Essex and Suffolk Coalition of Amenity Groups

21 September 2012

RIIO-T1: Initial Proposals for National Grid Electricity Transmission plc and National Grid Gas plc

And

NGET - Talking Networks - Willingness to Pay to mitigate the visual impact of existing electricity transmission infrastructure in designated landscapes

Ofgem is seeking responses to the package of proposals put forward for each of the relevant companies under the RIIO-T1 transmission price control process. Simultaneously, NGET has requested responses to recent Willingness to Pay Research, commissioned by NGET and undertaken by Accent.

The Essex and Suffolk Coalition of Amenity Groups is primarily concerned with visual amenity and the rational, economic development of transmission infrastructure. As these consultations are closely co-related this response is to Ofgem and also the Talking Networks team at NGET.

Accent's research follows -and was informed by - previous WTP studies. These, in turn, were subject to peer review and widespread scrutiny. Accent's report is thus robust and has important implications.

The public's response

In summary, the average amount respondents are willing to pay to mitigate[1] (underground) 50 miles of existing pylons in designated areas is £20 per household per year for eight years. This equates to £20 x 25 million = £0.5 billion per year. Using Ofgem's estimate of undergrounding existing infrastructure - £25 million per mile - this would pay for 20 miles per year.

This would mean the public is willing to pay over three times the cost of undergrounding existing infrastructure in designated areas[2].

Further, the Accent work has implications for other rural areas. The average amount respondents are willing to pay to underground 50 miles of existing pylons in other rural areas is £15 per household per year for eight years. This is less than for designated areas but still equates to double the cost of undergrounding. There is evidence to suggest respondents understood the 'local value' placed on many areas of the countryside that are not designated - perhaps because they have never come under planning pressure - and that the public sees

[1] The public's response was recorded in relation to various forms of mitigation but as the preferred method of mitigation was undergrounding we have referred to undergrounding rather than mitigation in this response.

[2] Cost of undergrounding 50 miles: 50 x £25 million = £1.25 billion. WTP to underground 50 miles: £4 billion.

the countryside 'for what it is', rather than inferring value due to a statutory designation which they may, or may not, fully understand.

We note and understand the various qualifications to these figures applied by National Grid and proposed by Ofgem but these research findings stand in their own right. Subsequent interpretation and revision is a matter for debate while the original data is material evidence and in the first instance should be taken at face value. The margin of WTP over cost is so large as not to be vulnerable to any likely refinement.

Ofgem's proposal

Ofgem accepts that NGET's analysis of Accent's work "provides strong support for a consumer funded programme as part of RIIO-T1 to improve the visual amenity of designated areas[3]" but argues "it does not provide sufficient information at this time … to inform the level at which the expenditure cap should be set for the whole of the price control."

An initial expenditure cap of £100 million is therefore proposed while further analysis is carried out, including research to find a median value.

Ofgem also proposes that each TO submit a policy for delivering visual amenity for approval in advance.

As already stated, we believe the Accent study provides a convincing case for the public's support for substantial visual amenity works.

At the same time, we accept the potential sensitivity of any plans to commit large sums for work that will have an impact on electricity bills over and above the substantive impact of the UK's broader energy policy. The amounts will be small relative to total electricity bills, and to the increases consequent on moving to renewable energy sources, but we recognize that, taken out of context, they could be misrepresented and misunderstood. It is therefore sensible to start with modest amounts.

Given the lead times for major infrastructure works the initial cap therefore seems reasonable but it should not preclude setting a higher cap for the remainder of the eight-year RIIO-T1 period in line with Accent's findings.

Moreover, we are concerned that Ofgem's anxiety about the initial public reception of a consumer funded programme to improve the visual amenity of designated areas may have led them to lose sight of the wider picture:

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3 RIIO-T1: Initial Proposals for National Grid Electricity Transmission and National Grid Gas *Initial Proposals - Outputs, incentives and innovation supporting document* - para 2.50

- Setting an appropriate figure for the remainder of the eight-year RIIO-T1 period cannot be long postponed. At least the principles of doing this need to be open to consultation now;

- A precautionary approach, in the sense of setting long term figures much lower than the WTP research suggests, is not compatible with Ofgem's consumer protection obligations, properly considered. "Consumer protection" goes much wider than simply achieving the lowest practicable price per unit. It involves seeking to identify the optimum values of certain parameters important to consumers, where consumers want the 'optimum' amount spent on their behalf. Examples familiar to Ofgem are the frequency and duration of power cuts, and also of voltage reductions. Difficult as it is, in these areas Ofgem have an obligation to identify the "Goldilocks amount"; neither too much nor too little. It is just so with visual amenity. Just as consumers would not thank Ofgem for deliberately reducing the amount to be spent on minimising the frequency and duration of power cuts, so, once the issues had been explained as in the WTP exercises, we believe they would not thank Ofgem for deliberately reducing the amount to be spent on improving visual amenity. Ofgem's task is to identify the Goldilocks amount;

- While Ofgem's immediate task is to set values and processes for the eight-year RIIO-T1 period, it is plain that the same issues will arise subsequently. We submit, below, that considering a longer period makes things simpler and easier;

- The Accent research was carried out to inform possible work to mitigate visual amenity of existing transmission infrastructure in National Parks and AONBs. But it has important conclusions for existing transmission infrastructure in other rural areas, as noted above. Likewise, it has vital implications for new transmission infrastructure. The WTP respondents made clear they expected any money spent on improving visual amenity to be spent cost-effectively. Given undergrounding new lines costs usefully less than undergrounding existing lines, it makes no sense to contemplate undergrounding existing lines in designated areas, and not underground all new lines in designated areas.

An approach based on the conclusion above indicates that all new lines in designated areas should be undergrounded.

First, this conclusion needs to be communicated authoritatively to the National Planning Inspectorate. Ofgem has a key role as a statutory consultee with regard to specific applications for Development Consent Orders but ambiguities and conflicts within EN1 and EN5 mean that an urgent review involving all relevant parties is essential.

Second, the work to improve visual amenity of existing lines needs to be planned in conjunction with the assumed undergrounding of new lines. Undergrounding of existing lines is most cost-effective when either it enables expenditure on upgrading the existing line to be avoided, or when it can be done simultaneously with installing a new line connecting the same points ("one big trench instead of

two small ones"). Planning to underground existing lines in designated areas on the same 25-year time-scale as new lines is the logical strategy (an important consideration for ENSG).

There are some 360 miles of existing lines in designated areas. We need to bear in mind that to mitigate a line's visual effect on a designated area, it will sometimes be necessary to underground the line outside the designated area. Therefore, rather more than 360 miles of undergrounding will be necessary.

NGET plans some 370 miles of new line over the next 25 years. Not all of it is to be in designated areas but it will sometimes be necessary to underground the line outside the designated area for the reasons given above. Also, given the WTP evidence is that the average household is willing to pay £15 per year for eight years to underground existing infrastructure in other rural areas, there has to be a possibility that it will be appropriate to underground at least some new infrastructure in other rural areas.

For illustrative purposes, we can assume that a policy of undergrounding all new lines - and all existing lines visible from within designated areas - would amount to 750 miles of undergrounding over 25 years. At £25 million per mile, and over 25 million households, this amounts to £30 per average household per year.

The Accent research tells us that the average household is willing to pay £20 per year for eight years to underground 50 miles. It seems reasonable to deduce they would be willing to continue paying that amount per year for 25 years to underground 150 miles. And if they would be willing to pay £25 per year to underground 150 miles, how could they not be willing to pay £30 per year to underground 750 miles, and complete the job?

If more WTP work is to be commissioned; let it be to explore this approach rather than be overly concerned with statistical minutiae.

In suggesting this extension of the work we note the following and suggest these points should be addressed in any additional research:

1. respondents did not have the option to indicate willingness to pay more than £20 per year;

2. respondents were not made aware that everyone is paying for undergrounding in urban areas

3. respondents were not made aware that the revenue cost of underground transmission is usefully less that of overhead lines (because the electricity losses are less).

While it may be interesting to have both a mean and median figure, it must be remembered that changing the survey protocol to achieve this will mean the data is not directly comparable. Rather, something 'different' will have been measured and notwithstanding the earlier suggestions from London Economics, it is arguable whether the result will be significantly more meaningful. A skewed distribution, as recorded by Accent, seems inevitable in this sort of research and

in the qualitative analysis the 'non-payers' (of concern to Ofgem) are balanced by those prepared to pay more for the 'greater good'.

There is an important practical advantage from the approach suggested. The approach proposed by Ofgem would be perceived as posing the question "Which existing lines are to be undergrounded?" This would lead to enormous pressure from every National Park and AONB for their existing infrastructure to be included, putting NGET in the impossible position of being asked to evaluate the visual amenity benefit of undergrounding Line A in National Park X as against Line B in AONB Y. It is not credible that such evaluation could be outsourced to, say, the RIBA or the National Trust.

But on the alternative approach, everyone will know that their line will be mitigated in due course. The question will become "In what sequence are existing lines are to be mitigated?" They will be much more amenable to the argument that the sequence should be driven by cost (and cost avoidance) considerations, and that these considerations can reasonably be left to NGET.

Revised policy on visual amenity

Ofgem proposes that the policy adopted by the TOs on visual amenity would be assessed by considering:

"the extent to which the TO's policy meets various principles, such as involving stakeholder engagement and input, delivering long term value for money for existing and future consumers and, overall, contributing to sustainable development[4]."

We welcome this proposal but are concerned that recent revisions to NGET's newly introduced *Approach to the Design and Routeing of New Electricity Transmission Lines* fail to meet these assessment criteria.

In particular all references to the use of Multi-Criteria Analysis as an options appraisal tool and the commitment to align with best practice as set out in the Treasury Green Book have been removed. Also, there is no longer a reference to consideration of 'people and communities'.

The wider community is central to the concept of WTP and similarly should be embedded in the Business Plan. In its current form, *New Approach…* does not appear to meet Ofgem's requirement for "well-justified consideration of visual amenity"[5]. This is material to the TO's Business Plan.

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[4] RIIO-T1: Initial Proposals for National Grid Electricity Transmission and National Grid Gas

Initial Proposals – Outputs, incentives and innovation Supporting Document - para 2.51

[5] Factsheet 106 - *Visual Amenity and Network Regulation*

"Economic and efficient"

Economy and efficiency is a primary requirement running through the 1989 Electricity Act and the National Policy Statements.

There are practical ways in which delivery policy for mitigation of existing lines can be assessed for efficiency. For example, and already stated, undergrounding existing lines that run close to, or parallel with, new underground lines would normally be efficient in terms of economies of scale and should be a selection criteria for undergrounding lines in designated areas.

It is also essential that major infrastructure planning and governance is based on a modern definition of 'economic'. In this context WTP is an essential aid to an accurate understanding of the term. WTP is vital to socio-economic analysis and the results of the recent studies should be applied to all options appraisals listed in the business plan.

In this respect the standard of the '3Rs' (the common name for the Government's *Assessing the Impact of Spacial Interventions*) should be followed. These guidelines remind us that: "a clear distinction between financial and economic analysis must be maintained".

A narrow definition of "economic and efficient" is thus inadequate and falls short of the requirement for "sustainable development" already mentioned. WTP is the best method currently available for applying a monetary value to the visual amenity effects on the countryside, over and above estimates for impact on tourism, local businesses and the like.

Ofgem states that NGET's proposal "is also in line with National Policy Statements on planning decisions which require proposers to show how they balance visual impacts against other factors, eg availability and cost of alternative sites, routes and technologies."

However, WTP is entirely absent from the NPS and it is difficult to see how it can be aligned with the spirit and letter of EN5 without amendment of the NPS or - at the very least - fresh guidance.

Conclusions and the longer term

WTP for visual amenity is not a subject that fits easily into a restricted time frame.

We see no reason - on the basis of the latest research and the various surveys that preceded it - why an allowance for mitigation should be confined to the current price control period. Indeed, current trends indicate a growing backlash to the increasing visual intrusion of energy generation and infrastructure. While it is sometimes argued "we will get used to it" this may well be because until recently a relatively small minority have had to do so at close quarters.

In the longer term we therefore believe the latest research means it is logical to plan for:

- All existing infrastructure in designated areas to be undergrounded over the next 25 years;
- All new infrastructure in designated areas to be underground;
- All new infrastructure in other rural areas to be underground.

In the meantime we believe it is important for Ofgem to:

1. Sanction the initial spending cap as proposed without any prejudice to the size of the remaining allowance in the price control period.
2. Advise DECC and the Minister of State on the urgent need to revise the National Policy Statements and/or issue new guidance[6].
3. Clarify its position as a statutory consultee for major infrastructure projects and update its fact sheet and other guidance to take full account of the impact of WTP on the options appraisal and planning consent for projects that will shortly reach the formal consultation stage.

National Grid should:

1. Give serious consideration to the recommendations made by stakeholders in the recent workshops and in written submissions and revise policy accordingly.
2. Revise (again) the "New Approach…" to take account of the WTP results and their impact on socio-economic evaluation.
3. Ensure all divisions of its business, especially those at project level, are fully aware of the implications of the WTP work and understand how to apply it to their local projects.

Essex and Suffolk Coalition of Amenity Groups

Bury not Blight
Colne-Stour Countryside Association
CPRE Essex and Suffolk Branches
Dedham Vale Society
Stour Valley Underground
The Suffolk Preservation Society

[6] EN5 2.8.9 states: the Planning Inspectorate should only refuse consent for overhead line proposals in favour of an underground or sub-sea line if it is satisfied that the benefits from the non-overhead line alternative will clearly outweigh any extra economic, social and environmental impacts and the technical difficulties are surmountable. It is difficult to see how the Planning Inspectorate could interpret this, and other sections of the NPS, without further guidance on how 'economic and social impacts' should be evaluated. Stakeholders should be made aware in advance of the rationale adopted by the statutory consultee in its 'guidance'.