

ACS. CMET2 SAFETY ASSESSMENT CRITERIA INITIAL & RE-ASSESSMENT EMERGENCY SERVICE PROVIDER AND GAS METER INSTALLER DIAPHRAGM, RD AND TURBINE METER INSTALLATIONS NATURAL GAS

CMET2 INITIAL & RE-ASSESSMENT

Introduction

Tests gas safety competence to install, commission, service, maintain and exchange non-domestic diaphragm, RD, USM and turbine meter installations.

Candidates successfully completing CMET2 may also install, commission and service MP regulators that would fall within the scope of REGT2

CBs may adopt Competence and Criteria numbering different to that used in this document. CB documentation may adopt wording for criteria different to that used in this document, provided the meaning is unaffected.

Range

Primary meter installations incorporating diaphragm, rotary displacement, ultrasonic or turbine meters with and without by-pass at a pressure not exceeding 7 bar and not in the scope of IGEM/GM/6 Edition 2 (covered by CMET1).

Pre-requisites

COCN1 or CMA1 or CESP1 or COCNPI1LS + ICPN1 + TPCP1 + CMET1 or QCF or S/NVQ.

Exclusions

Gas load assessment; measurement, installation and use of volume conversion systems and energy computation of gas meter readings to reference conditions; electrical or electronic connections to meters; construction or installation of meter boxes, compartments or housing; installation or replacement of ECVs, service valves or their operation; hydrostatic testing; meter removal from site and subsequent disposal; testing by OFGEM and theft of gas. Certification in this assessment does not of itself confer approval as an 'AMI' registered gas meter installer.

References

- MIs.
- HSL56
- IGEM/GM/8 Edition 2 parts 1-5
- IGEM/UP/2 Edition 3
- IGE/UP/1
- IGEM/GM/7B
- GIUSP.

ACS.SMB.003.ACDND identifies Normative Documents that should be held by ACs. The References (REF) where indicated are only a guide to where the criteria can be resourced and therefore, the REF may not be exhaustive.

Abbreviations

AC. Assessment centre

CB. Certification Body

ECV. Emergency control valve

GT. Gas transporter

I. Initial

MIP. Maximum incidental pressure

MOP. Maximum operating pressure

MIs. Manufacturer's/manufacturers' instructions

OP. Operating pressure

Ref. Reference

SSV. Slam-shut valve

STP. Strength test pressure.

Omplete pre-installation checks to include: (i) Identity / check service pressure (ii) check subtability of location and identify hazardous areas classification (v) check system controls and determine operating pressure of load (v) check system controls and determine operating pressure of load (v) check system controls and determine operating pressure of load (v) obtain authorization of GT and sealing requirements (v) obtain authorization of GT and sealing requirements (v) determine zoning distances surrounding installation fittings and components (v) determine zoning distances surrounding installation fittings and components (v) check ECV operates correctly 1. check ECV operates correctly 2. check meter and installation components are fit for use and purpose (pressure breaks, rating, adequate supports, termination of creep relief) 2. check meter and installation components are fit for use and purpose (pressure breaks, rating, adequate supports, termination of creep relief) 3. isolate ass supply prior to work 4. remove blind flange from ECV (on a new installation) 5. assemble/install straight length of meter inlet/outlet connection, valve, regulator, safety devices, impulse lines, filter 7. assemble and install outlet pipework and MOV 8. install text/purpe points 9. adequately support pipework 9. adequately support turbine meter 10. install, level and support turbine meter 11. lubricate turbine meter to MIs 12. test for tightness and purpe meter installation of air 13. commission meter installation (IGE/GM/R Parts 3 Section 18) (ii) check all components function to MIs (iii) check set points of regulators under flow conditions (simulation can be used) (iv) check all components function to files are remove a commissioning archiner (OC) 14. Part 1) (iv) set and test safety system control pressures prior to regulator. (iv) check set points of regulators under flow conditions (simulation, TGE/GM/R) Part 1) (iv) set and test safety system control pressures prior to regulator. (iv)	PERF	ORMANCE CRITERIA	REF	I	R
(i) check surbilly of foctation and identify hazardous areas classification (ii) check ventilation and position of vents (iv) check system controls and determine operating pressure of load (v) chock system controls and determine operating pressure of load (v) chock system controls and determine operating pressure of load (v) obtain authorization of GT and sealing requirements (v) determine zoning distances surrounding installation fittings and components (v) determine zoning distances surrounding installation fittings and components (v) determine zoning distances surrounding installation fittings and components (v) check meter and installation components are fit for use and purpose (pressure breaks, rating, adequate supports, termination of creep relief) (v) check meter and installation components are fit for use and purpose (pressure breaks, rating, adequate supports, termination of creep relief) (v) check agas supply prior to work (v) check agas supply prior to work (v) check agas supply prior to work (v) position turbine meter correctly (v) assemble/install straight length of meter inlet/outlet connection, valve, regulator, safety devices, impulse lines, filter (v) position turbine meter correctly (v) adequately support pipework (v) check all components function to MIs (v) check all components function to MIs & remove a commissioning strainer (OQ) (v) check all components function to MIs & remove a commissioning strainer (OQ) (v) check all components function to MIs & remove a commissioning strainer (OQ) (v) check all components function to MIs & remove a commissioning strainer (OQ) (v) check all components function to MIs & remove a commissioning strainer (OQ) (v) check all components function to MIs & remove a commissioning strainer (OQ) (v) check as points of results are such as a commissioning strainer (OQ) (v) c					
(iii) check surtability of location and identify hazardous areas classification (iv) check system controls and determine operating pressure of load (v) check system controls and determine operating pressure of load (v) obtain authorization of GT and sealing requirements (vi) determine zoning distances surrounding installation fittings and components 3 Safe working procedures: 1. check ECV operates correctly 2. check meter and installation components are fit for use and purpose (pressure breaks, rating, adequate supports, termination of creep relief) 2. check meter and installation components are fit for use and purpose (pressure breaks, rating, adequate supports, termination of creep relief) 3. Isolate ass supply prior to work 4. remove blind flange from ECV (on a new installation) 5. assemble/install straight length of meter inlet/outlet connection, valve, regulator, safety devices, impulse lines, filter 6. position turbine meter correctly 7. assemble and install outlet pipework and MOV 8. install test/purge points 7. y 8. install test/purge points 7. y 8. install test/purge points 7. y 8. install test/purge points 8. install test for tightness and purge meter installation of air 12. test for tightness and purge meter installation of air 13. commission meter installation (TGE/GM/8 Parts 3 Section 18) (i) check all components function to Mis (ii) check regulator is operating in full control prior to opening outlet valves (iv) check set points of regulators under flow conditions (simulation, 16E/GM/8 Part 3) (ii) set and test safety system control pressures prior to regulator (iv) check set points of regulators under flow conditions (simulation and bused) (iv) check set points of regulators under flow conditions (simulation) 7. vet montion regulator at determined set point (iv) check SSV set point plus accuracy grow conditions (simulation) 7. routine maintenance of meters 8. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 9. opostioning of impulse take		•		✓	
(V) obtain authorization of GT and sealing requirements (V) obtain authorization of GT and sealing requirements (V) obtain authorization of GT and sealing requirements (V) determine zoning distances surrounding installation fittings and components (V) determine zoning distances surrounding installation fittings and components (V) check et CV operates correctly (V) check meter and installation components are fit for use and purpose (pressure breaks, rating, adequate supports, termination of creep relief) (pressure breaks, rating, adequate supports, termination of creep relief) (pressure breaks, rating, adequate supports, termination of creep relief) (pressure breaks, rating, adequate supports, termination of creep relief) (pressure breaks, rating, adequate supports, termination of creep relief) (pressure breaks, rating, adequate supports, termination of creep relief) (pressure, saley developed in Eco (or a new installation) (pressure, saley developed, installation) (pressure, saley developed, installation) (pressure) (✓	✓
(iv) check system controls and determine operating pressure of load	(iii)	check ventilation and position of vents		✓	
(vi) determine zoning distances surrounding installation fittings and components 18 Safe working procedures: 1.	(iv)			✓	✓
1a Safe working procedures :	(v)	obtain authorization of GT and sealing requirements		✓	
1. check ECV operates correctly 2. check meter and installation components are fit for use and purpose (pressure breaks, rating, adequate supports, termination of creep relief) 3. isolate gas supply prior to work 4. remove blind flange from ECV (on a new installation) 5. assemble/install straight length of meter inlet/outlet connection, valve, regulator, safety devices, impulse lines, filter 6. position turbine meter correctly 7. assemble and install outlet pipework and MOV 8. install test/purge points 9. adequately support pipework 10. install, level and support turbine meter 11. lubricate turbine meter to MIs 12. test for tightness and purge meter installation of air 12. test for tightness and purge meter installation of air 13. commission meter installation (IGE/GM/8 Parts 3 Section 18) (i) check all components function to MIs (ii) set and test safety system control pressures prior to regulator (iii) check regulator is operating in full control prior to opening outlet valves (iv) check ast points of regulators under flow conditions (simulation can be used) (v) check all components function to MIs & remove a commissioning strainer (OQ) (v) check all components function to MIs & remove a commissioning strainer (OQ) (v) check all components function to MIs & remove a commissioning strainer (OQ) (v) check all components function to MIs & remove a commissioning strainer (OQ) (v) check all components function to MIs & remove a commissioning strainer (OQ) (v) check all components function to MIs & remove a commissioning strainer (OQ) (v) check all components function to MIs & remove a commissioning strainer (OQ) (v) check all components function to MIs & remove a commissioning strainer (OQ) (v) check all components function to MIs & remove a commissioning strainer (OQ) (v) check all components function to MIs & remove a commissioning strainer (OQ) (v) check all components function to MIs & remove a commissioning strainer (OQ) (v) check all components function to MIs & remove a commissioning strainer (OQ) (v) check	(vi)			✓	✓
2. check meter and installation components are fit for use and purpose (pressure breaks, rathing, adequate supports, termination of creep relief) 3. isolate gas supply prior to work 4. remove blind flange from ECV (on a new installation) 5. assemble/install straight length of meter inlet/outlet connection, valve, regulator, safety devices, impulse lines, filter 6. position turbine meter correctly 7. assemble and install outlet pipework and MOV 8. install test/purpe points 9. adequately support pipework 10. install, level and support turbine meter 11. lubricate turbine meter to MIs 12. test for tightness and purge meter installation of air 13. commission meter installation (IGE/GM/8 Parts 3 Section 18) (i) check all components function to MIs (ii) set and test safety system control pressures prior to regulator (iii) check regulator is operating in full control prior to opening outlet valves (iv) check all components function to MIs is remove a commissioning strainer (OQ) (iv) check all components function to MIs is remove a commissioning strainer (OQ) (iv) check all components function to MIs is remove a commissioning strainer (OQ) (iv) check all components function to MIs is remove a commissioning strainer (OQ) (iv) check all components function to MIs is remove a commissioning strainer (OQ) (iv) check all components function to MIs is remove a commissioning strainer (OQ) (v) check all components function to MIs is remove a commissioning strainer (OQ) (v) check all components function to MIs is remove a commissioning strainer (OQ) (v) check all components function to MIs is remove a commissioning strainer (OQ) (v) check all components function to MIs is remove a commissioning strainer (OQ) (v) check all components function to MIs is remove a commissioning strainer (OQ) (v) check all components function to MIs is remove a commissioning strainer (OQ) (v) check all components function to MIs is remove a commissioning strainer (OQ) (v) check all components function to MIs is remove a commissioning strainer (OQ) (v	1a	Safe working procedures :		✓	✓
Cyressure breaks, rating, adequate supports, termination of creep relief)	1.			✓	
3. isolate gas supply prior to work 4. remove blind flange from ECV (on a new installation) 5. assemble/install straight length of meter inlet/outlet connection, valve, regulators, safety devices, impulse lines, filter 6. position turbine meter correctly 7. assemble and install outlet pipework and MOV 8. install test/purge points 9. adequately support pipework 10. install, level and support turbine meter 11. lubricate turbine meter to MIs 12. test for tightness and purge meter installation of air 13. commission meter installation (IGE/GM/8 Parts 3 Section 18) 14. commission meter installation (IGE/GM/8 Parts 3 Section 18) 15. est and test safety system control pressures prior to regulator 16. check all components function to MIs 17. vicheck set points of regulators under flow conditions (simulation can be used) 18. vicheck set points of regulators under flow conditions (simulation can be used) 19. vicheck all components function to MIs fremove a commissioning strainer (OQ) 19. set and test safety system control prior to pening outlet valves 19. vicheck set points of regulators under flow conditions (simulation can be used) 19. vicheck all components function to MIs is tenove a commissioning strainer (OQ) 20. vicheck all components function to MIs is remove a commissioning strainer (OQ) 21. set points – metering pressure (twin stream installation, IGE/GM/8 Part 1) 22. set points – metering pressure (twin stream installation, IGE/GM/8 Part 1) 23. vicheck set points accuracy orgup tolerance (MIP) does not exceed STP of downstream system 24. vicheck SSV set point plus accuracy group tolerance (MIP) does not exceed STP of downstream system (III) set monitor regulators were selected (V) check SSV set point plus accuracy group tolerance (MIP) does not exceed STP of downstream system (III) set tropic orgunity or the meter (III) of the meter (III) set tropic orgunity orgunity organity o	2.			✓	✓
4. remove blind flange from ECV (on a new installation) 7. assemble/install straight length of meter inlet/outlet connection, valve, regulator, safety devices, impulse lines, filter 6. position turbine meter correctly 7. assemble and install outlet pipework and MOV 8. install test/purge points 9. adequately support pipework 10. linstall, level and support turbine meter 11. lubricate turbine meter to MIS 12. test for tightness and purge meter installation of air 12. test for tightness and purge meter installation of air 13. commission meter installation (IGE/GM/8 Parts 3 Section 18) (i) check all components function to MIS (ii) set and test safety system control pressures prior to regulator (iii) check regulator is operating in full control prior to opening outlet valves (iv) check set points of regulators under flow conditions (simulation can be used) (v) check all components function to MIS & remove a commissioning strainer (OQ) 4. set points — metering pressure (twin stream installation, IGE/GM/8 Part 1) (ii) set active regulator at determined set point (iii) set sold sove relief valve set pressure (take into account accuracy of relief valve set pressure (take into account accuracy of relief valve surface) (iv) check SSV set point plus accuracy group tolerance (MIP) does not exceed STP of downstream system (v) consider control accuracy at meter when accuracy classes for regulators were selected (vi) Functional and operational checks of slam shut and creep relief components 15. apply labelling 7					
5. assemble/install straight length of meter infevoutiet connection, valve, regulator, safety devices, impulse lines, filter 7. assemble and install outlet pipework and MOV 8. install test/purge points 9. adequately support pipework 10. install, level and support turbine meter 11. lubricate turbine meter to MIS 12. test for tightness and purge meter installation of air 12. test for tightness and purge meter installation of air 13. commission meter installation (IGE/GM/8 Parts 3 Section 18) (i) check all components function to MIS (ii) set and test safety system control pressures prior to regulator 7. vicheck all components function to MIS (iii) check regulator is operating in full control prior to opening outlet valves 8. vicheck all components function to MIS & remove a commissioning strainer. (OQ) 9. vicheck all components function to MIS & remove a commissioning strainer. (OQ) 14. set points – metering pressure (twin stream installation, IGE/GM/8 Part 1) (ii) set active regulator at determined set point (iii) set active regulator at determined set point (iii) set so where the valve set pressure (take into account accuracy of relief valve and SSV to ensure relief valve is not restricted) (iv) check SSV set point plus accuracy group tolerance (MIP) does not exceed STP of downstream system (v) consider control accuracy at meter when accuracy classes for regulators were selected (vi) Functional and operational checks of slam shut and creep relief components 15. apply labelling 16. The need for documentation, commissioning reports , request for information from GT and meter designer 17. routine maintenance of meters 18. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 19. determining routine maintenance of filters and strainers 10. requirements and sizing of impulse take off lines 11. safety requirements for removal of meters 12. position of meter faults 13. commission meter faults 14. requirements and intended and the precautions required					✓
regulator, safety devices, impulse lines, filter 6. position turbine meter correctty 7. assemble and install outlet pipework and MOV 8. install test/purge points 9. adequately support pipework 10. install, level and support turbine meter 11. lubricate turbine meter to MIs 12. test for tightness and purge meter installation of air 13. commission meter installation (IGE/GM/8 Parts 3 Section 18) (i) check all components function to MIs (ii) set and test safety system control pressures prior to regulator (iii) check regulator is operating in full control prior to opening outlet valves (iv) check set points of regulators under flow conditions (simulation can be used) (v) check all components function to MIs 8 remove a commissioning strainer. (OQ) 14. set points — metering pressure (twin stream installation, IGE/GM/8 Part 1) (i) set active regulator at determined set point (ii) set SSV above relief valve set pressure (take into account accuracy of relief valve and SSV to ensure relief valve is not restricted) (iv) check SSV set point plus accuracy group tolerance (MIP) does not exceed STP of downstream system (v) consider control accuracy at meter when accuracy classes for regulators were selected (vi) Functional and operational checks of slam shut and creep relief components 15. apply labelling 16. Identify esses correct and incorrect use of main equipotential bonding 77. routine maintenance of meters 88. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 99. determining routine maintenance of filters and strainers 90. operational and functional checks of filter, slam shut and creep relief 21. safety requirements for removal of meters 22. pas flow, straight length pipe work in the vicinity of the meter 39. operational and functional checks of filter, slam shut and creep relief 29. operational and functional checks of filter, slam shut and creep relief 29. operational and functional checks of filter, slam shut and creep relief 29. operational and functional checks					_
6. position turbine meter correctly 7. assemble and install outlet pipework and MOV 8. install test/purge points 9. adequately support pipework 9. adequately support pipework 10. install, level and support turbine meter 11. lubricate turbine meter to MIS 12. test for tightness and purge meter installation of air 13. commission meter installation (IGE/GM/8 Parts 3 Section 18) (1) check all components function to MIS (1) set and test safety system control pressures prior to regulator (1) check all components function to MIS (1) check regulator is operating in full control prior to opening outlet valves (1) check all components function to MIS & remove a commissioning strainer (OQ) (2) check all components function to MIS & remove a commissioning strainer (OQ) (3) set points - metering pressure (twin stream installation, IGE/GM/8 (4) set active regulator at determined set point (5) set monitor regulator at determined set point (6) set Syst above relief valve set pressure (take into account accuracy of relief valve and SSV to ensure relief valve is not restricted) (7) check SSV sabove relief valve set pressure (take into account accuracy of relief valve and SSV to ensure relief valve is not restricted) (8) check SSV set point plus accuracy group tolerance (MIP) does not exceed STP (9) consider control accuracy at meter when accuracy classes for regulators were selected (9) Functional and operational checks of slam shut and creep relief components 15. apply labelling 16. The need for documentation, commissioning reports , request for information from GT and meter designer 17. The need for documentation, commissioning reports , request for information from GT and meter designer 18. Meter types and selection options 19. apply labelling 19. The need for documentation, commissioning reports , request for information from GT and meter designer 19. apply labelling 19. The need for documentation of meters 19. apply labelling 19. The need for documentation of meters 19. apply labelling 19. The need for documentation of met	5.			~	
1. posterior install outlet pipework and MOV 8. install test/purge points 9. adequately support pipework 10. install, level and support turbine meter 11. lubricate turbine meter to MIS 12. test for tightness and purge meter installation of air 13. commission meter installation (IGE/GM/8 Parts 3 Section 18) (i) check all components function to MIS (ii) check all components function to MIS (iii) check regulator is operating in full control prior to opening outlet valves (iv) check set points of regulators under flow conditions (simulation can be used) (v) check all components function to MIS & remove a commissioning strainer (OQ) 14. set points - metering pressure (twin stream installation, IGE/GM/8 Part 1) (ii) set active regulator at determined set point (iii) set SSV above relief valve set pressure (take into account accuracy of relief valve and SSV to ensure relief valve is not restricted) (v) check SSV set point plus accuracy group tolerance (MIP) does not exceed STP of downstream system (v) consider control accuracy at meter when accuracy classes for regulators were selected (vi) Check SSV set point plus accuracy group tolerance (MIP) does not exceed STP of downstream system (v) consider control accuracy at meter when accuracy classes for regulators were selected (vi) Functional and operational checks of slam shut and creep relief components 15. apply labelling 16. the need for documentation, commissioning reports , request for information from GT and meter designer 17. routine maintenance of meters 18. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 29. determining routine maintenance of filters and strainers 29. opperational and functional checks of filters, slam shut and creep relief components whilst maintaining a positive pressure 29. opperational of meter faults 20. recognition of meter faults 20. vertices and strainers 21. hydrostatic testing needed and the precautions required					-
8. install test/purge points 9. adequately support pipework 10. install, level and support turbine meter 11. lubricate turbine meter to MIs 12. test for tightness and purge meter installation of air 13. commission meter installation (IGE/GM/8 Parts 3 Section 18) (i) check all components function to MIs (ii) set and test safety system control pressures prior to regulator (iii) check regulator is operating in full control prior to opening outlet valves (iv) check set points of regulators under flow conditions (simulation can be used) (v) check all components function to MIs & remove a commissioning strainer (OQ) 4. set points of regulators under flow conditions (simulation can be used) (v) check set points of regulators under flow conditions (simulation can be used) (v) check all components function to MIs & remove a commissioning strainer (OQ) 4. set points — metering pressure (twin stream installation, IGE/GM/8 Part 1) (i) set active regulator at determined set point (ii) set monitor regulator at determined set point (iii) set SSV above relief valve set pressure (take into account accuracy of relief valve and SSV to ensure relief valve is not restricted) (iv) check SSV set point plus accuracy group tolerance (MIP) does not exceed STP (iv) consider control accuracy at meter when accuracy classes for regulators were selected (v) consider control accuracy at meter when accuracy classes for regulators were selected (vi) Functional and operational checks of slam shut and creep relief components 1. apply labelling Y KNOWLEDGE AND UNDERSTANDING REF I R R Neter types and selection options A Part types and selection options Y Meter types and selection options Y Meter types and selection options Y I the need for documentation, commissioning reports, request for information from G1 and meter designer A requirements and sizing of impulse take off lines 1. apply labelling Y A requirements and sizing of impulse take off lines S labelling A requirements and sizing of impulse take off lines Gas cleaning inc					-
10. install, level and support pipework 10. install, level and support turbine meter 11. lubricate turbine meter to MIs 12. test for tightness and purge meter installation of air 13. commission meter installation (IGE/GM/8 Parts 3 Section 18) (1 check all components function to MIs 10. commission meter installation (IGE/GM/8 Parts 3 Section 18) (1 check all components function to MIs 12. test for tightness and purge meter installation of air 13. commission meter installation (IGE/GM/8 Parts 3 Section 18) (2 check all components function to MIs (3 check set points of regulators under flow conditions (simulation can be used) (4 check set points of regulators under flow conditions (simulation can be used) (5 check all components function to MIs & remove a commissioning strainer (OQ) (6 check all components function to MIs & remove a commissioning strainer (OQ) (7 check SSV sobove relief valve set point (8 set active regulator at determined set point (9 check SSV above relief valve set point (10 check SSV sobove relief valve set point (10 check SSV set point plus accuracy put folerance (MIP) does not exceed STP (10 consider control accuracy at meter when accuracy classes for regulators were selected (10 consider control accuracy at meter when accuracy classes for regulators were selected (11 consider control accuracy at meter when accuracy classes for regulators were selected (12 components (13 apply labelling (14 control accuracy at meter when accuracy classes for regulators were selected (15 consider control accuracy at meter when accuracy classes for regulators were selected (16 consider control accuracy at meter when accuracy classes for regulators were selected (17 consider control accuracy at meter when accuracy classes for regulators were selected (18 consider control accuracy at meter when accuracy classes for regulators were selected (19 consider control accuracy at meter when accuracy classes for regulators were selected (10 consider control accuracy at meter when accuracy classes for regulators were sel					-
10. install, level and support turbine meter 11. lubricate turbine meter to MIS 12. test for tightness and purge meter installation of air 13. commission meter installation (IGE/GM/8 Parts 3 Section 18) (i) check all components function to MIS (ii) set and test safety system control pressures prior to regulator (iii) check regulator is operating in full control prior to opening outlet valves (iv) check set points of regulators under flow conditions (simulation can be used) (v) check all components function to MIS & remove a commissioning strainer (○Q) (v) check all components function to MIS & remove a commissioning strainer (○Q) (v) check all components function to MIS & remove a commissioning strainer (○Q) (v) check all components function to MIS & remove a commissioning strainer (○Q) (v) check set points of regulators under flow conditions (simulation can be used) (v) check set points of regulators at determined set point (ii) set monitor regulator at determined set point (iii) set monitor regulator at determined set point (iii) set SSV above relief valve set pressure (take into account accuracy of relief valve and SSV to ensure relief valve is not restricted) (vi) check SSV set point plus accuracy group tolerance (MIP) does not exceed STP of downstream system (v) consider control accuracy at meter when accuracy classes for regulators were selected (vi) Functional and operational checks of slam shut and creep relief (vi) Functional and operational checks of slam shut and creep relief (vi) Functional and operational checks of slam shut and creep relief (vi) Functional and operational checks of slam shut and creep relief (vii) Functional and operational checks of slam shut and creep relief (vii) Functional and operational checks of slam shut and creep relief (vii) Functional and operational checks of slam shut and creep relief (vii) Functional and operational operatio					-
11. Iubricate turbine meter to MIS 12. test for tightness and purge meter installation of air 13. commission meter installation (IGE/GM/8 Parts 3 Section 18) (i) check all components function to MIS (ii) check regulator is operating in full control prior to opening outlet valves (iii) check regulator is operating in full control prior to opening outlet valves (iv) check set points of regulators under flow conditions (simulation can be used) (v) check all components function to MIS & remove a commissioning strainer (OQ) 14. set points – metering pressure (twin stream installation, IGE/GM/8 Part 1) (i) set active regulator at determined set point (ii) set SV above relief valve set pressure (take into account accuracy of relief valve and SSV to ensure relief valve is not restricted) (v) check SSV set point plus accuracy group tolerance (MIP) does not exceed STP of downstream system (v) consider control accuracy at meter when accuracy classes for regulators were selected (vi) Functional and operational checks of slam shut and creep relief components 15. apply labelling KNOWLEDGE AND UNDERSTANDING 16. Meter types and selection options 17. routine maintenance of meters 18. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 19. determining routine maintenance of filters and strainers 19. determining routine maintenance of filters and strainers 10. recognition of meter faults 11. safety requirements for removal of meters 12. hydrostatic testing needed and the precautions required	9.	adequately support pipework			
12. test for tightness and purge meter installation of air 13. commission meter installation (IGE/GM/8 Parts 3 Section 18) (i) check all components function to MIs (ii) check regulator is operating in full control prior to regulator (iii) check regulator is operating in full control prior to opening outlet valves (iv) check all components function to MIs & remove a commissioning strainer (OQ) (v) check all components function to MIs & remove a commissioning strainer (OQ) (v) check all components function to MIs & remove a commissioning strainer (OQ) (v) check all components function to MIs & remove a commissioning strainer (OQ) (v) check all components function to MIs & remove a commissioning strainer (OQ) (v) check all components function to MIs & remove a commissioning strainer (OQ) (v) check source for the following strainer (OQ) (v) set active regulator at determined set point (i) set active regulator at determined set point (ii) set monitor regulator at determined set point (iii) set SSV above relief valve set pressure (take into account accuracy of relief valve and SSV to ensure relief valve is not restricted) (iv) check SSV set point plus accuracy group tolerance (MIP) does not exceed STP of downstream system (v) consider control accuracy at meter when accuracy classes for regulators were selected (vi) Functional and operational checks of slam shut and creep relief components 15. apply labelling REF I R KNOWLEDGE AND UNDERSTANDING 1. the need for documentation, commissioning reports , request for information from GT and meter designer 1a Meter types and selection options 2. gas flow, straight length pipe work in the vicinity of the meter 3. positioning of impulse line take offs 4. requirements and sizing of impulse take off lines 5. labelling 6. Identify eress correct and incorrect use of main equipotential bonding 7. routine maintenance of meters 8. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 9. determining routine maintenance of filters and strainers 90 operational and					
13. commission meter installation (IGE/GM/8 Parts 3 Section 18)					
(ii) check all components function to MIs set and test safety system control pressures prior to regulator (iii) check regulator is operating in full control prior to opening outlet valves (iv) check set points of regulators under flow conditions (simulation can be used)	12.	test for tightness and purge meter installation of air		✓	✓
(iii) set and test safety system control pressures prior to regulator (iii) check regulator is operating in full control prior to opening outlet valves (iv) check set points of regulators under flow conditions (simulation can be used) √ ✓ (v) check all components function to MIs & remove a commissioning strainer (OQ) 14. set points - metering pressure (twin stream installation, IGE/GM/8 Part 1) (i) set active regulator at determined set point (ii) set monitor regulator at determined set point (iii) set SSV above relief valve set pressure (take into account accuracy of relief valve and SSV to ensure relief valve is not restricted) (iv) check SSV set point plus accuracy group tolerance (MIP) does not exceed STP of downstream system (v) consider control accuracy at meter when accuracy classes for regulators were selected (vi) Functional and operational checks of slam shut and creep relief components 15. apply labelling KNOWLEDGE AND UNDERSTANDING 1 the need for documentation, commissioning reports , request for information from GT and meter designer 1 Meter types and selection options 2 gas flow, straight length pipe work in the vicinity of the meter 3 positioning of impulse line take offs 4. requirements and sizing of impulse take off lines 5 labelling 6 Identify eress correct and incorrect use of main equipotential bonding 7. routine maintenance of meters 8. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 9 determining routine maintenance of filters and strainers 9 operational and functional checks of filter, slam shut and creep relief components whilst maintaining a positive pressure 10. recognition of meter faults 11. safety requirements for removal of meters 12. hydrostatic testing needed and the precautions required					
(iii) check regulator is operating in full control prior to opening outlet valves (iv) check set points of regulators under flow conditions (simulation can be used) (v) check all components function to MIs & remove a commissioning strainer (OQ) 14. set points – metering pressure (twin stream installation, IGE/GM/8 Part 1) (i) set active regulator at determined set point (iii) set storibur regulator at determined set point (iii) set storibur regulator at determined set point (iv) check SSV above relief valve set pressure (take into account accuracy of relief valve and SSV to ensure relief valve is not restricted) (iv) check SSV set point plus accuracy group tolerance (MIP) does not exceed STP of downstream system (v) consider control accuracy at meter when accuracy classes for regulators were selected (vi) Functional and operational checks of slam shut and creep relief components 15. apply labelling KNOWLEDGE AND UNDERSTANDING REF 1. the need for documentation, commissioning reports ,request for information from GT and meter designer 1a Meter types and selection options 1b quirements and sizing of impulse line take offs 1c quirements and sizing of impulse take off lines 1c labelling 1c requirements and sizing of impulse take off lines 1c labelling 1d determining routine maintenance of filters and strainers 1d determining routine maintenance of filters and straine					
(iv) check set points of regulators under flow conditions (simulation can be used) (v) check all components function to MIs & remove a commissioning strainer (OQ) 14. set points - metering pressure (twin stream installation, IGE/GM/8 Part 1) (i) set active regulator at determined set point (ii) set sctive regulator at determined set point (iii) set SSV above relief valve set pressure (take into account accuracy of relief valve and SSV to ensure relief valve is not restricted) (iv) check SSV set point plus accuracy group tolerance (MIP) does not exceed STP of downstream system (v) consider control accuracy at meter when accuracy classes for regulators were selected (vi) Functional and operational checks of slam shut and creep relief components 15. apply labelling KNOWLEDGE AND UNDERSTANDING 18. the need for documentation, commissioning reports ,request for information from GT and meter designer 19. Meter types and selection options 20. gas flow, straight length pipe work in the vicinity of the meter 31. positioning of impulse line take offs 42. requirements and sizing of impulse take off lines 43. requirements and sizing of impulse take off lines 44. requirements and sizing of impulse take off lines 45. labelling 46. Identify eress correct and incorrect use of main equipotential bonding 47. routine maintenance of meters 48. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 49. determining routine maintenance of filters and strainers 49. operational and functional checks of filter, slam shut and creep relief 40. recognition of meter faults 41. safety requirements for removal of meters 41. safety requirements for removal of meters 42. hydrostatic testing needed and the precautions required					<u> </u>
(v) check all components function to MIs & remove a commissioning strainer (OQ) 14. set points - metering pressure (twin stream installation, IGE/GM/8 Part 1) (ii) set active regulator at determined set point (iii) set monitor regulator at determined set point (iii) set solva bove relief valve set pressure (take into account accuracy of relief valve and SSV to ensure relief valve is not restricted) (iv) check SSV set point plus accuracy group tolerance (MIP) does not exceed STP of downstream system (v) consider control accuracy at meter when accuracy classes for regulators were selected (vi) Functional and operational checks of slam shut and creep relief components 15. apply labelling KNOWLEDGE AND UNDERSTANDING 1. the need for documentation, commissioning reports ,request for information from GT and meter designer 1a Meter types and selection options 2. gas flow, straight length pipe work in the vicinity of the meter 3. positioning of impulse line take offs 4. requirements and sizing of impulse take off lines 5. labelling 6. Identify eress correct and incorrect use of main equipotential bonding 7. routine maintenance of meters 8. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 9. determining routine maintenance of filters and strainers 9a operational and functional checks of filter, slam shut and creep relief components whilst maintaining a positive pressure 10. recognition of meter faults 11. safety requirements for removal of meters 12. hydrostatic testing needed and the precautions required					<u> </u>
14. set points – metering pressure (twin stream installation, IGE/GM/8 Part 1) (i) set active regulator at determined set point set monitor regulator at determined set point v/ / (iii) set SSV above relief valve set pressure (take into account accuracy of relief valve and SSV to ensure relief valve is not restricted) (iv) check SSV set point plus accuracy group tolerance (MIP) does not exceed STP of downstream system (v) consider control accuracy at meter when accuracy classes for regulators were selected (vi) Functional and operational checks of slam shut and creep relief components 15. apply labelling 17. the need for documentation, commissioning reports , request for information from GT and meter designer 18. Meter types and selection options 20. gas flow, straight length pipe work in the vicinity of the meter 31. positioning of impulse line take offs 42. requirements and sizing of impulse take off lines 43. requirements and sizing of impulse take off lines 44. requirements and sizing of impulse take off lines 45. labelling 47. routine maintenance of meters 48. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 49. determining routine maintenance of filters and strainers 40. recognition of meter faults 41. recognition of meter faults 42. vi 43. safety requirements for removal of meters 43. positioning to impulse take off liters and strainers 44. requirements and sizing of impulse take off liters and strainers 45. applications of meter faults 46. recognition of meter faults 47. vi 48. safety requirements for removal of meters 48. hydrostatic testing needed and the precautions required					√
(i) set active regulator at determined set point (ii) set monitor regulator at determined set point (iii) set SSV above relief valve set pressure (take into account accuracy of relief valve and SSV to ensure relief valve is not restricted) (iv) check SSV set point plus accuracy group tolerance (MIP) does not exceed STP of downstream system (v) consider control accuracy at meter when accuracy classes for regulators were selected (vi) Functional and operational checks of slam shut and creep relief components 15. apply labelling (NOWLEDGE AND UNDERSTANDING 1. the need for documentation, commissioning reports , request for information from GT and meter designer 1a Meter types and selection options 2. gas flow, straight length pipe work in the vicinity of the meter 3. positioning of impulse line take offs 4. requirements and sizing of impulse take off lines 5. labelling 6. Identify eress correct and incorrect use of main equipotential bonding 7. routine maintenance of meters 8. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 9. determining routine maintenance of filters and strainers 9a operational and functional checks of filter, slam shut and creep relief components whilst maintaining a positive pressure 10. recognition of meter faults 11. safety requirements for removal of meters 12. hydrostatic testing needed and the precautions required				✓	✓
(i) set active regulator at determined set point (ii) set monitor regulator at determined set point (iii) set SSV above relief valve set pressure (take into account accuracy of relief valve and SSV to ensure relief valve is not restricted) (iv) check SSV set point plus accuracy group tolerance (MIP) does not exceed STP of downstream system (v) consider control accuracy at meter when accuracy classes for regulators were selected (vi) Functional and operational checks of slam shut and creep relief components apply labelling 15. apply labelling 18. the need for documentation, commissioning reports ,request for information from GT and meter designer 1a. Meter types and selection options 2. gas flow, straight length pipe work in the vicinity of the meter 3. positioning of impulse line take offs 4. requirements and sizing of impulse take off lines 5. labelling 6. Identify eress correct and incorrect use of main equipotential bonding 7. routine maintenance of meters 8. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 9. determining routine maintenance of filters and strainers 9a operational and functional checks of filter, slam shut and creep relief components whilst maintaining a positive pressure 10. recognition of meter faults 11. safety requirements for removal of meters 12. hydrostatic testing needed and the precautions required	14.				
(iii) set monitor regulator at determined set point ✓ (iii) set SSV above relief valve set pressure (take into account accuracy of relief valve and SSV to ensure relief valve is not restricted) ✓ (iv) check SSV set point plus accuracy group tolerance (MIP) does not exceed STP of downstream system ✓ (v) consider control accuracy at meter when accuracy classes for regulators were selected ✓ (vi) Functional and operational checks of slam shut and creep relief components ✓ 15. apply labelling REF I KNOWLEDGE AND UNDERSTANDING REF I 1. the need for documentation, commissioning reports ,request for information from GT and meter designer ✓ ✓ 1a Meter types and selection options ✓ ✓ 2. gas flow, straight length pipe work in the vicinity of the meter ✓ ✓ 3. positioning of impulse line take offs ✓ ✓ 4. requirements and sizing of impulse take off lines ✓ ✓ 5. labelling ✓ ✓ 6. Identify eress correct and incorrect use of main equipotential bonding ✓ 7. routine maintenance of meters ✓ 8. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar ✓ 9a operational and functional checks of filter,	(:)				
(iii) set SSV above relief valve set pressure (take into account accuracy of relief valve and SSV to ensure relief valve is not restricted) (iv) check SSV set point plus accuracy group tolerance (MIP) does not exceed STP of downstream system (v) consider control accuracy at meter when accuracy classes for regulators were selected (vi) Functional and operational checks of slam shut and creep relief components 15. apply labelling KNOWLEDGE AND UNDERSTANDING 1. the need for documentation, commissioning reports ,request for information from GT and meter designer 1a Meter types and selection options 2. gas flow, straight length pipe work in the vicinity of the meter 3. positioning of impulse line take offs 4. requirements and sizing of impulse take off lines 5. labelling 6. Identify eress correct and incorrect use of main equipotential bonding 7. routine maintenance of meters 8. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 9. determining routine maintenance of filters and strainers 9a operational and functional checks of filter, slam shut and creep relief components whilst maintaining a positive pressure 10. recognition of meter faults 11. safety requirements for removal of meters 12. hydrostatic testing needed and the precautions required					· /
valve and SSV to ensure relief valve is not restricted) (iv) check SSV set point plus accuracy group tolerance (MIP) does not exceed STP of downstream system (v) consider control accuracy at meter when accuracy classes for regulators were selected (vi) Functional and operational checks of slam shut and creep relief components 15. apply labelling KNOWLEDGE AND UNDERSTANDING 1. the need for documentation, commissioning reports ,request for information from GT and meter designer 1a Meter types and selection options 2. gas flow, straight length pipe work in the vicinity of the meter 3. positioning of impulse line take offs 4. requirements and sizing of impulse take off lines 5. labelling 6. Identify cross correct and incorrect use of main equipotential bonding 7. routine maintenance of meters 8. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 9. determining routine maintenance of filters and strainers 9a operational and functional checks of filter, slam shut and creep relief components whilst maintaining a positive pressure 10. recognition of meter faults 11. safety requirements for removal of meters 12. hydrostatic testing needed and the precautions required					
(iv) check SSV set point plus accuracy group tolerance (MIP) does not exceed STP of downstream system (v) consider control accuracy at meter when accuracy classes for regulators were selected (vi) Functional and operational checks of slam shut and creep relief components 15. apply labelling KNOWLEDGE AND UNDERSTANDING 1. the need for documentation, commissioning reports ,request for information from GT and meter designer 1a Meter types and selection options 2. gas flow, straight length pipe work in the vicinity of the meter 3. positioning of impulse line take offs 4. requirements and sizing of impulse take off lines 5. labelling 6. Identify eross correct and incorrect use of main equipotential bonding 7. routine maintenance of meters 8. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 9. determining routine maintenance of filters and strainers 9a operational and functional checks of filter, slam shut and creep relief components whilst maintaining a positive pressure 10. recognition of meter faults 11. safety requirements for removal of meters 12. hydrostatic testing needed and the precautions required	("")				,
of downstream system (v) consider control accuracy at meter when accuracy classes for regulators were selected (vi) Functional and operational checks of slam shut and creep relief components 15. apply labelling ** ** ** ** ** ** ** ** **	(iv)			√	✓
selected (vi) Functional and operational checks of slam shut and creep relief components 15. apply labelling KNOWLEGE AND UNDERSTANDING 1. the need for documentation, commissioning reports ,request for information from GT and meter designer 1a Meter types and selection options 2. gas flow, straight length pipe work in the vicinity of the meter 3. positioning of impulse line take offs 4. requirements and sizing of impulse take off lines 5. labelling 6. Identify eress correct and incorrect use of main equipotential bonding 7. routine maintenance of meters 8. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 9. determining routine maintenance of filters and strainers 9a operational and functional checks of filter, slam shut and creep relief components whilst maintaining a positive pressure 10. recognition of meter faults 11. safety requirements for removal of meters 4. ✓	(, ,				
(vi) Functional and operational checks of slam shut and creep relief components 15. apply labelling KNOWLEDGE AND UNDERSTANDING 1. the need for documentation, commissioning reports ,request for information from GT and meter designer 1a Meter types and selection options 2. gas flow, straight length pipe work in the vicinity of the meter 3. positioning of impulse line take offs 4. requirements and sizing of impulse take off lines 5. labelling 6. Identify eross correct and incorrect use of main equipotential bonding 7. routine maintenance of meters 8. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 9. determining routine maintenance of filters and strainers 9a operational and functional checks of filter, slam shut and creep relief components whilst maintaining a positive pressure 10. recognition of meter faults 11. safety requirements for removal of meters 4 ✓ ✓ 12. hydrostatic testing needed and the precautions required	(v)			✓	✓
components 15. apply labelling KNOWLEDGE AND UNDERSTANDING 1. the need for documentation, commissioning reports ,request for information from GT and meter designer 1a Meter types and selection options 2. gas flow, straight length pipe work in the vicinity of the meter 3. positioning of impulse line take offs 4. requirements and sizing of impulse take off lines 5. labelling 6. Identify eress correct and incorrect use of main equipotential bonding 7. routine maintenance of meters 8. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 9. determining routine maintenance of filters and strainers 9a operational and functional checks of filter, slam shut and creep relief components whilst maintaining a positive pressure 10. recognition of meter faults 11. safety requirements for removal of meters 12. hydrostatic testing needed and the precautions required	. ,	selected			
15. apply labelling	(vi)	Functional and operational checks of slam shut and creep relief			\checkmark
KNOWLEDGE AND UNDERSTANDING REF I R 1. the need for documentation, commissioning reports ,request for information from GT and meter designer ✓ ✓ 1a Meter types and selection options ✓ ✓ 2. gas flow, straight length pipe work in the vicinity of the meter ✓ 3. positioning of impulse line take offs ✓ 4. requirements and sizing of impulse take off lines ✓ 5. labelling ✓ 6. Identify eross correct and incorrect use of main equipotential bonding ✓ 7. routine maintenance of meters ✓ 8. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar ✓ 9. determining routine maintenance of filters and strainers ✓ 9a operational and functional checks of filter, slam shut and creep relief components whilst maintaining a positive pressure ✓ 10. recognition of meter faults ✓ 11. safety requirements for removal of meters ✓ 12. hydrostatic testing needed and the precautions required ✓		components			
1. the need for documentation, commissioning reports ,request for information from GT and meter designer 1a Meter types and selection options 2. gas flow, straight length pipe work in the vicinity of the meter 3. positioning of impulse line take offs 4. requirements and sizing of impulse take off lines 5. labelling 6. Identify eross correct and incorrect use of main equipotential bonding 7. routine maintenance of meters 8. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 9. determining routine maintenance of filters and strainers 9a operational and functional checks of filter, slam shut and creep relief components whilst maintaining a positive pressure 10. recognition of meter faults 11. safety requirements for removal of meters 12. hydrostatic testing needed and the precautions required	15.	apply labelling		✓	
from GT and meter designer 1a Meter types and selection options 2. gas flow, straight length pipe work in the vicinity of the meter 3. positioning of impulse line take offs 4. requirements and sizing of impulse take off lines 5. labelling 6. Identify eross correct and incorrect use of main equipotential bonding 7. routine maintenance of meters 8. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 9. determining routine maintenance of filters and strainers 9a operational and functional checks of filter, slam shut and creep relief components whilst maintaining a positive pressure 10. recognition of meter faults 11. safety requirements for removal of meters 12. hydrostatic testing needed and the precautions required			REF	I	R
1a Meter types and selection options ✓ 2. gas flow, straight length pipe work in the vicinity of the meter ✓ 3. positioning of impulse line take offs ✓ 4. requirements and sizing of impulse take off lines ✓ 5. labelling ✓ 6. Identify eross correct and incorrect use of main equipotential bonding ✓ 7. routine maintenance of meters ✓ 8. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar ✓ 9. determining routine maintenance of filters and strainers ✓ 9a operational and functional checks of filter, slam shut and creep relief components whilst maintaining a positive pressure ✓ 10. recognition of meter faults ✓ 11. safety requirements for removal of meters ✓ 12. hydrostatic testing needed and the precautions required ✓	1.	the need for documentation, commissioning reports ,request for information		✓	✓
2. gas flow, straight length pipe work in the vicinity of the meter 3. positioning of impulse line take offs 4. requirements and sizing of impulse take off lines 5. labelling 6. Identify eress correct and incorrect use of main equipotential bonding 7. routine maintenance of meters 8. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 9. determining routine maintenance of filters and strainers 9a operational and functional checks of filter, slam shut and creep relief components whilst maintaining a positive pressure 10. recognition of meter faults 11. safety requirements for removal of meters 12. hydrostatic testing needed and the precautions required					
3. positioning of impulse line take offs 4. requirements and sizing of impulse take off lines 5. labelling 6. Identify cross correct and incorrect use of main equipotential bonding 7. routine maintenance of meters 8. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 9. determining routine maintenance of filters and strainers 9a operational and functional checks of filter, slam shut and creep relief components whilst maintaining a positive pressure 10. recognition of meter faults 11. safety requirements for removal of meters 12. hydrostatic testing needed and the precautions required					✓
4. requirements and sizing of impulse take off lines 5. labelling 6. Identify eross correct and incorrect use of main equipotential bonding 7. routine maintenance of meters 8. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 9. determining routine maintenance of filters and strainers 9a operational and functional checks of filter, slam shut and creep relief components whilst maintaining a positive pressure 10. recognition of meter faults 11. safety requirements for removal of meters 12. hydrostatic testing needed and the precautions required		gas flow, straight length pipe work in the vicinity of the meter			
5. labelling 6. Identify cross correct and incorrect use of main equipotential bonding 7. routine maintenance of meters 8. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 9. determining routine maintenance of filters and strainers 9a operational and functional checks of filter, slam shut and creep relief components whilst maintaining a positive pressure 10. recognition of meter faults 11. safety requirements for removal of meters 12. hydrostatic testing needed and the precautions required	3.	positioning of impulse line take offs		✓	
6. Identify eross correct and incorrect use of main equipotential bonding 7. routine maintenance of meters 8. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 9. determining routine maintenance of filters and strainers 9a operational and functional checks of filter, slam shut and creep relief components whilst maintaining a positive pressure 10. recognition of meter faults 11. safety requirements for removal of meters 12. hydrostatic testing needed and the precautions required	4.	requirements and sizing of impulse take off lines		✓	
7. routine maintenance of meters 8. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 9. determining routine maintenance of filters and strainers 9a operational and functional checks of filter, slam shut and creep relief components whilst maintaining a positive pressure 10. recognition of meter faults 11. safety requirements for removal of meters 12. hydrostatic testing needed and the precautions required	5.	labelling		✓	
7. routine maintenance of meters 8. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 9. determining routine maintenance of filters and strainers 9a operational and functional checks of filter, slam shut and creep relief components whilst maintaining a positive pressure 10. recognition of meter faults 11. safety requirements for removal of meters 12. hydrostatic testing needed and the precautions required	6.	Identify cross correct and incorrect use of main equipotential bonding		✓	
8. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 9. determining routine maintenance of filters and strainers 9a operational and functional checks of filter, slam shut and creep relief components whilst maintaining a positive pressure 10. recognition of meter faults 11. safety requirements for removal of meters 12. hydrostatic testing needed and the precautions required		, , , , , , , , , , , , , , , , , , , ,			
8. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 9. determining routine maintenance of filters and strainers 9a operational and functional checks of filter, slam shut and creep relief components whilst maintaining a positive pressure 10. recognition of meter faults 11. safety requirements for removal of meters 12. hydrostatic testing needed and the precautions required					
8. Gas cleaning including filtration for all types of meter of MOP ≤ 7 bar 9. determining routine maintenance of filters and strainers 9a operational and functional checks of filter, slam shut and creep relief components whilst maintaining a positive pressure 10. recognition of meter faults 11. safety requirements for removal of meters 12. hydrostatic testing needed and the precautions required	7.	routine maintenance of meters		√	
9. determining routine maintenance of filters and strainers 9a operational and functional checks of filter, slam shut and creep relief components whilst maintaining a positive pressure 10. recognition of meter faults 11. safety requirements for removal of meters 12. hydrostatic testing needed and the precautions required				√	
9a operational and functional checks of filter, slam shut and creep relief components whilst maintaining a positive pressure 10. recognition of meter faults 11. safety requirements for removal of meters 12. hydrostatic testing needed and the precautions required				√	
components whilst maintaining a positive pressure 10. recognition of meter faults 11. safety requirements for removal of meters 12. hydrostatic testing needed and the precautions required 13. v				√	
10. recognition of meter faults ✓ ✓ 11. safety requirements for removal of meters ✓ ✓ 12. hydrostatic testing needed and the precautions required ✓ ✓	"				
11. safety requirements for removal of meters 12. hydrostatic testing needed and the precautions required 13. safety requirements for removal of meters 14. v	10.			✓	✓
12. hydrostatic testing needed and the precautions required				✓	√
				✓	✓
13. routine maintenance of relief valves and pressure protection devices ✓		· · · · · · · · · · · · · · · · · · ·			
	13.	routine maintenance of relief valves and pressure protection devices		√	

ACS.SMB.004.AC.TABLE 2. CMET2.INITIAL & RE-ASSESSMENT

14.	determining OP of appliances	√	
15.	GT network standards operating conditions	✓	✓
16.	determine Meter /Regulator capacity & application is sufficient for connected load	√	V
17.	Regulators and Safety device protection protocol	√	√