

National Grid Resubmission

Resubmission for East of England, North West and North London Networks on Streetworks

1. General Overview

Introduction

Les Guest Associates has been asked to review the National Grid Gas Distribution Streetworks reopener dated May 2015.

The purpose of this report is to review the claim to ensure that the costs claimed are additional due to the introduction of permit schemes and lane rental. (NRSWA 1991 as amended by TMA 2004) My focus has centred around analysis of the 2013/14 costs, and the evidence provided to support the claim. In addition, my opinions are supported by specific knowledge from my previous roles in Streetworks together with previous discussions I have had with local authorities and government. I am not in a position to challenge future workload and efficiencies other than indicated, and therefore whether the extrapolation over the remaining years is correct. I have also indicated where costs are not clearly evidenced. The report is broken down into four elements; a general overview, and more detailed analysis on the information provided for the three networks.

Permit fees

For each of the networks, the permit fees used appear to be correct and in line with legislation. The number of works used in the calculations appear to have been incorporated from other spreadsheets and seem to be reasonable.

I am not in a position to challenge the number of projected works over the coming years. Overall the claim for permit fees for each network seems to be reasonable.

With regard to permit variations - There is no evidence to explain why there are so many and the reasons for the variations. It is therefore unclear whether they are due to poor planning or management, excessive challenges by the authorities, or due to circumstances which could not have been known before commencing work.

The number and proportion of variations in the North West is much higher than other networks. Permit variations will always be necessary, especially where some authorities are more unreasonable than others. I am of the opinion that the Regulator should determine an efficient percentage level.

Permit Administration

Essentially, this is down to 3 elements per network:

- Back Office staff
East of England and North London have claimed additional back office costs for administration but have not indicated how many additional staff have been recruited or

why. This is confused further by the statement in the North London section " *Within the London Network the existing back office staff were utilised to administer the new schemes with costs being incurred for the provision of traffic management plans and extra supervisory visits as requested by the permitting authorities.*" This would indicate that the costs claimed are not additional but down to redeployment. The North West network has not included any claim.

- **Traffic Management Plans**

Generally the cost of plans are £125, and in East of England and North London, the volume claimed is in line with the number of Capex and Repex activities where they are likely to be required. North West has not claimed for TM plans, which is an indication that those permit authorities may have focussed more on site occupation and duration rather than the impact of works site on the public. Some TM plans would have been required prior to the introduction of permit schemes, especially for high profile projects. There is no evidence to substantiate whether the number and cost of plans in the resubmission are only for additional plans or for all plans, nor is it confirmed the level of plans produced prior to the introduction of permit schemes.

Whilst £125 per plan is reasonable, (the cost when outsourced in 2009 was £400), there may be an opportunity to reduce this cost further by using a mobile app in conjunction with site meetings with the highway authorities.

- **Additional Site Meetings**

This is now a requirement by most authorities for all major works whereas prior to the introduction of permit schemes, would have happened infrequently and only on high profile projects. The average cost that has been claimed for meetings across all three networks is relatively low. The number of meetings is in line with projects in North London and East of England where focus is on the impact of works on the travelling public. There is no claim for this element in the North West

Productivity Costs

These are the hardest element to confirm without more data and analysis. The Appendix "Model Conditions matrix 23rd June" provided with the submission for East of England, sets out a summary of all the possible conditions and issues that may be encountered. It also shows the additional costs associated with each of these conditions. These have been derived from a great deal of analysis by the network and I am not in a position to counter these impact assessments. Not all projects will have all conditions imposed and not all will incur the full impact every time.

The key is not only to understand the total number of conditions by network, but to understand the actual volume by authority and the financial impacts for individual projects.

The North West authorities seem to have focussed mainly on timing and duration with is in line with the assumptions made for permit administration costs. East of England and North London authorities have also imposed more conditions on road space and methodology which restricts some of the economies of scale for work carried out by traditional methods within traditional site footprints. All of the above elements would add additional costs to projects and are due to the introduction of permit schemes. The Regulator should consider any future efficiencies from the proposed introduction of new innovative techniques.

Lane Rental

There is comprehensive detail provided to consider the impact of lane rental fees and the decision process to determine whether it would be more efficient to stand the fees or carry out mitigating actions. I have reviewed each job and looked at the potential fees, the actual fees paid and the cost of avoiding fees and can see that the network has worked efficiently and in the interest of road users, energy customers and key stakeholders. Extensive use of Core and Vacuum technology has also reduced the impact of immediate works incurring charges. The introduction of new technology such as CISBOT and PRISM could reduce the number of days occupation in the future and I do not know whether this has been included in future predictions.

Innovation

Innovative technology like CISBOT may reduce lane rental days further in the future where it can be deployed efficiently. PRISM (pipe replacement in situ manufacturing) may also help reduce lane rental days. However, I am not in a position to predict the extent of this as I have not been privileged to see all the benefits from the project.

Whilst these may certainly reduce lane rental charges due to reduced occupation of the road, they will not have a major impact on permit fees as fees are charged per works per USRN rather than occupation.

If successful, they may result in smaller site footprints and occupation which could reduce the unproductive costs associated with the imposition of conditions.

Summary

It is not for me to comment on whether the claims for future years are correct, only the legitimacy of the claim for additional costs and whether they were reasonable for the year 2013/14.

In general, the claim for permit fees is appropriate, and whilst there will always be a need for permit variations and therefore permit variation fees, there is little evidence to support whether these have been efficiently incurred or not, and therefore the Regulator would need to make a decision on this element.

For permit administration, the claims for traffic management plans and additional site meetings are generally in line with both the number of major works and the focus of those authorities, however some element would have occurred prior to the introduction of permit schemes. There is no evidence to substantiate that back office administration is an additional cost, and indeed in one network indicates that it is redeployment.

For productivity costs, the impact of the imposition of conditions to limit work space will incur additional costs and have an impact on productivity. The documentation clearly outlines all the potential increases in costs per condition per project, but does not indicate whether all of the costs have been applied to all projects or not. The Regulator would need to determine the level of allowance.

For lane rental, I consider the total costs claimed for lane rental fees or the cost to mitigate fees is reasonable and has been incurred in the best interest of customers and the travelling public. The introduction of innovative new techniques could reduce lane rental costs further in the future.



Comparison of permit fees														
Local Authority	Scheme	0, 1, 2 and traffic sensitivite streets						Type 3, 4 / Non traffic sensitive						
		Provisional advanced Authorisation	Major activity permit	Standard activity permit	Minor activity permit	Immediate activity permit	Variation to a permit	Provisional advanced Authorisation	Major activity permit	Standard activity permit	Minor activity permit	Immediate activity permit	Variation to a permit	
DFT Maximum Fees		£105	£240	£130	£65	£60	£45	£75	£150	£75	£45	£40	£35	
London Network	Tower Hamlets	London	£105	£240	£130	£65	£60	£45	£75	£150	£75	£45	£40	£35
	Slough	South East	£94	£232	£130	£63	£55	£45	£70	£142	N/A	N/A	N/A	£35
	Surrey	South East	£83	£216	£127	£58	£52	£45	£66	£141	N/A	N/A	N/A	£35
	Bracknell Forest	South East	£91	£224	£128	£63	£57	£45	£74	£143	N/A	N/A	N/A	£35
	Southend on Sea	East of England	£98	£218	£123	£60	£54	£45	£70	£140	£75	£43	£38	£35
East of England Network	Barnsley	Yorkshire	£86	£168	£96	£52	£45	£45	N/A	N/A	N/A	N/A	N/A	N/A
	Doncaster	Yorkshire	£91	£211	£109	£64	£59	£45	N/A	N/A	N/A	N/A	N/A	N/A
	Sheffield	Yorkshire	£99	£206	£109	£58	£55	£45	N/A	N/A	N/A	N/A	N/A	N/A
	Rotherham	Yorkshire	£95	£213	£118	£58	£54	£45	N/A	N/A	N/A	N/A	N/A	N/A
	Bedford	East of England	£105	£240	£130	£65	£60	£45	£75	£150	£75	£45	£40	£35
	Hertfordshire	East of England	£105	£240	£130	£65	£60	£45	£75	£150	£75	£45	£40	£35
	Luton	East of England	£105	£240	£130	£65	£60	£45	£75	£150	£75	£45	£40	£35
	Northamptonsh	Own scheme	£97	£209	£119	£63	£49	£45	N/A	N/A	N/A	N/A	N/A	N/A
	Derby City	Own scheme	£105	£231	£130	£62	£60	£45	N/A	N/A	N/A	N/A	N/A	N/A
	Buckinghamshir	Own scheme	£102	£208	£125	£62	£58	£45	N/A	N/A	N/A	N/A	N/A	N/A
North West Network	Enfield	London	£105	£240	£130	£65	£60	£45	£75	£150	£75	£45	£40	£35
	Haringey	London	£105	£240	£130	£65	£60	£45	£75	£150	£75	£45	£40	£35
	Bolton	GMRAPS	£105	£240	£130	£65	£60	£45	£70 / £60	£170/£110	£90/£45	£45/£10	£30/£10	£35
	Bury	GMRAPS	£105	£240	£130	£65	£60	£45	£70 / £60	£170/£110	£90/£45	£45/£10	£30/£10	£35
	Manchester	GMRAPS	£105	£240	£130	£65	£60	£45	£70 / £60	£170/£110	£90/£45	£45/£10	£30/£10	£35
	Oldham	GMRAPS	£105	£240	£130	£65	£60	£45	£70 / £60	£170/£110	£90/£45	£45/£10	£30/£10	£35
	Rochdale	GMRAPS	£105	£240	£130	£65	£60	£45	£70 / £60	£170/£110	£90/£45	£45/£10	£30/£10	£35
	Salford	GMRAPS	£105	£240	£130	£65	£60	£45	£70 / £60	£170/£110	£90/£45	£45/£10	£30/£10	£35
	Stockport	GMRAPS	£105	£240	£130	£65	£60	£45	£70 / £60	£170/£110	£90/£45	£45/£10	£30/£10	£35
	Tameside	GMRAPS	£105	£240	£130	£65	£60	£45	£70 / £60	£170/£110	£90/£45	£45/£10	£30/£10	£35
Trafford	GMRAPS	£105	£240	£130	£65	£60	£45	£70 / £60	£170/£110	£90/£45	£45/£10	£30/£10	£35	
Wigan	GMRAPS	£105	£240	£130	£65	£60	£45	£70 / £60	£170/£110	£90/£45	£45/£10	£30/£10	£35	
St Helens	Mersey Authorit	£103	£208	£122	£61	£57	£45	£63	£108	£63	£31	£28	£35	
Bold Red shows where the authority charges maximum fees														

2. East of England

Resubmission for £8.43million

General

In the East of England network, permit fees apply to type 0, 1, 2 roads and traffic sensitive streets for all schemes, although 6 authorities also apply fees to works on non traffic sensitive streets as well. The lists of permit scheme authorities operating in the East of England network included in spreadsheet "Appendix 2" are confusing. In tab "3.13 EoE" it lists ; Barnet (55%), Bedford, Hertfordshire, Luton, Enfield, Derby City, Northamptonshire, Barnsley, Doncaster, Rotherham, Sheffield, Haringey (39%) whilst tab "HA schemes update" does not include Barnet, but does include Buckinghamshire. Four of the authorities operate under the Yorkshire scheme, three operate the East of England scheme. Buckinghamshire applies only to strategically significant streets.

Permit Fees - Claim £2.12million

In 2013/14 East of England submitted 5014 permits. 3159 of these were granted, whilst 1855 were permit variations to the original permits.

Requests for variations occur where there are changes to the original permit. The most common of these are for permission to extend the duration of works beyond the previously agreed duration. The cost of a variation for traffic sensitive streets is £45 and for non sensitive it is £35. The cost of variations for the year is therefore between £65,000 and £84,000. The reasons for the permit variations have not been provided. It is therefore not clear whether they are due to poor planning or management, excessive challenges by the authorities, or due to circumstances which could not have been known before commencing work.

Whilst inaccurate planning or failure to fully occupy the site to complete works in the original timescales could indeed happen, often there are circumstances beyond the control of the Network requiring either extensions or changes to the original permit request. For example, coming across obstructions which have not been recorded, unpredicted changes in route etc. In my opinion, the Regulator should allow some variations as they will be unavoidable.

Without a more detailed breakdown, it is difficult to confirm that the value of permit fees is 100% accurate. However, using rough estimations based on a 10:90 split for TS and Non TS streets and a mix of work type, provides me with confidence that the fees claimed, are proportional to the workload and scheme types.

Permit Administration - Claim £1.36million

In 2013/14, there is a claim for back office staff of around £60,000 p.a. It has not been made explicitly clear whether this is new FTE, or redeployment of those previously employed on notice activities which are no longer required for the permit authorities.

There is a cost of around £62,000 p.a. for Traffic Management Plans. The average cost for TM plans is £125 per plan which is reasonable (3rd parties were charging £400 per plan in 2009) The claim is

for 500 TM plans p.a. This equates to around 29% of the total Repex and Capex works (1741) and is comparable to the total authorities who have been operating in London for some time, where around 33% have required TM Plans. It is also proportional to the permit schemes which apply to all streets or traffic sensitive streets only. Whilst the claim argues that TM Plans are a new requirement, there would have been some required prior to the introduction of permits to help local authorities on some major works or high profile projects. Therefore a small reduction would be reasonable.

The submission warrants additional costs for site meetings prior to works commencing. Whilst this would have naturally happened for some high profile major works out of courtesy, it is now a formal requirement for all major works and many standard works in traffic sensitive streets and therefore the additional cost incurred is due to the introduction of permit schemes.

In tab "3.13 East of England", the number of site meetings has not been recorded in the submission, nor has it been included in the main document. This gives a distorted view of the average costs of meetings for the total, existing and new. However, using the cost of £37,300 and £81 as an average cost, (from existing HAs) suggests an equivalent to around 450 meetings which is in line with the number of works requiring TM Plans. (500)

In my opinion, some site meetings and TM Plans would have previously taken place before the introduction of permits, but it is now a requirement where the highway authority stipulates. Therefore a small reduction would again be reasonable if the network has not already taken this into account.

Productivity - Claim £4.95million

This claim is mainly due to restrictive conditions imposed by the highway authority. The table in section 4.21 outlines some 1422 conditions imposed in 2013/14 with the main conditions imposed being for timing and duration conditions and road space conditions.

Timing and duration conditions were one of the key attractions for local authorities to press for permit schemes. This gives them the ability to restrict start times until after the busy periods and curtail end times before rush hour to reduce the impact of the works on traffic. Whilst this helps the public (and therefore also utility customers), it can result in unproductive or lost time by teams, not only in hours worked, but also a duplication of effort moving barriers, spoil, materials etc. and then replacing which allows the traffic to flow more easily. Conversely, authorities can also insist on working outside of normal hours which adds a premium to costs.

Road space conditions will restrict the work zone, which again may reduce productivity by losing all the economies of scale to store larger quantities materials safely (more visits required by support vehicles) or results in shorter lengths of pipe insertion and therefore duplication of effort. The intention of this condition is to reduce the inconvenience to the travelling public, but it does increase costs to the undertaker of works.

The "Model Conditions matrix 23rd June" provided with the submission for East of England, sets out a summary of all the conditions, the issues encountered, and additional costs associated with each of these conditions and this has been produced to justify the claims. Not all projects will have all the conditions imposed on them every time, and all the impacts described would not necessarily be experienced every time.

The cost of the impact of the imposition of permit conditions is calculated at £579,000 p.a. I am unclear as to whether this is an extrapolation of the number of works, or whether the network has a

complete record of costs, or has taken into account a proportion of times the conditions will have applied. It is also not clear whether future efficiencies have been included.

Innovation and future developments

Sadly, innovative techniques do not always result in fewer permits and therefore a reduction in permit fees. However, some authorities may exercise some leniency as part of their scheme. The main savings would be in the reduction of the duration of works which mainly helps where lane rental is applied. If new techniques such as PRISM (pipe replacement in situ manufacturing) deliver the expected benefits, then site footprint may naturally be reduced and therefore the impact of some conditions may also reduce. However, I have not been privileged to see the full benefits case for the technique to understand the predicted savings.

The cost associated to produce Traffic Management plans in East of England for new permit schemes is £62,000 resulting in a total cost for the network of £82,000 p.a. at an average cost of £125. Whilst this represents good value, I understand this could be reduced further if it is combined with a site meeting with the highway authority and using a mobile application on site in conjunction with the highway representative.

Summary

The East of England resubmission is based on 12 authority schemes. Not all schemes are identical.

Barnsley, Doncaster Rotherham and Sheffield are part of the Yorkshire scheme which only applies to type 0,1,2, roads and traffic sensitive streets. The cost of permit fees for the Yorkshire scheme are amongst the lowest and in general, all below the DFT maximum charges, whereas the East of England schemes apply to all works and are at the DFT maximum charge. It is not clear whether the claim for permit variation fees are wholly efficient.

The claim for additional back office costs does not provide evidence of additional staff. The costs for Traffic Management plans and additional site visits are additional due to the legislation, but a small proportion would have occurred before the introduction of schemes.

The network has provided a comprehensive list of reasons for increased costs due to the imposition of conditions and the authorities who have implemented these schemes do demand shorter durations and smaller site footprints. These are a major part of the schemes implemented by the authorities in the East of England. Therefore these are legitimate additional costs. However, it is not clear whether the figure is a straight extrapolation, or whether it has taken into account that not all conditions will be applied so rigorously every time, nor whether there has been consideration for future efficiencies.

My observations are based on the necessity of changes to business processes and working practice and associated additional costs due to the introduction of permit schemes and lane rental. I have looked at the 2013/14 figures for evidence of expenditure and reasonableness. I have not considered extrapolation of this base year, or accounted for future efficiencies or changes in workload.



East Of England Permit Scheme Fees comparison													
Local Authority	Scheme	0, 1, 2 and traffic sensitivite streets						Type 3, 4 / Non traffic sensitive					
		Provisional advanced Authorisation	Major activity permit	Standard activity permit	Minor activity permit	Immediate activity permit	Variation to a permit	Provisional advanced Authorisation	Major activity permit	Standard activity permit	Minor activity permit	Immediate activity permit	Variation to a permit
DFT Maximum Fees		£105	£240	£130	£65	£60	£45	£75	£150	£75	£45	£40	£35
Barnsley	Yorkshire	£86	£168	£96	£52	£45	£45	N/A	N/A	N/A	N/A	N/A	N/A
Doncaster	Yorkshire	£91	£211	£109	£64	£59	£45	N/A	N/A	N/A	N/A	N/A	N/A
Sheffield	Yorkshire	£99	£206	£109	£58	£55	£45	N/A	N/A	N/A	N/A	N/A	N/A
Rotherham	Yorkshire	£95	£213	£118	£58	£54	£45	N/A	N/A	N/A	N/A	N/A	N/A
Bedford	East of England	£105	£240	£130	£65	£60	£45	£75	£150	£75	£45	£40	£35
Hertfordshire	East of England	£105	£240	£130	£65	£60	£45	£75	£150	£75	£45	£40	£35
Luton	East of England	£105	£240	£130	£65	£60	£45	£75	£150	£75	£45	£40	£35
Northamptonshire	Own scheme	£97	£209	£119	£63	£49	£45	N/A	N/A	N/A	N/A	N/A	N/A
Derby City	Own scheme	£105	£231	£130	£62	£60	£45	N/A	N/A	N/A	N/A	N/A	N/A
Buckinghamshire	Own scheme	£102	£208	£125	£62	£58	£45	N/A	N/A	N/A	N/A	N/A	N/A
Enfield	London	£105	£240	£130	£65	£60	£45	£75	£150	£75	£45	£40	£35
Haringey	London	£105	£240	£130	£65	£60	£45	£75	£150	£75	£45	£40	£35
		Bold Red shows where the authority charges maximum fees											

3. North West

Resubmission for £7.57 million

General

Ten of the eleven schemes operated in the North West Network fall under the Greater Manchester Permit Scheme (GMRAPS) whilst St. Helens is part of the Mersey Authorities Scheme. All schemes charge fees for all works in all streets and most charges are the maximum allowed by the Department for Transport.

Permit Fees - Claim £3.91 million

In 2013/14 the North West Network had 6082 permits granted which required an additional 5343 permit variations. The percentage of permits requiring variations (88%) is significantly higher than other networks. (58% in North London and 57% in East of England)

It is not clear how the variations are split by work type or traffic sensitivity (TS) and therefore the appropriate charge (either £45 or £35 per variation). The annual cost of variation fees will be between £187,000 and £240,000 p.a. The reasons for variations have not been clearly provided. It is therefore unclear whether they are due to poor planning or management, excessive challenges by the authorities, or due to circumstances which could not have been known before commencing work.

Whilst inaccurate planning or failure to fully occupy the site to complete works in the original timescales could indeed happen, often there are circumstances beyond the control of the Network requiring either extensions or changes to the original permit request. For example, coming across obstructions which have not been recorded, unpredicted changes in route etc.

It is also worth noting that the sum of conditions imposed by authorities in the North West network is 4669 of which 1891 are due to timing and duration. This may indicate that there are more challenges by authorities to the original estimated duration of works when the permit was submitted, (and consequently, extensions are requested which then incur variation fees) however, it has not been made explicitly clear. 4432 of the (5343) variations relate to Opex activities and given that 3348 permits for Opex were granted in the same period, it would seem every permit application in this category requires at least one variation permit. (132%) It is not clear whether this is due to unreasonable durations imposed by authorities, or works not being completed by the network in the timescales laid out by the permits, or if the timescales were reasonable.

In my opinion, the Regulator should allow some variations as they will be unavoidable.

Without a more detailed breakdown, it is difficult to confirm that the value of permit fees is 100% accurate. However, using rough estimations based on a 10:90 split for TS and Non TS streets and a mix of work type, provides me with confidence that the fees claimed, are proportional to the workload and scheme types.

In my opinion, the cost of permit fees should be allowed.

Permit Administration - Claim £0.75million

To enable justification of permit administration costs, I have reviewed the appendix 2 spreadsheet. However, some of the figures which would help me to confirm where and how costs were incurred are not clear or missing. Table D(i) cells G86 or Q86 do not appear to add up. The total for permit administration for the new authorities is £75,000 p.a. whilst the total for the network is £84,000 with no indication of how the figures have been derived. There is no breakdown between back office costs, Traffic Management plans or site meetings.

Although some of the data is missing, the spreadsheet records 263 meetings (219 pre-site and 44 whilst works are in progress) which do incur additional costs to the period before the introduction of permit schemes. Some meetings would have previously happened on high profile projects. There does not appear to be a breakdown of the additional costs or numbers for the provision of Traffic Management plans in the submission from the North West network.

Productivity - Claim £2.91million

This claim is mainly due to restrictive conditions imposed by highway authorities. The table in section 5.2 adds up to 4669 conditions (text says 4633) imposed in 2013/14 with the main conditions imposed being the timing and duration conditions, (1891) consultation & publicity (572) and road space conditions (439). The volume is significantly higher than those imposed by authorities in other schemes and in other networks as the NW schemes apply permit conditions to all works including those in non sensitive streets. It is clear that a major concern of the NW authorities is to manage more works to shorter durations. In the NW, 31% of permits attract a timing and duration condition, whilst in North London and East of England, the figures are 3% and 10% respectively.

Timing and duration conditions were one of the key attractions for local authorities to press for permit schemes. This gives them the ability to restrict start times until after the busy periods and curtail end times before rush hour to reduce the impact of the works on traffic. Whilst this helps the public (and therefore also utility customers), it can mean unproductive or lost time by teams, not only in hours worked, but also a duplication of effort moving barriers and then replacing, spoil etc. to allow the traffic to flow more easily. Conversely, authorities can also insist on working outside of normal hours which adds a premium to costs.

Road space conditions will restrict the work zone, which again may reduce productivity by losing all the economies of scale to store larger quantities materials safely (more visits required by support vehicles) or demand shorter lengths of pipe insertion and therefore duplication of effort. The intention of this condition is to reduce the inconvenience to the travelling public, but it does increase costs to the undertaker of works.

The "Model Conditions matrix 23rd June" provided with the submission for East of England, but still applicable to the North West sets out a summary of conditions, issues encountered, and additional costs associated with each of these conditions and this has been produced to justify the claims. Not all projects will have all the conditions imposed on them every time, and all the impacts described would not necessarily be experienced every time.

Tab 3.13 in Appendix 2 shows the cost of the imposition of conditions to be around £900,000 p.a. (all down to timing and durations).

Tab NW (E20) shows the claim to have reduced to £326,000 following a challenge to contractors, resulting in £2.91m over the period.(NW0910 M20)

Innovation and future developments

Sadly, innovative techniques do not always result in fewer permits and therefore a reduction in permit fees. However, some authorities may exercise some leniency as part of their scheme. The main savings would be in the reduction of the duration of works which mainly helps where lane rental is applied. If new techniques such as PRISM (pipe replacement in situ manufacturing) deliver the expected benefits, then the site footprint may naturally be reduced and therefore the impact of some conditions may also reduce. However, I have not been privileged to see the full benefits case for the technique. In addition, and where more extensive use is possible, techniques such as core and vac and CISBOT for OPEX work could assist in reducing site occupation and therefore may reduce the financial impact of the timing and durations condition.

Summary

The North West Network resubmission is based on 11 authority schemes. 10 of the authorities follow the GMRAPS scheme and 1 (St Helens) follows the Mersey Authorities scheme. The GM scheme applies maximum fees allowed whilst St Helens operates with most fees below the maximum allowed. All schemes apply to all works on all streets.

Generally, the level of permit fees claimed are proportional to the workload, although the number and cost of permit variations are high and require further analysis.

The breakdown of costs for permit administration is not clear, with the only indication being that additional site meetings have taken place. There is no claim for additional staff or traffic management plans.

The costs for loss of productivity due to conditions for 2013/14 has been reduced by the network from £900,000 to £326,000. The total costs have been included only on the timing and duration line.

My observations are based on the necessity of changes to business processes and working practice and associated additional costs due to the introduction of permit schemes and lane rental. I have looked at the 2013/14 figures for evidence of expenditure and reasonableness. I have not considered extrapolation of this base year, or accounted for future efficiencies or changes in workload.



North West Permit Scheme Fees comparison													
Local Authority	Scheme	0, 1, 2 and traffic sensitivite streets						Type 3, 4 / Non traffic sensitive					
		Provisional advanced Authorisati	Major activity permit	Standard activity permit	Minor activity permit	Immediate activity permit	Variation to a permit	Provisional advanced Authorisati	Major activity permit	Standard activity permit	Minor activity permit	Immediate activity permit	Variation to a permit
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Bolton	GMRAPS	£105	£240	£130	£65	£60	£45	£70 / £60	£170/£110	£90/£45	£45/£10	£30/£10	£35
Bury	GMRAPS	£105	£240	£130	£65	£60	£45	£70 / £60	£170/£110	£90/£45	£45/£10	£30/£10	£35
Manchester	GMRAPS	£105	£240	£130	£65	£60	£45	£70 / £60	£170/£110	£90/£45	£45/£10	£30/£10	£35
Oldham	GMRAPS	£105	£240	£130	£65	£60	£45	£70 / £60	£170/£110	£90/£45	£45/£10	£30/£10	£35
Rochdale	GMRAPS	£105	£240	£130	£65	£60	£45	£70 / £60	£170/£110	£90/£45	£45/£10	£30/£10	£35
Salford	GMRAPS	£105	£240	£130	£65	£60	£45	£70 / £60	£170/£110	£90/£45	£45/£10	£30/£10	£35
Stockport	GMRAPS	£105	£240	£130	£65	£60	£45	£70 / £60	£170/£110	£90/£45	£45/£10	£30/£10	£35
Tameside	GMRAPS	£105	£240	£130	£65	£60	£45	£70 / £60	£170/£110	£90/£45	£45/£10	£30/£10	£35
Trafford	GMRAPS	£105	£240	£130	£65	£60	£45	£70 / £60	£170/£110	£90/£45	£45/£10	£30/£10	£35
Wigan	GMRAPS	£105	£240	£130	£65	£60	£45	£70 / £60	£170/£110	£90/£45	£45/£10	£30/£10	£35
St Helens	Mersey Authorities	£103	£208	£122	£61	£57	£45	£63	£108	£63	£31	£28	£35
Bold Red shows where the authority charges maximum fees													

4. North London

Resubmission for £12.24 million

General

The North London Network has experienced permit schemes longer than other networks due to the introduction of the London Permit Scheme (LOPS) as the first in the UK.

For the claim period, 5 new authorities implemented permit schemes. Tower Hamlets which is part of the London Permit Scheme (LOPS), Slough, Surrey and Bracknell Forest which are members of the South East Permit Group and Southend on Sea which is part of the East of England group of authorities.

Tower Hamlets applies permit fees to all works in all streets and generally applies the DfT maximum rates.

Surrey, Slough and Bracknell Forest apply fees to all works in road types 0, 1 and 2 and traffic sensitive streets and also fees for major works in non traffic sensitive streets. Fees are generally below the DfT maximum rates.

Southend on Sea is part of the East of England scheme applying fees for all works in all streets, mostly below the maximum rate.

Permit Fees - Claim £2.36 million

During the base year, 3293 permits were granted by the new participating authorities, together with 1323 permit variations. This represents 40% of permits requiring variations. Each of the schemes also apply conditions with some 3106 conditions in the year, mainly due to road space (1096), Consultation (702) and local conditions (574)

The cost of variations to permits isn't recorded, but will be somewhere between £46,000 and £60,000. (£45 for traffic sensitive streets and £35 for non traffic sensitive) The reasons for variations have not been provided. It is therefore not clear whether they are due to poor planning or management, excessive challenges by the authorities, or due to circumstances which could not have been known before commencing work.

Whilst inaccurate planning or failure to fully occupy the site to complete works in the original timescales could indeed happen, often there are circumstances beyond the control of the Network requiring either extensions or changes to the original permit request. For example, coming across obstructions which have not been recorded, unpredicted changes in route etc. In my opinion, the Regulator should allow some variations as they will be unavoidable.

Without a more detailed breakdown, it is difficult to confirm that the value of permit fees is 100% accurate. However, using rough estimations based on a 10:90 split for TS and Non TS streets and a mix of work type, provides me with confidence that the fees claimed, are proportional to the workload and scheme types.

In my opinion, the cost of permit fees should be allowed, but the Regulator should determine what level of variation fees is justifiable and adjust appropriately.

Permit Administration - Claim £0.99million

The bulk of the permit administration costs are made up from activities which were not deemed to be a requirement prior to the introduction of permit schemes. These include the additional provision of Traffic Management Plans (£41,000) Required attendance for site meetings (£29,000) and back office staff (£47,000). Section 6.14 says "*Within the London Network the existing back office staff were utilised to administer the new schemes with costs being incurred for the provision of traffic management plans and extra supervisory visits as requested by the permitting authorities.*" This indicates redeployment and therefore I see no reason for the inclusion of £47,000.

The cost of TM plans averages £125 which is reasonable. The claim is for around 300 plans for 832 Repex projects which again is reasonable.

A total of 963 site meetings were required from 248 Capex and Repex projects costing £30 per meeting. The average cost is very reasonable, less than the previous costs and but the volume is high, but in proportion with previous authorities operating in this network. (Due to the volume of strategic streets affected)

Some TM plans and on-site meetings did take place prior to the introduction of permit schemes but these were generally adhoc and normally on complicated or high profile projects. Therefore whilst they are a requirement now, and the additional costs are justified, the Regulator may consider a reduction of a small percentage for costs which would have been incurred previously.

Productivity - Claim £4.01million

This claim is mainly due to restrictive conditions imposed by highway authorities. 3106 conditions were applied to 3293 works in the year. Whilst most of the conditions applied were to limit road space (1096) the cost of which amounted to £143,000, the highest cost of the new conditions was due to timing and duration which amounted to £211,000. The North London network does have the highest proportion of significant strategic streets in the UK and therefore this would be expected. Road space is also a serious problem in London due to the number of streets with on-road parking. Residents are (naturally) reluctant to vacate these for long periods and as such, authorities address resident's needs by restricting the length a stretch of road is occupied by the utility by reducing the usual footprint of works. This often brings in inefficiencies in the techniques used to replace longer lengths of main, together with the need for more support vehicles to bring and take away materials. It is interesting to see that the condition to consult is high (702) but no costs attributed to this by the network.

The "Model Conditions matrix 23rd June" provided with the EoE submission sets out a summary of all the conditions, issues encountered and additional costs associated with each of these conditions and this has been produced to justify the claims.

Not all projects have all the conditions imposed, every time and all the impacts described would not necessarily be experienced.

Lane Rental Claim £4.88 million

National Grid have put in place an innovative and effective process which results in the most cost effective and economic decisions to either pay or avoid lane rental costs. A tool determines whether it is more appropriate to pay the charge or to avoid the charge and incur mitigating costs. The capture process also provides excellent evidence on a project by project basis to show the success of

the technique. For works other than Medium Pressure replacement, the mitigation process has resulted in a much higher net avoidance. This has therefore provided good value to the public (less disruption on highly trafficked roads) and for gas customers it is a lesser overall cost. It has also enhanced the stakeholder relations with TfL and the Mayor of London. Lane Rental is an additional cost of £3.38m over the period assuming workload does not change from forecast. I am not aware of a better decision support tool being used and the net cost is far lower than originally anticipated due to the accurate decisions made.

For Medium Pressure replacement, a similar process has been used to project the best decisions over the coming years for MP replacement. Assuming all work will take place as planned, the additional cost of £1.5 million seems to be good value.

With regard to immediate works, 200 took place in the period with a potential value of £1.695m. This was mitigated to 26 works which were charged at £74,700. (average 2 days charge per works). Of the 200 works, 65 had an incursion into the carriageway and the core and vacuum technique was used successfully on 27 (41%) which is better than the original prediction of effective use. (around 10% of gas escapes).

Innovation and future developments

Sadly, innovative techniques do not always result in fewer permits and therefore a reduction in permit fees, however, some authorities may exercise leniency as part of their scheme. The main savings would be in the reduction of the duration of works which helps where lane rental is applied. If new techniques such as PRISM (pipe replacement in situ manufacturing) and CISBOT deliver the expected benefits, then site footprint may naturally be reduced and therefore the impact of some conditions may also reduce. However, I have not been privileged to see the full benefits case for the techniques to understand the predicted savings.

The cost associated to produce Traffic Management plans in North London for new permit schemes is £41,000 with a total cost for the network of £300,000 p.a. at an average cost of £125. Whilst this represents good value, I understand this could be reduced further if combined with a site meeting with the highway authority and using a mobile application on site in conjunction with the highway representative.

It is evident that the use of core and vacuum technology has reduced potential lane rental costs.

Summary

From the evidence provided, it would seem that the claim for permit fees is in line with previous implementations, and without a detailed breakdown, the level claimed is in line with my rough estimate. However, the Regulator should consider what proportion of variation fees are appropriate.

Administration costs are in line with previous implementations and other networks, however the only question I have is whether the back office cost is justified as an additional cost or whether existing staff have been redeployed.

TM Plans and site meeting costs are low, but I believe a small deduction should be made as some would have been necessary before the permit schemes were introduced.



Unproductive costs are understandable, especially in London where there is a fight for road space, but some of these may be mitigated in the future if proposed innovative techniques are successful.

The evidence provided for lane rental is comprehensive and it would appear that National Grid have successfully mitigated the potential cost of fees to ensure that the minimal amount is considered as an allowance and therefore to be passed on to customers.

My observations are based on the necessity of changes to business processes and working practice and associated additional costs due to the introduction of permit schemes and lane rental. I have looked at the 2013/14 figures for evidence of expenditure and reasonableness. I have not considered extrapolation of this base year, or accounted for future efficiencies or changes in workload.



North London Permit Scheme Fees comparison													
Local Authority	Scheme	0, 1, 2 and traffic sensitivite streets						Type 3, 4 / Non traffic sensitive					
		Provisional advanced Authorisation	Major activity permit	Standard activity permit	Minor activity permit	Immediate activity permit	Variation to a permit	Provisional advanced Authorisation	Major activity permit	Standard activity permit	Minor activity permit	Immediate activity permit	Variation to a permit
DFT Maximum Fees		£105	£240	£130	£65	£60	£45	£75	£150	£75	£45	£40	£35
Tower Hamlets	London	£105	£240	£130	£65	£60	£45	£75	£150	£75	£45	£40	£35
Slough	South East	£94	£232	£130	£63	£55	£45	£70	£142	N/A	N/A	N/A	£35
Surrey	South East	£83	£216	£127	£58	£52	£45	£66	£141	N/A	N/A	N/A	£35
Bracknell Forest	South East	£91	£224	£128	£63	£57	£45	£74	£143	N/A	N/A	N/A	£35
Southend on Sea	East of England	£98	£218	£123	£60	£54	£45	£70	£140	£75	£43	£38	£35
Bold Red shows where the authority charges maximum fees													