



NGN/PR/SER/9

UIP's REQUIREMENTS FOR

SERVICE ALTERATIONS AND DISCONNECTIONS

JUNE 2008

CONTENTS

| | Page |
|--|-------------|
| FOREWORD | iv |
| BRIEF HISTORY | iv |
| DISCLAIMER | iv |
| MANDATORY AND NON-MANDATORY REQUIREMENTS | iv |
| INTRODUCTION | 1 |
| SAFETY | 1 |
| 1 SCOPE | 1 |
| 2 REFERENCES | 1 |
| 3 SERVICE ALTERATIONS | 1 |
| 3.1 General | 1 |
| 3.2 Industrial & Commercial Services | 2 |
| 3.3 Limitations of Soundness Testing | 2 |
| 3.4 Exposed Steel | 2 |
| 3.5 Dual Services | 3 |
| 3.6 Feeder Mains (or Steel Rails) | 3 |
| 3.7 Shallow Depth Services | 3 |
| 4 DISCONNECTIONS | 3 |
| 5 COMPLETION OF WORK | 4 |

FOREWORD

This document was approved by GNSEC for use by managers, engineers and supervisors throughout Northern Gas Networks Limited (NGN).

NGN 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 NGN Register of safety and engineering documents available on the company Intranet.

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

Compliance with this Safety and Engineering documents does not confer immunity from prosecution for breach of statutory or other legal obligations.

BRIEF HISTORY

| | | |
|---------------------|-----------|--------------|
| Reviewed & Approved | June 2008 | NGN/PR/SER/9 |
|---------------------|-----------|--------------|

DISCLAIMER

This safety and engineering document is provided for use by NGN and such of its contractors as are obliged by the terms and conditions of their contracts to comply with this document. Where this document is used by any other party it is the responsibility of that party to ensure that this document is correctly applied.

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.

MANAGEMENT PROCEDURE FOR

UIP's REQUIREMENTS FOR SERVICE ALTERATIONS AND DISCONNECTIONS

INTRODUCTION

In support of competition in the provision of service alterations and disconnections, NGN has prepared this procedure to set out requirements for Utility Infrastructure Providers (UIP's) who carry out service alterations and disconnections.

Application of the content of this bulletin will help ensure that NGN complies with its legislative obligations.

While NGN has taken all reasonable care to ensure the accuracy of the contents of this procedure, NGN accepts no responsibility for any liability incurred by any person relying on the contents of this procedure. It is the responsibility of any person carrying out service alterations and disconnections to be aware of, and ensure that they comply with, any legislative or other requirements that apply to such activities.

SAFETY

In the event of a gas escape being identified before or during the proposed works (including any damage to the service pipe), the escape must be reported to the national Emergency Call Centre on 0800 111 999. It should be recognised that the effects of damage are not always immediate, and that what may appear insignificant could give rise to a dangerous occurrence. All repairs to gas service pipe installations will be the relevant Gas Transporters responsibility.

1. SCOPE

This procedure sets out requirements to be undertaken by authorised Utility Infrastructure Providers (UIP's) when service alterations and / or disconnection of services pipes of any size and up to 7 barg are undertaken on the NGN Network, where it is intended that NGN adopts the service.

2. REFERENCES

This document supplements the following industry documents to enable alteration and disconnection of service pipes by authorised Utility Infrastructure Providers (UIP's):

| | |
|------------|--|
| IGE/TD/101 | Adoption of pipe systems by a GT – Management of UIP activities. |
| IGE/TD/4 | PE and Steel Gas Services and Service Pipework – Edition 4 |
| IGE/GL 5 | Managing New Works, Modifications and Repairs – Edition 2 |
| HSC L81 | Design, construction and installation of gas service pipes |
| | Gas Safety (Installation &Use) Regs 1998 |

3. SERVICE ALTERATIONS

3.1 General

3.1.1 NGN's distribution pipe replacement policy requires the decommissioning of metallic pipes and their replacement with Polyethylene pipes.

3.1.2 When localised alteration work is required on an existing steel service ($\leq 2''$) it must be renewed completely to the main. If the service entry is found to be in steel (steel tail) and the remainder of the service is PE, then the steel section must be replaced.

3.1.3 Care must be taken when undertaking work on any 'live' service installation. Before any work commences all meters must be identified and the consequences of shutting off the supply to end-users considered. This is particularly important with regard to multi occupancy premises where additional emergency control valves may have been installed covering the whole of the building or section of it. All adjacent properties must be checked for the presence of dual services.

3.1.4 A PE service should be isolated at least 2 metres away from the premises when undertaking alterations. The service must be squeezed-off and cut downstream of the squeeze-off. The live end of the service must be capped.

3.1.5 If a service is to be altered or cut off downstream of an above ground entry tee, the integral stopper may be used as a means of isolation. Please note, a check should be undertaken to ensure a gas-tight seal is achieved.

3.1.6 If a service is to be altered or cut off downstream of a service isolation valve (SIV) the SIV should be used as a means of isolation. In both cases the effectiveness of the seal must be established using a pressure gauge connected to the outlet of the Emergency Control Valve (ECV) to carry out a let by test.

3.1.7 All new sections of PE pipe and any section of PE service that is temporarily de-commissioned due to alteration work, must be pressure tested prior to re-commissioning. If the test is not satisfactory, the service pipe must be renewed.

3.1.8 A compression fitting must not be used for reconnection within 2 metres of the property, the altered part of the service must be reconnected using an electrofusion coupling.

3.1.9 When carrying out an alteration on an MP or IP service, the service must be isolated at a valve or plugged at the main. Work on IP services will require design appraisal as set out in IGE GL/5

3.1.9.1 On completion of a service alteration, the existing length of service pipe to the main must be checked with Gas detection equipment in conjunction with barholing to ensure that any disturbance has not caused a leak. Barholes must be plugged on completion of a survey.

3.1.9.2 Meter and ECV labelling must be updated upon completion of work, in accordance with **SER10**.

3.2 Industrial & Commercial Services

3.2.1 For industrial and commercial premises, where the requirement for a continuous supply makes it impracticable to disconnect the old service supply before gassing up the new service, the new service may be commissioned before the old service is cut off. The old service must be disconnected as soon as possible after the new service has been commissioned. This should be no later than 1 week following the commissioning of the new service.

3.2.2 Where work is carried out on buried industrial and commercial services >2" to 4" diameter during routine operations pipes that are confirmed to be in good condition (including coating), and which pass the appropriate soundness test, may be reconnected to the parent main. (see 3.3 below-Limitations of Soundness testing). Consideration must be given to Cathodic Protection where fitted.

3.3 Limitations of Soundness Testing

Soundness testing of buried steel pipes can only confirm that the pipes are suitable to contain the test pressure at the time of testing. Aged steel pipes can be substantially corroded but still pass a low-pressure soundness test. Re-commissioning of aged steel pipes allows the potential for corrosion failure shortly afterwards as undetected corrosion of the buried pipe continues, or physical disturbance occurs.

3.4 Exposed Steel

PE must not be laid above ground or in exposed locations (with the exception of GRP sleeve-protected service entries), and steel is the preferred material in such circumstances e.g. risers to flats, house entries where fire/vandalism is considered a particular hazard etc. Where such sections are discovered during a pipe alteration / replacement project, and are re-connected to the new PE parent main following

confirmation of its continued fitness for purpose, details must be recorded, to ensure that steel pipework within PE networks can be clearly identified and maintained.

3.5 Dual Services

3.5.1 For dual steel services, replacement with two new independent services is the preferred option. Should this not be practicable, then the service is to be renewed utilizing the existing route, or near as practically possible. NGN must be contacted to authorise any deviation.

3.5.2 In circumstances where an individual service, forming part of a steel dual service requires permanent isolation, the existing services must be permanently abandoned and a new replacement service installed from the main to the property requiring the gas supply.

3.5.3 Dual services must be recorded and the meter point reference number MPRN label must be fitted/updated on the service entries adjacent to the meter positions in both premises (See **SER10**).

3.6 Feeder mains (or Steel Rails)

These are small diameter (typically 2") steel feeder mains that were laid to the rear, at the front of or alongside properties, usually in close proximity to the property. Steel rails that have not been recorded on existing mapping systems and discovered whilst undertaking a routine service alteration work, must be reported to NGN.

3.7 Shallow Depth Services

The service pipe should normally be laid at a minimum depth of 375mm in private ground and 450mm in public highway. Should a situation where the service pipe is not at the required depth or proposed to be laid shallower¹, then consideration should be given to either additional protection² or replacement to minimise 3rd party damage.

Notes:

¹ **Proposals for shallow depth services will need to be validated by NGN and recorded by UIP on completion of the work.**

² **Examples of additional protection against interference would include the provision of a sleeved duct, concrete plinth, steel plate with a suitable caution / warning tape applied.**

3.7.2 Any gas services to be found at site that have been 'built' over i.e conservatories, house extensions etc must be reported to NGN.

4. DISCONNECTIONS

4.1 The interruption of supply should be prearranged with all end users of the service pipe installation. Care must be taken to maintain electrical continuity when disconnecting metallic gas services, by using a temporary continuity bond.

4.2 The ECV must always be closed and capped before any work on the service pipe is carried out.

4.3 Permanent disconnection of services must be undertaken by physically isolating the service at point of connection to the main. Any redundant section of service must be purged and capped.

4.4 For each service cut off, an excavation must be made at the service entry point to ensure that the correct service has been isolated, and to facilitate the removal of the old service. The service must be cut after fitting an electrical continuity bond.

4.5 The old service must be removed from the property, the service entry sealed and wall made good. The ends of any abandoned pipework left in the ground must be sealed with cap ends.

4.6 The standpipe inside the property must be removed to a point below ground level, capped and the floor made good.

4.7 Where the service inside the property is encased in concrete or its removal would create severe disturbance, a deviation from the requirements of 4.5 and 4.6 above is acceptable. In these circumstances the service entry may remain in situ', must be cut as close as practicable to the point of entry and the end of the service capped. Records returned to NGN must state that the existing service pipe has not been fully removed and must state the reason.

4.8 When a supply on a domestic service is isolated by the use of a riser tee plug, or a service incorporating a riser tee is cut off, it will not normally be necessary to access to the premise, unless there is evidence that other supplies exist.

4.9 When isolating or cutting off services to all other premises, and there is reason to believe more than one meter is installed or the age of the premise or service is such that other supplies may exist in the premise, access must be gained to the premise to ensure that all supplies have been isolated.

5. COMPLETION OF WORK

5.1 Where a meter is not fitted prior to the distribution team leaving site following purging of the service, the ECV must be capped and sealed.

5.2 Approved labels must be fitted as stated in **SER10**. The property inside and out must be checked for leakage using approved Gas detection equipment. If any readings are found, the escape must be reported to NGN Emergency services.

5.3 All records must be kept of all service work undertaken and returned to NGN in accordance with IGE/TD/101 – Adoption of pipe systems by a GT, management of UIP activities.