Fuel Cell based Hybrid Power Supply System (FC-HPSS)

Fuel Cell Based Hybrid Power Source (FC-HPSS) catering for net power output of 30KVA has been successfully designed , developed and realised containerized is a zero carbon emission power source using 99.99% pure hydrogen for defence applications FC-HPSS to replace fossil fuel based Diesel Generator set (DGs). It is inbuilt with various technologies like Proton Exchange Membrane (PEM) based Fuel Cell system, Solar PV systems, High Energy and Power Density Energy Storage systems and Integrated Power Management system (IPMS) with provision for wind interface. System design is scalable and can be customized as per requirement. The system is field deployable and can be used as power source wherever grid power is unavailable The power source can be utilized to power various defence systems like Missile launcher, Perimeter Surveillance System, Shelters, Bunkers etc.



1. Interested companies/industries are requested to apply against this EoI to following address:-

To,

The Director

Research & Development Establishment (Engineers)

DRDO, Govt. of India, Ministry of Defence,

Kalas, Alandi Road, Dighi P. O., Pune- 411015, India

Phone No: 020-27044000

Email-director.rde@gov.in

Fax No: 020-27044009

2. A copy of interest may be sent to the following address without any attachment:-To,

The Director, Directorate of Industry Interface & Technology Management (DIITM), Room No. 447, DRDO Bhawan, Rajaji Marg, New Delhi-110 011 Email-diitm.hqr@gov.in Fax-011-23793008 All industries interested in seeking ToT are requested to apply in the format given below. Kindly fill in the fields. The list of documents to be attached is provided in Annexure – I. Kindly provide the reference of page no. of supporting document in the relevant field of form.

<u>PART-1</u>

General Information

(Please enclose documents in support of information provided)

1.	Name of the Technology requested for Technology Transfer (Technology name and concerned Lab, Category)	
2.	Name of the industry/ organization	
3.	Complete Address and other details	
	Registered OfficeStatePhone NoFaxEmailWebsite	
	FactoryStatePhone NoFaxEmailWebsite	
6.	Point of ContactNameDesignationAddressMobile NoPh NoEmail ID	
7.	NAME OF CMD/ MD /PARTNERS/ PROPRIETOR/ etc Name Designation Address Mobile No Ph No Email ID	
8.	Date of Incorporation of company	
9.	Foreign Direct Investment in company (if any in %)	
10.	Shareholding pattern	
11.	Turn over as per Audited Balance Sheet for the preceding three years. Year Year Year Year	
12.	Annual budget for R&D during last three years (if any) Year Year Year	
13.	Income Tax returns for the preceding three years period Year Year Year	

14.	Nature of company DPSU, Private Limited, Public Limited, Partnership, Proprietary, Ex- Serviceman Unit	
15.	Category of industry Large Scale, Medium Scale, Small Scale, Micro, Startup	
16.	MSME Registration No	
17.	Certificates of registration as a manufacturing unit, if any.	
18.	If Startup, DPIIT Registration No	
19.	UDYOG AADHAR No	
20.	PAN Number	
21.	Details of Industrial license for defence manufacturing issued by DPIIT (if any)	
22.	Details of PESO license (if any)	
23.	GST Number	
24.	Nature of business Manufacturing/ Sole Selling or Authorized Agent/ Assembler/ Traders/ Dealer/ Processor/ Repacker/ Others	
25.	Details of current products and services Products and services Supplied (please specify Govt/ Domestic market/ Export)	
26.	Record of past performance (e.g., Supply orders executed against of Ministry of Defence orders, Public Sectors and Paramilitary Forces, if any).	
27.	Details of registration with NSIC / SSI, DGS&D, other Defence Department, other Govt. Dept, membership of FICCI/ASSOCHAM/CII or other Industrial Association (Attach relevant copies of registration letters)	
28.	Have you already taken any technology from DRDO (If yes, give details attaching separate sheet) Name of the Technology, Lab, Year, License number & Status	
29.	ISO/ ISI certification or any other certification (If yes, give details)	
30.	Relevant clearances form the authorities/ ministries (if any)	
31.	Capacity and capability to undertake developmental work and to accept attendant financial and commercial risks.	
32.	Capacity/capability to market the product through the marketing network, sales and service network, reliability to maintain confidentiality.	

PART-2

Infrastructure and other Information

1.	Total area of factory
	Covered (m ²),
	Uncovered (m ²),
	Bonded space available (m ²)
2.	Ownership of factory
	Self-owned, partnership, rental
3.	Electric power
	Sanctioned
	Installed
	Standby (if any)
4.	Availability of adequate infrastructure
	(List of machines and their production capacities) and
	technical expertise
5.	Name of bank & A/c No Name of bank
	A/c type
	A/c no
	Address of the bank
	Phone:
	Email:

6. Details of current products:

S.No	Туре	Description	Licensed/installed capacity	Annual production for preceding 3
				years

7. Details of foreign collaboration, if any

S.No	Product	Product Name and address of collaborator		Remarks

8. Details of products developed for services

S.No	Nomenclature of stores	Order No. and date	Remarks

9. Please give details of important facilities & infrastructure as per following format for:

- (a) Production
- (b) Unconventional, special m/c
- (c) Testing & quality control facilities

S.No	Description of m/c	Make & model	Qty	Date of purchase	Remarks

2

2

10. Furnish the following details with relevant certificates and documents

- (a) R&D facilities available
- (b) Inspection quality control of raw material components
- (c) Assistance from central agency for testing / calibration etc.
- (d) laboratory and drawing office facility

11. Principal customers:

S. No	Name & address	S.O No and date	Date of last supply	Products supplied	Value

12. Future plans (if any) in respect of expansion programme/ installation of additional machines/ test facilities etc.

13. Name of the technology requested for transfer

(give self-assessment of your capability to absorb the technology)

14. Details of employee as on date on firm's pay roll

PERMANENT	PERMANENT						
Category	Post Held	Number	Qualificatio	Total Service			
			n				
Technical	Prod. Manager Q.C. Manager Supervisor Testing Staff (QC) Skilled workers Unskilled workers, etc						
Administrative	Purchase Manager Accounts Officer Office Superintendent Clerical Others, etc						

TEMPORARY	TEMPORARY						
Category	Post Held	Number	Qualificatio	Total Service			
Technical	Prod. Manager Q.C. Manager Supervisor Testing Staff (QC) Skilled workers Unskilled workers, etc						
Administrative	Purchase Manager Accounts Officer Office Superintendent Clerical Others, etc						

DECLARATION:

I / we confirm that the information furnished in Part 1 & 2 above is correct. In the event of any information given by me / us is found incorrect / false at any time, I / we understand our EoI for ToT will be cancelled/ rejected without notice, beside any other appropriate action against me / us.

Industry seal

Authorized signatory

Name(s) in capital

Designation and seal of authorized signatory

Date:

Place:

List of Support documents to be attached with Eol

- (a) Memorandum and Articles of Association (Should be incorporated as per Indian Companies Act, as amended time to time)
- (b) Certificates of registration as a manufacturing unit, if any.
- (c) Audited Balance Sheet for the preceding three years.
- (d) Income Tax returns for the preceding three year period
- (e) Details of shareholding/ownership pattern especially foreign partners/ shareholders, foreign employees, directors, etc. The company must adhere to the prevailing Govt of India policies and regulations on Foreign Direct Investment (FDI)/DIPP norms as applicable.
- (f) Annual budget for R&D during last three years.
- (g) Numbers and details of IPR or patents, etc., held by the company.
- (h) Number of technically or professionally qualified personnel.
- (i) Record of past performance (e.g., Supply orders executed against of Ministry of Defence orders, Public Sectors and Paramilitary Forces, if any).
- (j) Availability of adequate infrastructure (List of machines and their production capacities) and technical expertise.
- (k) List of Testing and Support equipment's
- (I) ISO/ ISI certification or any other certification
- (m) Relevant clearances form the authorities/ ministries (if any)
- (n) Capacity and capability to undertake developmental work and to accept attendant financial and commercial risks.
- (o) Capacity/capability to market the product through the marketing network, sales and service network, reliability to maintain confidentiality.
- (p) PESO and DPIIT license for explosive handling if ToT is for high energy Material, explosives, propellants, and component/ system dealing with it etc.
- (q) Under taking form company seeking ToT that none of its Directors, Independent Directors, non-executive Directors, Key management personnel are involved in any corrupt practices, unfair means and illegal activities.
- (r) Details of the industrials license for defence manufacturing be provided by the industry seeking ToTs.
- (s) Application cum Industry Assessment Form.