



SGN
Your gas. Our network.

SGN/PM/PS/5

Safety Management Framework

Management Procedure for managing New Works, Modifications and Repairs



NOVEMBER 2015



Management Procedure for managing New Works, Modifications and Repairs SGN/PM/PS/5

Document Owner: Dominic Cummings

Issue Date: 25 November 2015

Context

Who is this Management Procedure for?

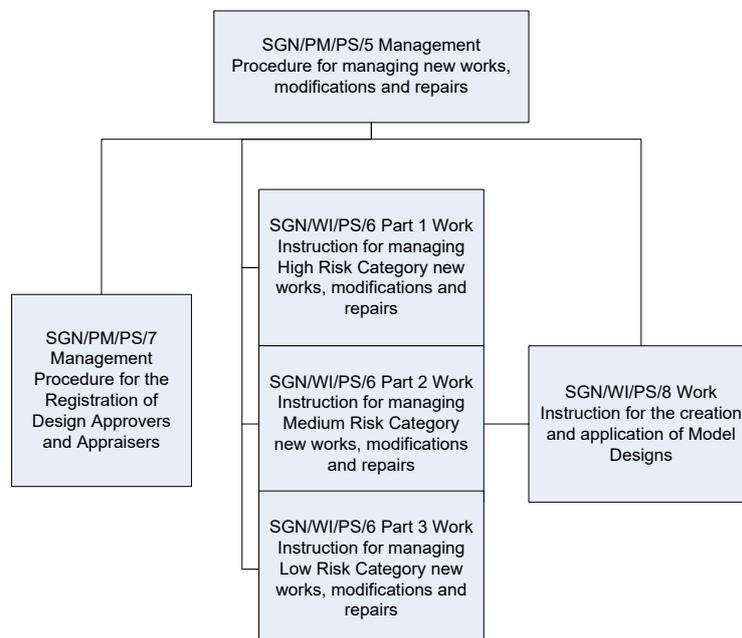
This Management Procedure is for all those in our business involved in the management of new works, modifications or repairs to gas assets.

What does this Management procedure do?

This Management Procedure provides the guidance to the processes that must be followed when managing new works, modifications or repairs to gas assets. These processes follow the stages indicated below.

<u>Initiation Stage (Design produced)</u>	<u>Design Appraised Independently</u>	<u>User acceptance of design</u>	<u>Build & Commissioning</u>	<u>Records Produced</u>	<u>User sign off as complete</u>
Part A	Part B	Part C	Parts D& E	Part F	Part F

Different processes need to be followed depending on the complexity and risk level of a particular item of new work, modification or repair. This Management Procedure provides guidance on the selection of the appropriate process to use and on the use of other supporting documentation. The diagram below illustrates the relationship between this and other related procedures.



Scope

This Management Procedure incorporates the philosophy outlined in the Institution of Gas Engineers & Managers (IGEM) guidance document IGE/GL/5 “Plant Modification Procedures” Edition 3 which recommends the processes for appraising and approving modifications to a gas transportation system and its associated support systems.

Why do we need this Management procedure?

The purpose of this Management Procedure is to provide a framework for management and control of new works, modifications and repairs on gas systems. Formal Management Procedures are necessary to ensure SGN's compliance with legislation, including the Pressure System Safety Regulations (PSSR) 2000, the Construction (Design & Management) (CDM) Regulations 2015, the Health and Safety at Work etc. (HASAW) Act 1974, the Electricity at Work Regulations 1989, the Pipelines Safety (PSR) Regulations 1996, the Gas Safety (Installation and Use) Regulations 1998, the Dangerous Substances and Explosive Atmosphere Regulations (DSEAR) 2002 and the Control of Major Accident Hazards (COMAH) Regulations 1999, and also to comply with the SGN Safety Case and the Major Accident Prevention Document (MAPD).

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1. INTRODUCTION

- 1.1 The Pressure Systems Safety Regulations (2000) (referred to as PSSR) is intended to reduce the risk of failure of pressurised systems. A key tool for achieving this is an examination in accordance with a Written Scheme of Examination. Where an examination identifies a situation requiring repair or modification then this remedial work will need to be completed in a controlled manner. Although the examination identifies the defect, it is the modification or repair which remediates the potential hazard. As a result of this philosophy, PSSR places exacting requirements on the control of modifications and repairs.
- 1.2 Regulation 4 of PSSR covers the design, construction, repair and modification of pressure systems and puts a duty on all concerned to ensure that the pressure system is fit for purpose. HSE guidance on PSSR advises that designs are independently verified and approved. Robust controls are therefore required to manage new works, modifications and repairs on SGN's gas network.
- 1.3 The purpose of this Management Procedure is to ensure that planned and executed 'design activity' is properly appraised, approved and determined as fit for purpose by fully qualified and competent people. This Management procedure and its supporting documents cover the following:
- a) Details of the assets and activities that fall within the scope of these controls
 - b) The process for controlling new works, modifications or repairs
 - c) Details of the roles that must be assessed and approved, and held on a register in order to carry out specified activities
 - d) The process for assessing the complexity and risk for a specific item of work
 - e) Processes to be followed for each category of complexity and risk
 - f) Processes for adopting standardised (Model) designs
 - g) Records requirements
- 1.4 In emergency situations it may be necessary to install new, or modify existing, plant and equipment without the prior approvals required by this Management Procedure. Should this be necessary then the requirements of this Management Procedure must be completed retrospectively as a matter of urgency.

2. ASSETS & ACTIVITIES COVERED BY THIS PROCEDURE

- 2.1 This Management Procedure applies to the management and control of new works, modifications or repairs to assets utilised for the transportation, distribution and metering of gas as follows:

<p>Gas transportation asset systems operating above 2 bar and pipelines operating above 2 bar¹</p>
<p>¹Design Appraisal of other plant considered appropriate is at the discretion of the User but it is strongly recommended that appropriate sections of the design process are followed</p>
<p>Pressure vessels operating above 0.5 bar with a stored energy capacity exceeding 250 bar litres</p>

Pressure reduction installations with inlet pressures greater than 2 bar (includes all pressure reduction equipment found on Gas Conditioning, High Pressure Storage, Local Gas Treatment and LPG & LNG Storage installations)
Low Pressure Storage sites including antifreeze systems
IP Mains
IP Services
IP inlet District / I&C Governor installations
IP Service Governors
High pressure storage installations
Pipelines operating above 7 barg
Local Gas Treatment equipment
Supply point metering installations with an inlet pressure above 2.0 bar
LPG & LNG systems
Electrical ² , Instrumentation and telemetry equipment and any associated software
² Electrical installations within non-operational buildings are excluded from the scope of these Management Procedures however it is recommended that the appropriate sections of the design process be followed.
All asset referred to under the 'MAINT' suite of Procedures

- 2.2 This Management Procedure encompasses all disciplines (including mechanical, electrical, cathodic protection, instrumentation and control, civil / structural, process safety, human factors and software) and applies to both in-house and outsourced activities.

3. ROLES & RESPONSIBILITIES

- 3.1 The User, as defined under PSSR, is responsible for ensuring that processes are in place for managing new works, modifications and repairs on SGN's gas network. This role is discharged by Asset Management.
- 3.2 The process for managing new works, modifications or repairs is divided into several parts. The table below expands on the activities that take place and detail who is responsible for each step.

Stage	Stage Title	Activity	Responsible Role
A	Initiation	Initiates process, obtains unique reference number, generates initial paperwork	PS/6 Coordinator
A	Initiation	Design produced	Designer / Design Organisation
A	Initiation	Where required - Design Approved in readiness for	Design Approver

		Appraisal	
B	Design Appraisal	Independent Design Appraisal	Appraiser(s)
C	User Acceptance	Permits a design has been supported by the Design Approver at Part A (where applicable) and by the Appraiser at Part B to be installed	User
D	Installation	A design that was signed off at Part C is now installed and recorded as installed	Installer
E	Commissioning	An installed design is now commissioned and recorded	Commissioning Engineer
F	Records	Records are updated	PS/6 Coordinator & other roles determined by SGN/PM/RE/2
F	Closure	Work is signed off as complete	PS/6 Coordinator & User

Note: these requirements vary with the level of risk and complexity involved – more detailed guidance is provided in SGN/WI/PS/6 parts 1 to 3

- 3.3 The manager of the department that plans or initiates a piece of new work, modification or repair is the nominated PS/6 Coordinator. Although they may delegate this task they will continue to remain accountable for it.
- 3.4 Although most of the PS/6 Coordinator's work is at Part A, they are also responsible for progressing the paperwork through to closure, and so will remain involved with the project through to Part F.
- 3.5 For work classified as High & Medium Risk, a Design Approver must be selected from the User's PS/7 Register of individuals assessed as competent to undertake the role. Low Risk work (typically like for like component replacement) doesn't require any detailed design work to be undertaken, and so this role doesn't apply to Low Risk work. The process for assessing and registering Design Approvers for High and Medium Risk work is detailed in [SGN/PM/PS/7 Management Procedure for the Registration of Design Approvers and Appraisers](#).
- 3.6 The Design Approver must approve a prepared design at Stage A prior to the design being released for Appraisal at Stage B. The purpose of this role is to ensure that design work is properly coordinated and checked prior to releasing it for Appraisal. A Design Approver may also be a Designer and may also approve their own design work.
- 3.7 The Appraiser is an Engineer who has been assessed as competent to carry out independent design appraisals for a specific discipline. To ensure independence, an Appraiser must not appraise their own design work. For work classified as High & Medium Risk, an Appraiser must be selected from the User's PS/7 Register of individuals assessed as competent to undertake the role. For Low Risk work a Senior Manager may appoint an Appraiser but they must still ensure that the Appraiser has been assessed as competent. The process for assessing and registering Appraisers for High, Medium and Low Risk work is detailed in [SGN/PM/PS/7 Management Procedure for the Registration of Design Approvers and Appraisers](#).

- 3.8 There is an expectation that clear communications will take place between all engineering disciplines and SGN departments in order to ensure this management procedure is complied with effectively and efficiently. Further guidance on the processes to follow can be obtained from asset.management@sgn.co.uk.
- 3.9 Advanced purchasing of long lead-time materials & components may be facilitated via early use of this procedure for subsequent incorporation into the final project design. Typical materials & components include Boiler Houses, Regulator & Filter Skids, and Ball Valves etc. In most cases the appraisal should be undertaken using the appropriate specification datasheets and supplier quotations.
- 3.10 Where major projects are planned consideration must be given to the preparation and submission of asset records as and when essential records become available and not just at the end of the project since this will aid the preparation and approval of commissioning work earlier on in the project.
- 3.11 The recording of new, modified or removed assets is a major requirement of this Management Procedure. Following commissioning of new or modified assets or the abandonment of redundant assets, the associated records must be updated in accordance with [SGN/PM/RE/2 Management Procedure for the Capture of Plant and Equipment Records](#)
- 3.12 In addition, confirmation that as built drawings and records, test figures and commissioning details have been completed must be provided to the User. The User must ensure that all records and systems are updated and the project documentation is archived before signing off the work as complete.

4. PROCESS FOR CONTROLLING NEW WORKS, MODIFICATIONS AND REPAIRS

- 4.1 The first step is to assess the level of complexity and risk for the proposed work.
- 4.2 There are varying levels of complexity and risk which are classified into four individual categories of work activity. The first three, defined as High Risk, Medium Risk and Low Risk, relate to the design of new plant or modification and repair to existing plant and require robust processes to be followed for their appraisal and approval. The fourth Category relates to routine maintenance activities and is usually controlled via normal work issue and capture processes such as Maximo. This, therefore, falls outside the scope of this Management Procedure.
- 4.3 A [Design Assessment Risk Table \(DART\)](#) is available to select which of the three control processes to follow for a planned type of work. The process to follow for each of these Categories is provided in 3 separate Work Instructions. The selection and use of the appropriate Work Instruction will depend on the nature and complexity of the project as indicated in the [DART](#). The Work Instructions for each of these three processes are:
- a) [SGN/WI/PS/6 Part 1 Work Instruction for managing High Risk new works, modifications and repairs](#)
This covers works incorporating a high level of risk and complexity and utilises the most robust control processes.
 - b) [SGN/WI/PS/6 Part 2 Work Instruction for managing Medium Risk new works, modifications and repairs](#)
This relates to work of medium complexity and medium risk which still requires a design and execution control process.

Many of these projects will be of a repetitive nature and so may utilise standardised (model) designs. A new appraisal will still be required for each new piece of work. However, by incorporating model designs into the design pack, considerable reductions in documentation and approval and appraisal workload can be achieved. Approved model designs are published on the SGN web page for [Model Appraisals](#).

[SGN/WI/PS/8 Work Instruction for the creation and application of Model Designs](#) details the process for adopting existing approved designs as Model designs which can then be used repeatedly for other Medium Risk work.

c) **[SGN/WI/PS/6 Part 3 Work Instruction for managing Low Risk new works, modifications and repairs](#)**

This covers work of a non complex nature that is more routinely undertaken, and ensures that the initiation and completion of the works are properly, registered, recorded and passed to Asset Management.

4.4 The fundamental approach to adopt when carrying out any new works, modifications or repairs is to start at High Risk unless the [DART](#) assessment indicates a lower risk category. Starting at this Category ensures that a lower risk Category is only adopted where proper consideration has taken place. Where there is any doubt regarding the risk Category to apply then the fall back position to adopt is High Risk. Further guidance can be obtained from asset.management@sgn.co.uk.

4.5 The [Design Assessment Risk Table \(DART\)](#) must be reviewed at least every 6 months by Asset Management to ensure its continued fitness for purpose. The review group should include key staff from SGN's Asset and Policy departments since engineering expertise and experience will form an important element of the review process.

4.6 The User must maintain a PS/6 Modification & Repair Progress Database to record and track the progress of each modification & repair. Each job must have a unique identification number and must also identify any remedial work arising out of a Written Scheme of Examination.

5. RECORDS

5.1 The recording of new, modified or removed assets is a major requirement of this Management Procedure.

5.2 Following commissioning of new or modified assets or the abandonment of redundant assets, the associated records must be updated in accordance with [SGN/PM/RE/2 Management Procedure for the Capture of Plant and Equipment Records](#)

5.3 In addition, confirmation that as built drawings and records, test figures and commissioning details have been completed must be provided to the User. These requirements are covered in more detail in SGN/WI/PS/ 6, parts 1 to 3.

5.4 The User must ensure that all records and systems are updated and the project documentation is archived before signing off the work as complete at Part F.

APPENDIX A REFERENCES

This Management Procedure makes reference to the documents listed below

A.1 Internal Documents

SGN/PM/ECP/2	-	Management Procedure For Cathodic Protection of Buried Steel Systems
SGN/PM/PS/7	-	Management Procedure for the Registration of Design Approvers and Appraisers
SGN/PM/RE/2	-	Management Procedure for The Capture of Plant and Equipment Records
SGN/PR/P/11	-	Work Procedure for Inspection and repair of damaged steel pipelines designed to operate at pressure greater than 2 bar
SGN/SP/E/55	-	Specification For Bolting, Jointing, Threading And Fasteners
SGN/SP/PA/10	-	Specification for new and maintenance painting at works and site for above ground pipeline and plant installations
SGN/WI/PS/6 Part 1	-	Work Instruction for managing High Risk Category new works, modifications and repairs
SGN/WI/PS/6 Part 2	-	Work Instruction for managing Medium Risk Category new works, modifications and repairs
SGN/WI/PS/6 Part 3	-	Work Instruction for managing Low Risk Category new works, modifications and repairs
SGN/WI/PS/8	-	Work Instruction for the creation and application of Model Designs

A.2 External Documents

BS 3381:1989	-	Specification for spiral wound gaskets for steel flanges to BS 1560
BS 4882:1990	-	Specification for bolting for flanges and pressure containing purposes
BS 7531:2006	-	Rubber bonded fibre jointing for industrial and aerospace purposes
BS EN 1514 –1:1997	-	Flanges and their joints. Dimensions of gaskets for PN-designated flanges. Non-metallic flat gaskets with or without inserts
BS EN 1514 -2:2005	-	Flanges and their joints. Dimensions of gaskets for PN-designated flanges. Spiral wound gaskets for use with steel flanges

IGEM/GL/5 Edition 3 - Procedures for managing new works, modifications and repairs

A.3 Legislation

Pressure System Safety Regulations (PSSR) 2000

Construction (Design & Management) (CDM) Regulations 2015

Health and Safety at Work etc. (HASAW) Act 1974

Electricity at Work Regulations 1989

Pipelines Safety Regulations (PSR) 1996

Gas Safety (Installation and Use) Regulations 1998

Dangerous Substances and Explosive Atmosphere Regulations (DSEAR) 2002

Control of Major Accident Hazards (COMAH) Regulations 1999

APPENDIX B DEFINITIONS

The definitions applying to this Management Procedure are given below

B.1 Roles

- Appraiser** - The Appraiser is an Engineer with the relevant competencies to appraise approved design work in a specified discipline(s). The Appraiser must be demonstrably independent of the work to be appraised. Appraisers may be nominated through the project plan or in writing to the PS/6 Coordinator, or may be appointed directly by the PS/6 Coordinator. Appraisers must be on the User's Register for High & Medium Risk work and may be appointed by a Senior Manager for Low Risk Work.
- Commissioning Engineer** - The person or organisation who undertakes testing and commissioning activities
- Competent Design Authority** - The Competent Design Authority (CDA) is a body appointed by the User having responsibilities for the assessment and registration of Design Approvers and Design Appraisers for High Risk Work, and who may also exercise controls within the design acceptance process
- Design Approver** - The Design Approver is an Engineer with the relevant competencies to approve a High Risk or Medium Risk design to ensure that it meets the requirements of the contract or design brief, legislation, and standards, and is safe. Design Approvers must be nominated through the project plan or in writing to the project Manager and must also be on the User's Register.
- Designer / Design Organisation** - The person or organisation that undertakes the design stage of a project
- Installer** - The person or organisation who undertakes the construction, installation, inspection and testing activities
- PS/6 Coordinator** - The person that initiates, progresses, and closes out a piece of new work, modification or repair. The manager of the department that plans or initiates this work is the nominated PS/6 Coordinator. They may delegate this task but will continue to remain accountable for it
- Senior Manager** - First Report Manager reporting to a Director
- User** - The User is a person representing SGN who is the duty holder under PSSR, and has responsibility for ensuring works is constructed, modified or repaired in accordance with PSSR, and who grants approval for this work to be undertaken

B.2 Disciplines

- Civil / Structural** - Defined as the design and construction of all civil and structural elements which protect, support or enclose the pressure-containing elements, or their supporting equipment, to ensure that they are able safely to resist the forces to which they may be subjected, along with the suitability and capability of the soils to support such civil and structural elements without causing any detrimental effects

- Cathodic Protection** - Defined as a form of protection against corrosion utilising electrical power. Cathodic Protection is an essential component in ensuring the integrity of the gas transportation system. It is therefore intended that CP Appraisal should be included within both the mechanical and electrical appraisals, as aspects of each discipline impact upon the integrity of CP design
- Electrical & Instrumentation** - Defined as the design, installation, testing and commissioning of all electrical and instrumentation equipment, plant and systems that protect and support production, transmission, distribution and storage installations.
- All electrical work (design, installation, testing and commissioning) must comply with The Electricity at Work Regulations (1989). The Regulations cover all electrical equipment, which includes switchgear, control panels, distribution boards, electrical accessories, portable tools and equipment and cables. The Regulations apply to all electrical systems including portable generators, batteries and instruments containing or operating from a source of electricity.
- Mechanical** - Defined as the pressure-containing plant, equipment, pipework, etc., which form the physical pressurised system
- Process Engineering** - Defined as the physical processes applied to the gas during transportation. This will include filtration, pre-heating, metering, Local Gas Treatment, pressure regulation and expansion, compression, metering, and other processes. It is not intended that it should include the physical availability of the gas supply for a particular application since this is covered by network planning and network operation requirements
- Safety Engineering** - Defined as the Hazard and Reliability aspects of gas transportation, e.g. COMAH, Risk Analysis and Assessment, HAZOP, HAZID, HAZCON etc. It is not intended to cover day-to-day construction site issues such as scaffolding and excavation registers, lifting equipment certification, COSHH etc.
- Software** - Defined as the design, installation, testing and commissioning of all software for electrical and instrumentation equipment, plant and systems that protect and support production, transmission, distribution and storage installations. All software contained within electrical and electrical system should be appraised by an E & I Appraiser
- B.3 General Appraisal** - An Appraisal is a review of an approved design output package by an Appraiser to establish that appropriate codes, policies, procedures and standards have been applied, that there are no omissions within the detailed design, and that SGN's requirements have otherwise been met. It does not include the responsibility to check or approve the design, although selective checking may be carried out to prove specific aspects of the design.

**Model /
Standard
Designs**

- A suite of standard designs that have been pre-appraised and approved as model designs. These are published for inclusion in future modification and repair submissions.

These model appraisals are generic in nature and are intended to reduce the work required each time a standard design is used. It is, however, essential that the specific application of the model appraisal / standard design is appraised on each and every occasion and the site-specific appraisal must reference the model appraisal.

An example of a model appraisal is for a standard connection to a < 7 bar pipeline. The mechanical connection design, specifications and materials need not be appraised each time, but the application of the standard design must be appraised to ensure that the standard design is not being installed on an inappropriate class of pipeline.

**PS/6
Modification &
Repair
Progress
Database**

- A database managed by the User to record and track the progress of each modification & repair

**User's PS/7
Register**

- A database held by the User that identifies PS/6 Coordinators, Design Approvers and Appraisers for all disciplines registered to undertake High & Medium Risk new works, modifications & repairs on SGN's gas systems. For High Risk work, Design Approvers and Appraisers are independently assessed and appointed by the CDA.

APPENDIX C GUIDE TO CLASSIFICATION OF WORK

C.1 High Risk Work covers:

- Major project where designs are required and major construction is undertaken
- Where new design drawings are required for modification or repair
- Where changes of hazardous areas occur as a result of repair or modification
- Where the works will involve welding to pressure containing equipment such as a pipeline or installations operating at 7bar or above
- Where the work involves welding to a pressure vessel
- Electrical or Instrumentation works not involving genuine "Like for Like"
- Pipelines Safety Regulations, or other significant legislation, requires detailed compliance and notification
- Where the modification or repair will affect or alter any statements in the COMAH Safety Report
- Where the modification or repair requires a change to permits or licence
- Where modification or repair will increase noise categories or environmental or planning limits
- Where modifications, repair or new works require a new assessment of Integrity of Safety Related Systems
- Where HAZIDS or HAZOPS are considered for the works
- Where the [Design Assessment Risk Table \(DART\)](#) indicates High Risk

C.2 Medium Risk Work covers:

- Where the works require the purchase of a standard 'skid' type unit to a specification used from the same manufacturer for other installations
- A model design appraisal already exists and has been approved in accordance with [SGN/WI/PS/8 Work Instruction for the creation and application of Model Designs](#), and has been published on the SGN web page for [Model Appraisals](#)
- Where there is a new specification required for the modification or repair
- Where there will be a need to change ELDs, Instrument or Electrical loop and Land Drainage drawings
- Where the [Design Assessment Risk Table \(DART\)](#) indicates Medium Risk

C.3 Low Risk Work covers:

- Where work of a less complex nature, are routinely undertaken and which the User has deemed appropriate to be covered by this documentation Category
- Where the replacement equipment has the same size and type of connections as the original

- Where the replacement equipment has the same specification as the original equipment but can offer greater functionality
- Where fully qualified, competent personnel are effecting the installation of the replacement equipment
- Where genuine “Like for Like” or manufacturer documented equivalent replacements
- Where there is a modification on the original equipment manufacturer instruction or advice
- Where the [Design Assessment Risk Table \(DART\)](#) indicates Low Risk

C.4 Work Not Requiring Appraisal and Approval:

C.4.1 The following work does not require separate appraisal and approval but must be recorded on the appropriate job card / work capture / records system to ensure that the asset records are properly maintained:

C.4.2 Pressure Systems:

- Routine maintenance and servicing
- Any inspection works wholly completed under procedure SGN/PR/P/11. (Repair procedures are not included and shall be carried out in accordance with Category 3 appraisal procedures)
- Soft part replacements, including filter elements provided it is in accordance with approved procedures
- Gasket replacement (like-for-like) in accordance with BS-EN 1514 -1, BS-EN 1514 -2, BS 3381 & BS 7531
- Painting repairs in accordance with SGN/SP/PA/10
- Grit blasting operations in accordance with SGN approved standards
- Wire brushing operations in accordance with SGN approved standards
- Replacement and repairs to wrapping or insulation in accordance with SGN approved standards
- Rectification of leaks associated with gaskets or soft seals in accordance with SGN/SP/E/55
- Re-affirmation of MOP's
- Fitting of temporary pressure or temperature gauges to existing stabblings
- Cathodic protection works not in contact with pressure containing parts in accordance with SGN/PM/ECP/2.
- Re-alignment or re-tightening of existing stud bolts and nuts in accordance with BS 4882 & SGN/SP/E/55 and the correct grade

C.4.3 Data logger, Gas Meter Volume Conversion Systems & Associated Equipment:

- Any inspection completed under MAINT procedures

- Fault finding and remedial work, excluding replacement of units effecting records system

APPENDIX D EXAMPLE DESIGN ASSESSMENT RISK TABLE (DART)

The following is an example of a [Design Assessment Risk Table \(DART\)](#). Since this is for illustrative purposes only, it doesn't contain all asset components and the risk categories shown may not reflect the actual current ratings. The current live [DART](#) can be accessed from this link.

Asset Group	Asset Component	Risk Category to Apply				Model Design Reference (if applicable)
		New Work	Modification	Replacement	Repair	
PRI >7 Bar	Valve	H	H	H	L	
PRI >7 Bar	Waterbath Heater	H	H	H	L	
PRI >7 Bar	Boiler	H	H	H	L	
PRI >7 Bar	Heat Exchanger	H	H	H	L	
PRI >7 Bar	E&I Control Panel	H	H	H	L	
PRI >7 Bar	Meter	H	H	H	L	
PRI >7 Bar	Filter	H	H	H	L	
PRI >7 Bar	Regulator	H	H	H	L	
PRI >7 Bar	Slamshut Valve	H	H	H	L	
PRI >7 Bar	Relief	H	H	H	L	
PRI >7 Bar	Non Return Valve	H	H	H	L	
PRI >7 Bar	Instrumentation	H	H	H	L	
Pipeline >7Bar	Pipeline	H	H	H	L	
Pipeline >7Bar	Block Valve	H	H	H	L	
District / I&C PRI <7 Bar	Valve	M	M	L	L	IP/09/1234
District / I&C PRI <7 Bar	Filter	M	M	L	L	IP/09/1235
District / I&C PRI <7 Bar	Slamshut Valve	M	M	L	L	IP/09/1236
District / I&C PRI <7 Bar	Regulator	M	M	L	L	IP/09/1237
District / I&C PRI <7 Bar	Relief	M	M	L	L	IP/09/1238
District / I&C PRI <7 Bar	Non Return Valve	M	M	L	L	IP/09/1239
District / I&C PRI <7 Bar	Data Logger	L	L	L	L	
Domestic Service Governor	Valve	M	M	L	n/a	IP/09/1242
Domestic Service Governor	Filter	M	M	L	n/a	IP/09/1243
Domestic Service Governor	Slamshut Valve	M	M	L	n/a	IP/09/1244

Domestic Service Governor	Regulator	M	M	L	n/a	IP/09/1245
Domestic Service Governor	Relief Valve	M	M	L	n/a	IP/09/1246
Domestic Service Governor	Kiosk	M	M	L	n/a	IP/09/1247
Main < 7 Bar	Branch Saddle	M	M	L	n/a	IP/09/1249
Main < 7 Bar	Weldolet	M	M	L	n/a	IP/09/1250
Main < 7 Bar	HDPE Main	M	M	L	L	IP/09/1251
Main < 7 Bar	Steel Main	M	M	L	L	IP/09/1252
Service <7 Bar	Top Tee	M	M	L	n/a	IP/09/1253
Service <7 Bar	Weldolet	M	M	L	n/a	IP/09/1254
Service <7 Bar	HDPE Service	M	M	L	L	IP/09/1255
Service <7 Bar	Steel Service	M	M	L	L	IP/09/1256

APPROVAL

This Management Procedure was approved by Dominic Cummings on 25 November 2015 for use by managers, engineers and supervisors throughout Scotia Gas Networks (SGN).

SGN documents are revised, when necessary, by the issue of new editions. Users should ensure that they are in possession of the latest edition by referring to the SHE & Engineering Document Library available on SGNnet.

Compliance with this safety and engineering document does not confer immunity from prosecution for breach of statutory or other legal obligations.

BRIEF HISTORY

First published as T/PR/G17	January 1999	
Revised and Re-issued	April 2001	
Editorial update to reflect demerger November 2000	June 2001	
Revised to incorporate minor amendments	January 2002	
Revised to incorporate T/PR/EL14	May 2003	EPSC/T02/630
Revised to incorporate T/GN/98/01 & align to Gas Requirements Manual	August 2004	EPSC/T03/812
Redrafted and re-issued as SGN/PM/G/17	September 2008	DESC-0117-14112007
Correction to typographical error	October 2008	DESC-0217-21102008
Major review and re-write plus amended to new Safety Management Framework (SMF) format	January 2013	DESC-0962-16092011
Redrafted and re-issued as SGN/PM/PS/5 supported by SGN/WI/PS/6 part 1, SGN/WI/PS/6 part 2, SGN/WI/PS/6 part 3, SGN/PM/PS/7 & SGN/WI/PS/8	November 2015	DESC-1547-28012015

KEY CHANGES

Section	Amendments
Whole	SGN/PM/G/17 split into SGN/PM/PS/5, SGN/WI/PS/6 part 1, SGN/WI/PS/6 part

document	2, SGN/WI/PS/6 part 3, SGN/PM/PS/7 & SGN/WI/PS/8 to simplify the process of applying its various requirements

DISCLAIMER

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MANDATORY AND NON-MANDATORY REQUIREMENTS

In this document:

must: indicates a mandatory requirement.

should: indicates best practice and is the preferred option. If an alternative method is used then a suitable and sufficient risk assessment must be completed to show that the alternative method delivers the same, or better, level of protection.

END NOTE

Comments

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