

**3EB/1****UTILITY INFRASTRUCTURE PROVIDER REQUIREMENTS TO SUPPORT WALES & WEST UTILITIES T/PR/AV1****SERVICE ALTERATIONS & DISCONNECTIONS****INTRODUCTION**

In support of competition in the provision of service alterations and disconnections, Wales & West Utilities has prepared this engineering bulletin 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 Wales & West Utilities complies with its legislative obligations, and meets the requirements of the Connections Process Quality Management System (CPQMS).

While Wales & West Utilities has taken all reasonable care to ensure the accuracy of the contents of this bulletin, Wales & West Utilities accepts no responsibility for any liability incurred by any person relying on the contents of this bulletin. 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 Wales & West Utilities 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 bulletin sets out requirements to be undertaken by authorised Utility Infrastructure Provider's (UIP's) when service alterations and / or disconnection of services pipes of any size and up to 7 barg are undertaken on the Wales & West Utilities Network, where it is intended that Wales & West Utilities 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/1	Adoption of pipe systems by a GT – Management of UIP activities.
IGE/TD/4	Gas Services Edition 3 1994
IGE/GL 5	Plant Modification Procedures
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 Wales & West Utilities' distribution pipe replacement policy requires the decommissioning of metallic pipes and their replacement with Polyethylene pipes.

3.1.2 When localized 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.

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 Technical Engineering Bulletin 12.

### **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, and which pass the appropriate soundness test, may be reconnected to the parent main. (See 3.3 below- Limitations of Soundness testing)

### **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. Wales & West Utilities 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.

### **3.6 Feeder mains (or Steel Rails)**

These are small diameter (typically 2") steel feeder mains that were laid to the rear of 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 Wales & West Utilities.

### **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 shallower<sup>1</sup>, then consideration should be given to either additional protection<sup>2</sup> or replacement to minimise 3<sup>rd</sup> party damage.

**Notes:**

<sup>1</sup>Proposals for shallow depth services will need to be validated by Wales & West Utilities and recorded by UIP on completion of the work.

<sup>2</sup>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 Wales & West Utilities.

## **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 Wales & West Utilities 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 3.1.92 and 3.5.3 above. 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 Wales & West Utilities Emergency services.

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

## **DATE OF IMPLEMENTATION**

8th September 2003.

APPROVED BY: Engineering Policy Manager (Distribution) as Document EPSG/T03/841

DATE: 05.09.2003

To be Reviewed by: 31.08 .2004