Revision to National Grid Reinforcement Policy UIP/GT Briefing Note 8

1. Introduction

This briefing note provides details of National Grid's reinforcement policy with respect to Alternative to Reinforcement Connections.

An Alternative to Reinforcement Connection occurs when the proposed connection would result in a reinforcement, and a connection to an alternative point would result in a lower overall cost project. Appendix 1 shows an example of an Alternative to Reinforcement connection.

National Grid has consulted with Ofgem and UIPs/GTs to develop the revised policy.

2. Revised Alternative to Reinforcement policy

National Grid has now introduced competition into Alternative to Reinforcement connections. This means that connecting UIPs/GTs will be able to carry out Alternative to Reinforcement connections in the way that they carry out any other connection. To ensure that UIPs/GTs are not disadvantaged National Grid will fund the additional work that is involved when an Alternative to Reinforcement connection is required.

National Grid expects that UIPs/GTs will wish to carry out the final tie in connection, however National Grid will continue to offer a final connection service if requested, and the costs will be shown separately on the quotation.

In accordance with National Grid's Standard Licence Condition 4B Statement section 2.13 effective from the 5th of April 2004, the alternative route is selected on the basis of providing lower overall reinforcement and connection costs. Where the alternative scheme is more expensive than the cost to the customer for connecting and reinforcing the nearest relevant mains, National Grid will pay a contribution to the customer equal to the difference between the two costs.

Where the alternative scheme is cheaper than the cost to the customer for connecting and reinforcing the nearest relevant main a payment will not be made.

In both cases the UIP/GT will be requested to lay the pipe (and install any other required apparatus) from the alternative connection point to the proposed consumer's site site. National Grid will install any reinforcement that is upstream of the final connection point. All cost comparison will be based on our contractor rates at the time of the quotation.

Where National Grid makes a payment to offset the additional cost of the Alternative to Reinforcement Connection the customer should submit their invoice on completion of the work. If National Grid are adopting any pipe completion is classed as commissioning, backfill and reinstatement of the works and submission of the required completion file to National Grid. Where National Grid is not adopting any pipe completion is classed as commissioning of the pipe.

National Grid will provide details of the reinforcement costs associated with the nearest relevant mains in Annex A to the quotation titled "Reinforcement Scheme Information". This template will detail reinforcement costs and economic test allowances towards the reinforcement costs upstream of the connection charging point.

National Grid will provide details of the Alternative to Reinforcement scheme and assessment of any required customer contribution in Annex A to the quotation titled "Alternative to reinforcement scheme additional information for UIPs/GTs"

GT Alternative to Reinforcement connections will vest with the connecting GT, whereas UIP Alternative to Reinforcement connection assets will be adopted by National Grid, subject to their being fit for purpose.

An example of the revised policy is shown in Appendix 1.

In the event that a customer does not wish to lay the Alternative to Reinforcement Connection then a connection can be made to another point, however as this connection is a sub-optimal solution the reinforcement will be treated as an enhancement and will be charged for in it's entirety.

4. Implementation

The implementation of this process will be on 5th April 2004. Requests received before close of business on 2nd April 2004 will be progressed under the existing arrangements.

Appendix 1

The diagram shows a typical GT site request.



The site is to be developed from the SE corner. The customer has requested a connection to point A via a GT feeder main (not shown)

National Grid has identified a lower cost Alternative to Reinforcement option via a connection to an MP main terminating at the SE corner of the site with a PRS. The Alternative to Reinforcement works are to be constructed by the GT and the customer has requested that National Grid carry out the final tie in connection.

All costs include works management charges unless stated otherwise.

Costs associated with the original charging point route

	Exc overheads	Incl overheads
Cost D to $C =$ Cost C to $B =$	£69K £35K	£100K £50K
Tie in connection at A =	£1.4K	£2K
Total costs =	£185.4	£152K
Allowable investment =	£55K	£80K
~		

Customer cost for original charging point would be: Tie in connection at $A = \pounds 2K$ Cost downstream of charging point (C to B) = £50K Reinforcement upstream of charging point (D to C) less economic test value =£69K (Excl OH) less £55k (Excl OH) = £14K plus overheads = £20K

Total customer cost for original route = $\pounds 2K + \pounds 50K + \pounds 20K = \pounds 72K$ (Incl OH)

NOTE: Values above rounded for clarity

Costs associated with the Alternative to Reinforcement route

The cost of the feeder main from point A to the SE corner is not included in the analysis.

Cost incl overheads

Tie in connection = $\pounds 5K$ Cost of regulator = $\pounds 15K$ Cost of mains = $\pounds 100K$ Total costs = $\pounds 120K$

Customer and National Grid contribution towards Alternative to Reinforcement

The total cost of the Alternative to Reinforcement connection $(\pounds 120K)$ is lower than the original route $(\pounds 152K)$ and hence selected as the most efficient solution.

The National Grid funded contribution is determined from deducting the original route reinforcement customer contribution from the cost of the alternative reinforcement, $= \pounds 120$ K - $\pounds 72$ K $= \pounds 48$ K

The final tie in cost of £5K would be shown on the quotation separately

Appendix 1 shows how these costs would be detailed in the reinforcement scheme information given in Annex A of the quotation.

Appendix 1 Annex A

Reinforcement Scheme Information

1. General Description of Project Works

EXAMPLE

Note: The physical capacity installed to ensure security of supply may differ from that described above

2. Costs and Customer Contribution Summary

Mains:	£
Regulator/PRS:	£
Other plant/equipment	£
Total Project Costs (exclusive OH)	

General reinforcement before winter after connection (prime) Specific reinforcement, customer cost to upsize general scheme Specific reinforcement, customer net cost of project General reinforcement, National Grid cost to upsize specific scheme

Betterment as a result of utilising replacement main

* only appropriate where National Grid and customer funded shared schemes apply, delete and add costs where appropriate

Net Specific Reinforcement Costs (excl OH)	
Final connection charge (excl OH	
Specific reinforcement cost minus the final connection charge	
Allowed Investment ex Ecotest (up to Cost Y)	
National Grid funded Reinforcement (B) (inc OH)	
Net Reinforcement Contribution Charge (A)	

NA* (£) 69 n/a 69 Cost Y Ζ 55 (£)

Z plus OH

Cost Y-Z

plus OH

69

69

NA*

NA*

NA*

NA*

£

£

£

£

£

£

£

£

£

3. Pressures entailed in the reinforcement

Anticipated connection point pressure following reinforcement

26mb

80

20

Appendix 1 Annex A Alternative to Reinforcement Scheme Additional Information for UIPs/GTs Note: All costs are inclusive of works management charges

1. General Description of Alternative Project Works

Alternative route selected on the basis of lower costs ie Cost L < Cost R

EXAMPLE Note: The physical capacity installed to ensure security of supply may differ from that described above 2. Costs and Customer Contribution Summary Need to show original route cost breakdown= Downstream of CP 50K + Reinforcement cont A £20K + Reinforcement cont B £80K + connection £2K Total Project costs using original route including customer 152 Cost R and National Grid works £ Need to show calculation of customer contribution to original route (Cont A £20K + downstream CP £50K + connection £2K £ 72 Cost S **Costs of Alternative Scheme** Mains downstream of the connection point 100 £ 15 Regulator/PRS downstream of the connection point £ Other plant/equipment downstream of the connection point £ 5 Physical tie in connection to National Grid system Cost K2 £ Specific reinforcement upstream of the connection point (refer to separate reinforcement template for breakdown) £ **Total Project Costs of Alternative Works** 120 Cost L £ Less any National Grid funded reinforcement/ betterment Cost M upstream of the connection point (includes Reinforcement B) £ Less any National Grid funded general Cost N reinforcement/betterment downstream of the connection point £ Less any customer funded Reinforcement A upstream of the Cost O connection point £ Net Cost of Alternative Scheme works attributable to customer 120 Cost P =downstream of the connection point £ L-M-N-O £ £ 48

National Grid funded contribution towards customer laid alternative works excluding Reinforcement contribution C (Cost P-Cost S). Where value is –ve no payment will be made **3. Pressures entailed in the alternative reinforcement**

Anticipated connection point pressure

75mb