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LV CABLES	STATION	PROJ	DISC.	DOC	SEQ	REV	PAGE:
MATERIAL REQUISITION	CGS5	636	EL	MR	002		

DOCUMENT TITLE:	
LV CABLES MATERIAL REQUISITION	

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REV.	DATE	DESCRIPTION	PREP.	APPR.	PROJ.	TPGC





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CHANGE RECORD SHEET

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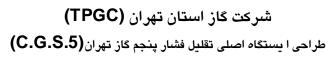
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شرکت ملی گاز ایران





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1. **INTRODUCTION**

National Iranian Gas Company (NIGC) intends to design 5th City Gas Station for Tehran on the 48" gas line located Babaei highway. Design facilities will perform in 2 sections: Basic and Detailed Design.

This station located at the end of 48" gas line to reduce pressure of 1,500,000 scmh of Natural gas from 1050 psig to 250 psig. The station contained 3 units with the capacity of 500,000 scmh and depressurizes natural gas in 2 cuts (1050psig-400psig and 400psig-250 psig) respectively.

1.1 **Definition of terms**

National Iranian Gas Company (NIGC) Owner :

National Iranian Gas Company (NIGC) Company

Contractor Oil Turbo Compressor Engineering Company (OTEC)

Consultant Oil Turbo Compressor Engineering Company (OTEC)

Supplier Means prime supplier responsible for the complete supply.

Sub-supplier Means a company, which provides components, products or services, to

Supplier.

Manufacturer Means a manufacturer of one group component, packaged by the Supplier.

SHALL and SHOULD - The word shall is to be understood as mandatory requirement and the word should Indicates a recommendation or that which is advised but not required.

2. SUBJECT OF REQUISITION

This material requisition provides the minimum requirements and information for the supply of the LV CABLES as listed in clause 4, in accordance with the applicable project documents as listed in clause 9 and latest edition of the codes and standards mentioned in the project documents.





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3. **GENERAL REQUIREMENTS**

- 3.1 All correspondence, drawings and documents submitted by Supplier shall be in English language.
- 3.2 International system of units (SI) shall be used in all documents, except for nominal diameter of pipes, fittings, flanges, etc. (that will be in inches), flange ratings and for pressure (measured in bars).
- 3.3 Any contradiction or difficulty in interpreting the different documents raised by the Supplier shall be notified to Consortium to obtain their clarification. Any deviation shall be listed, as well as priced, separately. Failure to do so will be interpreted as the Supplier having complied in every detail with Consortium's requirements. No deviation will be permitted without prior written agreement of the Consortium.
- 3.4 Design and manufacturing cannot be started until this clarification has been taken into account by Supplier.
- 3.5 Prior to commencement of fabrication and shipment, all documents as listed in the section 8.0 of this document shall be submitted for Company Review and Comment.
- 3.6 If Supplier considers any exceptions, deviations and /or alternatives, regarding Company's requirements, bidder shall clearly define and list them in his proposal under separate section entitled as "List of Deviations". Any deviations or exceptions shall be justified and fully explained in the bid.
 - After order award, Company will not allow any extra price necessitated from failure to comply with specifications.
- 3.7 All materials and components shall be guaranteed by the Supplier against defects or improper materials, poor workmanship and failure due to normal usage for 12 months after placed in service, but not exceeding 18 months after the date of shipment.
- 3.8 Packaging shall be suitable for land transportation and tropical proof, suitable for at least 1-year transit condition and 6 months storage under site conditions.
- 3.9 No protection, paint or other filling shall be applied to the contract works before they have been inspected, tested and approved by Company or his authorized inspector. After approval and before dispatching, each part of the contract works shall be thoroughly cleaned and appropriately protected and packed in accordance with the project specification.
- 3.10 The Supplier's quotation shall be submitted in three copies and must include the following:
 - Inquiry No. & quotation No.
 - Promised delivery date.
 - Country of origin.
 - Shipping weights and volume
- 3.11 As an alternative to the quotation submitted in accordance with the enclosed documents, it is Company's objective to achieve the commercially most attractive solution for the entire required scope within the requirements of this inquiry. Bidder is therefore requested to carefully analyze the enclosed documents and to submit additionally an alternative quotation highlighting cost affected items considering the codes standards and Manufacturer's standards only.



شىركت ملى گاز ايران شىركت گاز استان تهران (TPGC)



طراحى ا يستگاه اصلى تقليل فشار پنجم گاز تهران (C.G.S.5)

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- 3.12 All final documents/drawings shall be submitted in five copies in addition to those mentioned in attachments of this material requisition.
- 3.13 A fixed lump sum price is required for each and every item of the quotation. Supplier is required to include in his firm price the provision of all information relevant to handling and transportation of each item to the site, i.e. any required temporary support.
- 3.14 Supplier shall include in his firm price the cost of performing all specified tests and inspection including the cost of provision of test certificates.
- 3.15 Supplier shall include in his supply the provision of all pre-commissioning, commissioning, start-up spares and special tools.
- 3.16 Supplier shall submit a separate firm price and list for five years operational spares, which will be subject of a separate order.





OTEC (۵۱۵۱۵۱۵) معنی تعنیل فعال پیجم دار تهران(۵۱۵۱۵۱۵)

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4. BILL OF MATERIAL

4. <u>B</u>	ILL OF MAT			
Pos.	Tag No.	Description	Unit	Qty.
1	-	1 x 150 mm², 0.6/1 kV, power cable, annealed copper conductor, red color XLPE insulation, AWA, black color PVC outer sheath.	M	300
2	-	1 x 150 mm², 0.6/1 kV, power cable, annealed copper conductor, yellow color XLPE insulation, AWA, black color PVC outer sheath.	M	300
3	-	1 x 150 mm², 0.6/1 kV, power cable, annealed copper conductor, blue color XLPE insulation, AWA, black color PVC outer sheath.	M	300
4	-	1 x 150 mm², 0.6/1 kV, power cable, annealed copper conductor, black color XLPE insulation, AWA, black color PVC outer sheath.	M	150
5	-	3 x 2.5 mm², 0.6/1 kV, power cable, annealed copper conductor, (red, black & green-yellow color) XLPE insulation, SWA, black color PVC outer sheath.	M	1000
6	-	4 x 2.5 mm², 0.6/1 kV, power cable, annealed copper conductor, (red, yellow, blue & black color) XLPE insulation, SWA, black color PVC outer sheath.	M	100
7	-	3 x 4 mm², 0.6/1 kV, power cable, annealed copper conductor, (red, black & green-yellow color) XLPE insulation, SWA, black color PVC outer sheath.	M	2500
8	-	3 x 10 mm², 0.6/1 kV, power cable, annealed copper conductor, (red, black & green-yellow color) XLPE insulation, SWA, black color PVC outer sheath.	M	1500
9	-	4 x 10 mm², 0.6/1 kV, power cable, annealed copper conductor, (red, yellow, blue & black color) XLPE insulation, SWA, black color PVC outer sheath.	M	1500
10	-	4 x 16 mm², 0.6/1 kV, power cable, annealed copper conductor, (red, yellow, blue & black color) XLPE insulation, SWA, black color PVC outer sheath.	М	700
11	-	3 x 35+16 mm², 0.6/1 kV, power cable, annealed copper conductor, (red, yellow, blue & black color) XLPE insulation, SWA, black color PVC outer sheath.	M	1300





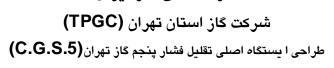
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Pos.	Tag No.	Description	Unit	Qty.
12	-	5 x 10 mm², 0.6/1 kV, power cable, annealed copper conductor, (red, yellow, blue, black & green-yellow color) XLPE insulation, SWA, black color PVC outer sheath.	M	1400
13	-	5 x 16 mm², 0.6/1 kV, power cable, annealed copper conductor, (red, yellow, blue, black & green-yellow color) XLPE insulation, SWA, black color PVC outer sheath.	M	2500
10				
11				
12				
13				
14				



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5. **SCOPE OF WORK-SERVICES**

- Preservation, protection and painting
- Preparation for shipment and packing
- Attending at all meetings held by Contractor/Consultant
- Submitting of a separate quotation for spare parts for 2 years operation
- Consumables and spare parts for start-up (if any)
- Documentation of the supply ,operation ,maintenance ,erection ,tests ,...
- Technical warranties
- Tools for erection and regular maintenance (if any)
- Special tools for commissioning and precommissioning(if any)
- Factory tests with witness

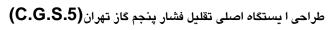
6. **SUPPLY EXCLUSION**

- Civil works
- Erection
- Supervision for the supply erection
- Site and acceptance test of the supplies



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7. GENERAL INFORMATION

7.1 **ABBREVIATIONS**

Keys to abbreviations used are the following:

7.1.1 Type of document

o: original

c: paper copy

e: electronic file

7.1.2 Delivery time

W: Week M: Month

AA: after commissioning

AC: after order

ACI: after order of revision no.(i)

ADL:at delivery AE: after site tests AL: after last delivery AU: after factory tests

BF : before beginning of manufacture

BL: before delivery

BO: before operation (example: welding, heat treatment,...)

BU: before factory tests EXW: Ex Works in Workshop DDU: Delivered at Site





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8. <u>VENDOR DATA REQUIREMENT</u>

	NO ENGINEERING DOCUMENTS		A	FTER PUR	CHASE ORI		
			FOR R	EVIEW	FOR INFORMATION		FINAL
NO			QTY	DELIVERY TIME	QTY	DELIVERY TIME	DOCUMENT
1	List of supplier's references	5C	-	-	-	-	5C+1E
2	Supplier's specification	5C	-	-	-	-	5C+1E
3	List of deviation from client specification	5C	-	-	-	-	5C+1E
4	Final list of deviation from client specification	-	5C+1E	-	5C+1E	2WBF	5C+1E
5	Equipment catalog	5C	-	-	-	-	5C+1E
6	General dimensional	5C	5C+1E	4WAC	-	-	5C+1E
7	Spare parts list for commissioning and start-up	3C	3C+1E	3W BL	5C+1E	ADL	5C+1E
8	Spare parts list for two (2) years of operation	3C	3C+1E	1WAC	5C+1E	ADL	5C+1E
9	Routine test certificate	_	_	_	5C+1E	1WAU	-
10	Type test certificate	5C	=	_	-	-	-
11	Progress report			_	-	Monthly	-
12	Technical shipment file	-	5C+1E	3W BL	_	_	5C+1E
13	Performa bill	-	=	=	5C+1E	ADL	_





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9. <u>LIST OF ATTACHMENTS</u>

DESIGNATION	REFERENCE
- SPEC. FOR LV CABLES	CGS5-636-EL-SP-004
- LV CABLES SCHEDULE	CGS5-636-EL-LI-001
- POWER ELECTRICAL WIRES & CABLES	IGS-EL-007(0):1378