INSTITUTUL NAȚIONAL DE CERCETARE - DEZVOLTARE
PENTRU INGINERIE ELECTRICĂ INCDIE ICPE-CA

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J40/3800/2001
Cod Fiscal R 13827850
Capital Social: 381.108 Lei
Trezorerie:
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PRODUCT SPECIFICATIONS

FOR

POWER PULSE GENERATOR (TEST SYSTEM)

Date of offers opening:

GENERAL DIRECTOR
Prof. Dr. Wilhelm Kappel

Minimal technical (eligibility) requirements – no points awarded

1. Field of use:

High power pulse generation for research/tests in the field of varistors/metal-oxide surge arrester and other protective devices.

2. Minimal technical requirements for offer eligibility:

No.	Component	Minimal technical requirements	
1		1.1	Installation: indoor, stationary
		1.2	Impulse current waveforms 8/20μs - 40kA; 1/20μs - 20kA; 4/10μs - 100kA; 30/60μs - 5kA, 10/350μs - 4kA; 2.4ms - 1,2kA (long wave)
		1.3	Line discharge class 1 - 3
		1.4	Power supply 240/380V, 50Hz
		1.5	Rated impulse energy: minimum 100KJ
		1.6	Charging voltage: minimum 100kV
		1.7	Max. time difference between impulses 50 - 60sec.
		1.8	Polarity change: motor driven
		1.9	Controlling of switching gap and possibility of trigger synchronization by AC power supply
		1.10	Automatic earthing system
		1.11	Emergency stop pushbutton
		1.12	Preselection of charging voltage
		1.13	PCB free capacitors
		1.14	System measurement and recording pulse (current/voltage): - EMC/EMI interference free; - fiber optic link; - rated resolution: minimum 12Bit.
		1.15	Safety Integrity Level –SIL3 (IEC 62061)
		1.16	Certificate of calibration acknowledged by authorized institute
		1.17	Performance certification of installed system issued by third party
2.	commercial requirements	2.1	Insurance spares and post warranty service: min. 5 years
		2.2	Term of warranty: min. 2 years **Service concept :** service hotline response time less than 24h
		2.3	**Delivery terms:** maximum 9 month after signing the contract, DDP-BENEFICIARY INCDIE ICPE-CA. The transport, installation and training are the responsibility of the supplier.

		2.4	**Payment method accepted by ICPE-CA is:** 30 % - with banking guarantee letter 70% - within 30 days after putting in operation, personnel training at the beneficiary and signing the acceptance report at INCDIE ICPE-CA.
		2.5	**The validity period of the offer:** 90 days from the offers submission deadline.
		2.6	**Installation and testing of the system in beneficiary laboratory**
		2.7	**Personnel training** in the beneficiary laboratory 2 persons/ 2 days.

A. Evaluated technical and functional characteristics.

No.	Technical characteristics	Allocated points
1.	Rated impulse energy: > 100kJ	10
2.	Charging voltage: > 100kV	10
3.	Rated resolution of dedicated measurement and recording pulse system: > 12 Bit	20
4.	Self calibration for measurement system	5
5.	Estimated total number of normal impulses and number of short-circuit discharges supported (underdamped RLC circuit response)	15
	TOTAL	60

B. Main terms concerning financing and payment:

Estimated value is 2025000 lei, equivalent to 450000 euro, exchange to 4.5lei/euro.

Financing sources of the contract to be assigned are: **Structural funds provided by POS CCE axis 2.2.1. "**Infrastructure to promote competitiveness through innovation in electrical engineering energy security for sustainable growth" **acronym PROMETEU ,** Project 629/11.03.2014

C. Criteria for evaluation and allocation of scores:

Evaluation criteria	**Maximum balance**
Offered price Determinant algorithm: $P = P_{min}/P_n \times 40$ *Where:* P_{min} is the lowest offered price; P_n is the price of offer „n". P is the obtained score.	40
Technical and functional characteristics in compliance with Product specifications chapter A: 1. The scores are granted only in the case of meeting the evaluated technical performances, so that the sum of the offered scores is maximum 60. 2. The method of calculating the effective score is: Offer to feature the best gets the scores maximum points after other offers	60

the following formula: $P_i=(C_i/C_{max}) \times P_{max}$ where: P_i - represents the score of the offer "i" C_i – represents the value of evaluated technical characteristic offered C_{max} - represents the best value of the evaluated technical characteristic offered P_{max} - represents the maxim score offered in the present documentation for respective feature If a evaluable technical characteristic is not met for the respective characteristic, will receive 0 points.	

D. **The criterion based on which the contract is to be assigned:** "the most advantageous offer from the economic point of view", 60% of the price being established by the technical characteristics and 40% by the financial offer.

Legal basis:

Government Emergency Ordinance no. 34/2006, published in the Official Gazette no. 418/15.05.2006 regarding the public acquisitions with subsequent amendments.

Date: 20.10.2014

Drafted,
PhD. Eng. Mihai BADIC