

# Purchase Order Quality Requirements (POQR) for IEC 61439 - LV Switchgear & Controlgear Assemblies



#### Acknowledgements

These Purchase Order Quality Requirements were prepared by a Joint Industry Project 33 Standardization of Equipment Specifications for Procurement organized by IOGP with support by the World Economic Forum (WEF).

#### Disclaimer

Whilst every effort has been made to ensure the accuracy of the information contained in this publication, neither IOGP nor any of its Members past present or future warrants its accuracy or will, regardless of its or their negligence, assume liability for any foreseeable or unforeseeable use made thereof, which liability is hereby excluded. Consequently, such use is at the recipient's own risk on the basis that any use by the recipient constitutes agreement to the terms of this disclaimer. The recipient is obliged to inform any subsequent recipient of such terms.

This publication is made available for information purposes and solely for the private use of the user. IOGP will not directly or indirectly endorse, approve or accredit the content of any course, event or otherwise where this publication will be reproduced.

#### Copyright notice

The contents of these pages are © International Association of Oil & Gas Producers. Permission is given to reproduce this report in whole or in part provided (i) that the copyright of IOGP and (ii) the sources are acknowledged. All other rights are reserved. Any other use requires the prior written permission of IOGP.

These Terms and Conditions shall be governed by and construed in accordance with the laws of England and Wales. Disputes arising here from shall be exclusively subject to the jurisdiction of the courts of England and Wales.

# Purchase Order Quality Requirements (POQR) for IEC 61439 - LV Switchgear & Controlgear Assemblies

#### Revision history

VERSION	DATE	AMENDMENTS

November 2016

(EPC LOGO)



# Purchase Order Quality Requirements (POQR) for IEC 61439 - LV Switchgear and Controlgear Assemblies

2	Issued for information						
Rev	Reason for Issue	Author	Date	Checked	Date	Approved	Date

Add Procurement package no. here

_		Rev
	S-560Q	Rev: 2
'-		

Add Project name here

#### 1 Scope

- a. This document defines the standard quality requirements for IEC 61439 low voltage switchgear and controlgear packages.
- b. Annex A defines the User conformance, verification and surveillance requirements.

#### 2 Normative references

The following documents are referenced in one or more requirements in this document. For dated references, only the version cited applies. For undated references, the latest version of the referenced document (including any amendments) applies.

API Specification Q1	Specification for Quality Management System Requirements for Manufacturing Organisations for the Petroleum and Natural Gas Industries.
IEC 61439-1	Low-voltage switchgear and controlgear assemblies - Part 1: General rules (Edition 2.0: 2011).
IEC 61439-2	Low-voltage switchgear and controlgear assemblies - Part 2: Power switchgear and controlgear assemblies (Edition 2.0: 2011).
ISO 9001	Quality management systems - Requirements.
S-560	Supplementary Requirements to IEC 61439-1 & 2 LV Switchgear & Controlgear.

#### 3 Terms and definitions

For the purpose of this document, the following terms and definitions apply:

#### User

An associate or subsidiary, or other organisation acting as owner, purchaser, or customer as designated in the Purchase Order.

#### Manufacturer

Entity entering into a contract with Company/Principal to provide materials, goods, supplies, equipment, or plant and includes the successors and (or) permitted assigns of such entity.

#### 4 Symbols and abbreviations

For purposes of this document, the following symbols and abbreviations apply:

ECMS Electrical control and monitoring system.

ITP Inspection and test plan.

PO Purchase order.

POQR Purchase order quality requirements.

SDR Supplier deliverable requirements.

SDRL Supplier deliverable requirements list.

#### 5 Quality requirements

#### 5.1 Quality management system

Quality management systems shall conform to ISO 9001, API Specification Q1, or equivalent agreed by Company.

#### 5.2 Conformance verification

- a. ITP or other operational planning and control documents provided by Manufacturer shall define the specific controls to be implemented by Manufacturer to conform with S-560 and this POQR.
- b. Controls shall be applied to products and services provided by Manufacturer and sub-suppliers.
- c. ITP or other operational planning and control documents, shall include the User:
  - 1. Verification and surveillance requirements included in Annex A,
- d. Conformance verification requirements in Annex A are minimum requirements, alternative requirement shall apply if specified in the Purchase Order.

## Annex A User surveillance and inspection

Α	REQUIREMENTS PRIOR TO MANUFACTURE / ASSEMBLY / TESTING	Activity Type
1	Post award kick-off and clarification meeting.	Н
2	Approval of all key pre-manufacture deliverables in conformance to the SDRL.  Manufacture not to proceed until relevant deliverables are approved by User either with or without comments for inclusion, in accordance with the Quality Plan.	Н
3	Pre-inspection meeting incorporating review of inspection and test plan.	Н
В	REQUIREMENTS DURING MANUFACTURE / ASSEMBLY / TESTING	Activity Type
1	Switchgear performance tests (IEC 61439-1 / S-560 - clause 9) where applicable.	W
2	Switchgear design verification (IEC 61439-1 / S-560 - clause 10 and all related sub-clauses) where applicable.	W
3	Switchgear routine verification tests (IEC 61439-1 / S-560 clause 11 and all related sub-clauses).	W
4	Switchgear special tests (S-560 - clause 11.101 ECMS) where applicable.	W
С	REQUIREMENTS FOR EQUIPMENT RELEASE AND PURCHASE ORDER COMPLETION	Activity Type
1	Inspection of equipment preservation, sea-fastening, export packing and weighing of all items.	W
2	Inspection of all loose ship items.	W
3	Inspection of insurance spares long term preservation and export packing.	W
4	Verify all inspections and tests are complete, review evidence that all defect items are closed.	Н
5	Manufacturing record books.	R
6	Installation, operation and maintenance manual.	R
7	Despatch dossier(s).	S
8	Certificate of conformity.	S
9	Final release (verification and acceptance of above requirements 1-8)	Н

#### Key:

#### Hold point (H)

A critical operation or process beyond which work shall not proceed without attendance by User representative or written User approval.

#### Witness point (W)

An operation or process that requires witness by the User representative. The operation or process may proceed without witness only with prior User approval. Repetitive witnessing activities may be by percentage as specified.

#### Surveillance (S)

Periodic review by the User representative of an activity, operation, process or documentation at Manufacturers or sub-(supplier) premises. No specific notification is required and the activity, operation or process may proceed if the User representative is not present.

#### Review (R)

User review of Manufacturer documentation providing objective evidence of the Manufacturer's conformance to the Purchase Order requirements. Documentation to be submitted to User office as stated in SDRL.

#### Registered Office

City Tower 40 Basinghall Street 14th Floor London EC2V 5DE United Kingdom

T +44 (0)20 3763 9700 F +44 (0)20 3763 9701 reception@iogp.org

#### Brussels Office

Bd du Souverain,165 4th Floor B-1160 Brussels Belgium

T +32 (0)2 566 9150 F +32 (0)2 566 9159 reception@iogp.org

#### **Houston Office**

10777 Westheimer Road Suite 1100 Houston, Texas 77042 United States

T +1 (713) 470 0315 reception@iogp.org

### www.iogp.org

