



MEASURED RESULTS – SGS FLOW MEASUREMENT & ALLOCATION

INDEPENDENT SOLUTIONS

FOR YOUR MEASUREMENT AND ALLOCATION NEEDS

When producing oil and gas you need an accurate understanding of the quantities and qualities of hydrocarbons produced. If you are involved in shared production, or transportation facilities, it becomes even more important to accurately track the allocation of net hydrocarbons between the various parties. SGS provides expertise and dedicated data validation services, independent of meter system providers and meter vendors, in order that you avoid measurement issues and costly errors.

PROVEN TRACK RECORD OF FLOW MEASUREMENT & ALLOCATION SERVICES

SGS has a proven track record, built over 20 years, in Flow Measurement and Allocation Services. Our expert team of highly experienced auditors, consultants, trainers, technicians and project managers mean you can be confident in SGS to deliver a comprehensive solution to all your needs. We maintain the highest levels of fiscal and process measurement requirements to guarantee you the best results for operational (OPEX) cost savings. Our wealth of global experience gives you access to trusted independent third party advice in all areas of: Fiscal; Allocation; Custody Transfer; Environment and Emissions Control Measurement.

ABOUT SGS FLOW MEASUREMENT AND ALLOCATION SERVICES

Our complete range of services provides you with: metering system audits; independent consultancy services; tailored training courses; hydrocarbon allocation; uncertainty studies; third party certification and design verification; metering system management; on-site calibration services; refinery loss audits; and project and engineering services.

Metering System Audits

You need to undertake regular audits of your metering systems in order to check and validate that potential instrument, system, data reporting, traceability and procedural errors are identified, highlighted and quantified at the earliest opportunity. The SGS audit service is perfectly placed as

an independent and impartial third party to provide this critical element in preventative maintenance.

Consultancy Services

SGS provides you with consultancy services on a comprehensive range of metering processes ensuring that project measurement requirements are fully implemented in selected metering systems and operational expenditure is minimised. This allows you to maintain your fiscal and process management requirements at the highest levels. We deliver independent and highly experienced Flow Metering Consultants to give you a totally independent and comprehensive service without affiliations to vendors, system builders or integrators.

Training

SGS Flow Measurement, Allocation and Metering Courses are designed for any level of expertise and each one is tailored to suit process, instrumentation, maintenance and management personnel. All our courses are based on best working practices and cover all operational, maintenance and safety issues.

Hydrocarbon Allocation Services

SGS supplies a thorough range of Hydrocarbon Allocation Services that include: Development of Agreements; Allocation Modeling; Exposure Analysis and Third Party Liaison. We are at the forefront of Allocation System Development and deliver accurate data reporting to you by utilising Embedded Equation of State Calculations, Sensitivity Analysis, Loss Exposure and Statistical Analysis Packages. Within all

of these services we make sure your data is professionally handled, reported on time and qualified by an independent third party. This allows you to assure your partners, and the regulatory bodies, to whom you report, that all measurements and revenue issues are in compliance with all requirements.

Uncertainty Studies

SGS is a leading provider of uncertainty analysis and is instrumental in developing industry standards. We solve your problems related to uncertainties of custody transfer and allocation metering systems with our wide range of services that combine traditional techniques and where appropriate Monte Carlo Simulation. Our services provide you with a cost effective means of defining measurement requirements and associated commercial exposure.

Third Party Certification and Design Verification

As the leading independent provider of third party certification and design verification SGS adds value to your projects from Conceptual and Front End Engineering Designs (FEED), through to Detailed Design to Installation, Commissioning and Steady State Operation of Systems.

Metering System Management

SGS offers a complete solution for fiscal and measurement management contracts. With our dedicated resource pool, covering all disciplines, SGS manages and operates a far-reaching number of metering system assets worldwide. All our systems are operated and maintained by experts who have undergone a rigorous training program in order that when it comes to the prioritisation of measurement issues, safety and integrity are not compromised.

On-site Calibration Services

SGS manages and operates a wide range and variety of on-site calibration services. We use our knowledge to ensure your measurement systems are calibrated using equipment traceable to relevant standards. SGS provides specialised equipment and highly skilled operators to perform on-site calibration using product and other calibrating fluids. Our experts are trained in numerous

operating and safety procedures and the service is fully certified for all hazardous areas of operation. We provide these services independently of system manufacturers and instrument vendors, meaning the advice you receive is completely impartial.

Project and Engineering Turnkey Solutions

Over the past 20 years, SGS has built up a proven record in turnkey solutions to FEED Studies, Detailed Design Review, Vendor Management, Measurement and Metering Issues. Our Project Engineering Team provides you with complete control of planning to hand-over, technical, procurement, FAT and site acceptance with their in-depth experience of commissioning and project management issues. Our solutions are presented on time, within budget and fully documented to meet your company and regulatory requirements. We also offer, through our project team, a wide range of independent services to manage: measurement system obsolescence; database solutions; metering system design; tender management; system procurement; and independent site acceptance of replacement equipment.

THE BENEFITS

With SGS acting as your third party metering system auditor you can feel assured that you are receiving the best independent and impartial advice available. This means you can trust in the actions required and implement them safe in the knowledge there is no affiliated network of manufacturers, providers or vendors influencing our results. Our global reach and network of services allows us to have an in-depth understanding and comprehensive solution to all of your ever-increasing measurement requirements. We have over 20 years of experience and a proven track record in ensuring timely, accurate and within budget services that take the uncertainty out of a critical element in your oil and gas production and transportation facilities. Whether your needs are metering, allocation, calibration or project engineering, you can be sure our worldwide network of experts, consultants and technicians, are ready to deliver cost effective and professional solutions to benefit your business.

WHY SGS?

Our industry knowledge, alongside our experience and recognition allows us to offer you our advice and to share with you our expertise. Our full Oil, Gas and Chemicals (OGC) programme covers upstream, midstream and downstream as well as LNG. We have been the established leading industry player in the sampling, measurement, analysis and certification of bulk liquids since the 1950s as a unified Group and for many decades before that in the form of the individual international companies who were merged to form what is today's OGC division.

Our Environmental Services support all industries and governments in developing sustainable solutions, complying with environmental regulations and assessing environmental performance. Our team of experienced consultants guide and assist customers through a comprehensive range of specialised environmental services ranging from impact assessments to air and water quality testing and a wide variety of climate change related services.

A WORLDWIDE COMPANY WITH GLOBAL SOLUTIONS

SGS is the world's leading inspection, verification, testing and certification company. Recognised as the global benchmark for quality and integrity, we employ over 64 000 people and operate a network of more than 1 250 offices and laboratories around the world.

We provide innovative services and solutions for every part of the oil, gas and chemicals industry and environmental services when and where they are needed. Our global network of offices and laboratories, alongside our dedicated team, allows us to respond to your needs, when and where they occur. Our reputation for independence, excellence and innovation has established us as the market leader in providing services that improve efficiency, reduce risk and deliver competitive advantage for you.

FOR MORE INFORMATION ABOUT FLOW MEASUREMENT AND ALLOCATION SERVICES CONTACT OGC@SGS.COM OR VISIT WWW.SGS.COM/OGC

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