



JK Consulting (International) Ltd

FLOW METERING SYSTEM LIFECYCLE

Maintain

- Calibration Procedures
- Validation
- Technicians Competency Assessment and Training
- Condition Based Monitoring

Compliance (Contractual Maintenance)

- Production Loss Reporting
- Allocation Reporting
- Events Reporting
- Routine Calibrations
- Audits

Audit Findings

- Audit Actions
- Is Meter Fit For Purpose?
- Operating Outside of Uncertainty Limits

Remedial Actions

- Re-Range Instrumentation
- Recalibrate Meter with Different Range

New Meter & Instruments

- Change of Meter Type?
- Change Range of Meter and Instruments
- New Technology

Measurement Philosophy

- Standards / Codes
- Regulatory
- Negotiations
- Allocation Agreements (if applicable)

Operate

- Operating Procedures
- Mismeasurements
- Dispensations
- Partner and Regulatory Reporting
- Hydrocarbon Accountant Reporting

Meter Select

- Process conditions
- Range / Turndown
- Uncertainty Requirements
- Maintenance Regime
- Physical Footprint
- CAPEX

Site Acceptance Testing

- Commissioning
- 3rd Party Acceptance and Sign Off
- Documentation
- Commissioning Procedures

Statement of Requirements

- Meter Type
- Meter Range
- Single/Two/Multi Phase
- Redundancy / Multiple Streams
- Liaise Partners / Regulators
- Analyser / Sampling

Factory Acceptance Testing

- Calibration
- Functional Tests
- Flow Computer Tests
- Analyser Tests
- Data Hand-Off Tests
- 3rd Party Witnessing

Construction

- Compliance with Standards and Design Requirements

Bid Evaluation

- Technical Basis
- Commercial Basis

Functional Specifications

- Output from FEED
- Installation Requirements
- Meter Type and Sizing
- Flow computers/ New Live Supervisory Computer
- Data Interfaces / Data Hand Off

Outline Design

- Standards
- Instrument Specifications
- Data Handoff Protocols
- Reporting Requirements

Front End Engineering Design

- Site Survey
- Equipment Specifications
- Drawings and P&ID, GA etc.
- Standards / Codes / Guidelines
- Mechanical Design / Piping