On completion of pro rata basis- 20% , After completion of DLP - 5 % and Formal Supplementary Service Level Agreements shall be executed in this regard subsequently after expiry of one year of defect liability period from the successful commissioning and handing over of the above works as required based on above.
20	Page No.6 Technical Bid Submission end date (Last date and time) for receipt of bids	Requesting to extend the bid submission date 10 days more. i.e. 25.09.2023 so bidders can sufficient time to submit bid after pre bid meeting suggestion to amend the tender	Extended upto- 3rd Oct 2023 at 3.00 PM
21		Do you have PNG gas pipe line up to the DG set ?	It is under process.
22		If no, can you please share us the line diagram reflecting the pipe line required along with bends and turns enabling us to estimate the pipe line scope of work and its costing.	Agency to coordinate with the IGL for the same.
23		What is the gas pressure supplied to you by the PNG provider ?	Piping with isolation valve providing 2 Bar gas supply to fuel kit. (Gas Connection to be provided). and Agency to coordinate with the IGL for the same.
24		We were unable to find Engine model details of 500 kVA & 810 kVA in the tender. Please fill the attached format with required details of DG set needed for submission of quote for	Sheet is attached - Annexure-XX
25		With respect to point no. 12 of your Conditions, please share the list of black listed contractors of IIITD?	You have to submit an undertaking regarding not having been blacklisted by any of the Govt. Dept. / PWD /CPWD etc. for taking up similar work.

CE, IIIT-Delhi

Annexure-XX

General Information			
Company Name:	IIITD		
Office address:	IIITD, Okhla Phase-3, New Delhi-110020		
Office Phone:	011-26907563/64/65		
Email address:	admin-project@iiitd.ac.in		
Generator Information			
	Unit #1	Unit #2	Unit #3
Manufacturer:	Cummins	Cummins	Cummins
Model:	ENGINE.KTA-19-G9.600 @ 1500 AS PER BS.GENSET/500KVA	ENGINE.KTA-19-G9.600 @ 1500 AS PER BS.GENSET/500KVA	ENGINE.KTA-38-G12.1068 HP @ 1500 RPM AS PER ISO 3046.GENSET/800KVA
Model Year:	2012	2012	2017
Rating (kVA):	500	500	810
Displacement (liters):	19	19	38
Number of Air Intakes:	1	1	2
Number of Turbos:	1	1	2
Number of Cylinders:	6	6	12
Number of Cylinder Banks:	1	1	2
Usage (hrs/day):	2	2	2
Average Load (%):	80	80	80
Diesel Consumption (liters/hour):	80	80	120
Economics			
Natural Gas/biogas Pricing (Rs/scm):			
Diesel Pricing (Rs/liter):	89.62	89.62	89.62
Calorific value of gas(Kcal/scm):			