Suffolk County Council update on Electricity Transmission

Legislation

Electricity Act 1989

The Electricity Act is arguably the biggest obstacle to a fundamentally new approach to planning transmission networks. While the Act has been amended to broaden the duties of the regulator (including to contribute to sustainable development), those duties of the regulated remain unchanged. It would appear that Ofgem is therefore handcuffed by the legislative requirements of companies to principally be “economic, efficient and coordinated”.

In July, Wells MP Tessa Munt won a parliamentary ballot to introduce a Ten Minute Rule Motion on the subject of Electricity Transmission (Protection of Landscape). The Bill is summarised as:

That leave be given to bring in a Bill to make provision to require factors other than cost to be considered for schemes for the transmission of high voltage electricity where infrastructure would impact on the visual and other amenity of a landscape; to provide that in certain cases such infrastructure be installed by visually unobtrusive works; to require that public consultation be undertaken and inform the selection of the method and technology for the transmission infrastructures used; and for connected purposes.’

The Bill had its first reading on 5th July and is due for second reading on the 25th November. The Bill has the support of Suffolk MPs Tim Yeo and Dr Therese Coffey and we would urge you to garner your own MPs support.

Regulation – Offshore

SCC is the only local authority on the “stakeholder community” supporting the Offshore Transmission Coordination Group (jointly chaired by DECC and Ofgem). There have been five “expert workshops”, each of which SCC has attended.

Coordination exists at different scales. From its simplest it means within offshore zones, then between offshore zones, progressing to coordination between onshore and offshore, and finally between countries. As the scale increases, the complexity of issues increases. The group has not focussed on international interconnection1.

There is general agreement that a coordinated network in its broadest sense has multiple benefits in reducing overall cost and environmental impact and that it is technically possible. There are however a number of issues that need to be resolved which include (depending on the scale);

1 The Energy & Climate Change Committee has recently produced a report on this matter.
• the consenting and financing of ‘anticipatory investment’ – i.e. who should pay for the oversizing of infrastructure in the first instance to accommodate future development (potentially by another developer)

• the potentially related cost of ‘stranded assets’, i.e. anticipatory infrastructure (or indeed any other) that is constructed and not ultimately used, perhaps due to projects not coming to fruition

• the ability of the planning system (specifically the IPC) to authorise development beyond that which is necessary to deliver a specific project

• need for technical standardisation

The issues are being explored through two workstreams, both led by consultants; firstly, commercial and regulatory issues and secondly, technical issues. Much has been made of issue identification but solutions are more difficult to come by. There is a degree of support for a spatial plan to guide network development, but concern over delays that may follow in its preparation and potential requirements for Strategic Environmental Assessment. The JNCC and the MMO have also raised this latter issue with DECC.

It is fair to say that planning consent is at the forefront of developers’ minds and anything that would provide a degree of certainty or expedite their ability to export electricity would be welcome. It is for this reason that developers are tending to pursue underground options as opposed to National Grid, though of course they are not regulated and thus not directed towards least cost solutions.

The consultants are due to produce their reports at the end of the year and Ofgem will consult on a revised regulatory framework for offshore in the new year. Full details of the work of this group can be found on Ofgem’s website.

It is worth noting here that National Grid has recently released an updated version of its Offshore Development Information Statement (ODIS), within which it is required by Ofgem to provide its views of the development of the transmission network located in offshore waters (including onshore connection points). While National Grid suggest these are “possible options for the future” several of the identified consequential onshore reinforcements are in the planning process. I attach a map indicating the possible search areas for upgrades.

DECC have confirmed that the Electricity Networks Strategy Group (ENSG) is also updating its 2009 work which is effectively acting as the current blueprint for onshore network development. Neither the timescales to which it is working, nor its relationship with the OTCG work, are clear.

Regulation - Onshore

National Grid’s Business Plan
Under the new transmission price control (RIIO-T1), which will run for 8 years commencing 1st April 2013, regulated companies are required to produce ‘well-justified business plans’ which address the following outputs; safety, environmental impact, customer satisfaction, reliability, conditions for connection and social obligations.

The regulated companies were required to produce their initial plans by 31st July. Ofgem then consulted stakeholders on the content of these plans. SCC’s response to the consultation, alongside others, has been published online.

Our primary concerns relate to the approach National Grid’s Business Plan took to examine ‘Willingness to Pay’, how they will value and balance judgements on the environment versus other considerations and the level of investment proposed for undergrounding and for innovation.

We had earlier been informally consulted by National Grid on their Business Plan and that response can be found here – those issues were highlighted in a previous newsletter. National Grid do not appear to have published our comments on their proposed Willingness to Pay Survey. While we were able to effect some positive changes, we believe that the study remains unsatisfactory. The WTP study was merged into a much broader questionnaire and did not follow best practice in methodology as provided by Defra. This is a critical piece of work as the questionnaire itself acknowledges that for £4.70 per household per year all new lines could be undergrounded, yet we do not currently have any say in this, despite government deciding on our behalf that we will subsidise the generation element.

Ofgem have recently released their initial views on the business plans and decided against ‘fast tracking’ National Grid’s through the approval process due to a number of concerns which included a need to provide greater evidence of an overarching strategy to deliver its environmental responsibilities and the need for a more detailed innovation strategy.

SCC, with colleagues from local amenity groups, have recently met with Ofgem to discuss our concerns with the Business Plan and related issues. To their credit Ofgem had appointed independent consultants to review National Grid’s WTP study and they reported to Ofgem a number of shortcomings with it, which National Grid, under direction from Ofgem, are now trying to resolve. Notwithstanding these concerns the evidence emerging from the WTP work indicates that households are willing to accept increases in their electricity bills at a level that would potentially fund the undergrounding of all existing lines in National Parks and AONBs. Due to the brief provided to the consultants by Ofgem, although the National Grid did consider WTP to underground new lines in their survey, this was not scrutinised. Nevertheless, again there appears to be WTP among consumers and Ofgem do recognise this. The WTP study was also narrower in its scope than Ofgem intended, with National Grid only considering undergrounding of lines as opposed to other means of mitigation. The study also failed to have regard to the impact of substations, which can be intrusive in themselves.

Regarding the undergrounding of future schemes, Ofgem propose to allocate a base level of funding to National Grid which could be topped up in light of
decisions made by the planning consenting body. While this is to some extent reassuring, if National Grid do not have the certainty over the level of undergrounding that they will be reimbursed for, they will wish to minimise their exposure to costs and as such will likely propose lower levels of undergrounding. It is not clear to us at this point whether the IPC or successor would be able to modify the level of undergrounding being proposed or whether they would be simply dealing with applications on a consent/refuse basis.

National Grid’s Business Plan sets out its approach to mitigation which in addition to the careful routing, new towers and undergrounding also identifies ‘community compensation for the loss of visual amenity’ as a possible mechanism\(^2\). This was not expanded further and indeed Ofgem seemed surprised by its inclusion. On the basis that there are disproportionate spatial impacts of the transmission network, we would support initiatives such as this, though whether this could be secured as part of the consenting regime is not clear. Given the aforementioned apparent WTP for undergrounding of existing lines it would seem sensible to consider whether such works could be considered alongside the construction of any new lines to minimise disruption. Furthermore, undergrounding of existing lines could also potentially reduce the broader cumulative impacts of new transmission infrastructure (including substations).

SCC is also a member of Ofgem’s [Price Control Review Forum](#) which allows stakeholders to share thoughts in the effectiveness of the price control system. The group last met in [May](#), and the next gathering is in early December. SCC is the only Local Authority representative.

In the meantime Ofgem have asked for further comments on their initial views of the Business Plans by [21st November](#).

**Policy**

**National Policy Statements**

The National Policy Statements for Energy were designated in July. While there were some improvements to EN5, we retain a number of significant concerns.

EN5 is now more receptive to means of reinforcement other than by pylons, the Holford Rules have been retained and some of the misleading figures on the cost of undergrounding have been removed.

However, it remains far from clear whether the IPC (or successor) will evaluate proposals on the basis that they are “economic and efficient” or rather sustainable. This emanates from the enduring misalignment between the duties of Ofgem and National Grid and the intentions of the planning system.

The IET/Kema report which was to provide an independent assessment on the costs of various

\(^2\) [How we will deliver](#), paragraph 257
transmission technologies was abandoned in the summer seemingly due to non-cooperation of key parties resulting in a “lack of data”. The study has been handed over to Parsons Brinckerhoff in association with Cable Consulting International, who are due to report by the end of the year. Evidence has been explicitly restricted to that relating to equipment costs, though the press release notes the importance of environmental impacts.

Siemens, concerned about some of the ‘misunderstandings and misrepresentations’ in relation to Gas Insulated Lines (GIL), released a statement on the deployment of this technology in August and it is at their request I attach that to this newsletter for your information. Notwithstanding the cautioning tone of this statement, it is worth noting that National Grid in their Business Plan have identified undergrounding using GIL as a high impact research and development priority\(^3\). Under RIIO any within period economic benefits which National Grid derive from deploying such technology will be retained by the company, therefore there is a clear incentive to progress its development.

**National Grid Undergrounding Policy**

National Grid concluded their consultation on their approach to undergrounding in the summer. The new document is now rebranded as “Our approach to the design and routeing of new electricity transmission lines” in order to reflect that all technologies start on an equal footing, as opposed to undergrounding being a special case. There are some positive changes in that National Grid formally recognise the importance of non-designated landscapes and that a lifetime costing approach is accepted as opposed to basic capital cost.

However, the Approach seems at odds with the principle of WTP as the consultation analysis states that National Grid are not supportive of cost benefit analysis and therefore it remains unclear how National Grid will balance cost against other impacts objectively\(^4\).

National Grid instead claim that their Multi-Criteria Analysis (MCA) approach is Treasury Green Book compliant and “is more appropriate for considering the wide range of issues we include that are not readily monetised”. However the Green Book is clear that because subjectivity is still required to compare the results of the weighting (as the results are not necessarily in monetary terms), cost benefit analysis should complement MCA\(^5\). Annex 2 of the Green Book, which was updated in July with the release of the Natural Environment White Paper, reaffirms that Social CBA and in particular WTP and Willingness to Accept Compensation (WTAC) remain the preferred means to derive monetary values for non-market goods.

Of further note is that National Grid claim there is no direct evidence that overhead lines affect property prices\(^6\), seemingly refuting hedonic pricing theory and the (albeit limited) academic literature on the subject\(^7\).

\(^3\) *Innovation, efficiency and value for money* (p22)
\(^4\) See pages 133, 143,149
\(^5\) Paragraph 6.6
\(^6\) Consultation analysis, page 55
Infrastructure Planning Commission

We believe it is critical that when IPC projects come forward the full implications are taken in to account. For example alongside the direct impacts of an offshore windfarm, the impacts of the onshore transmission elements in their entirety should also be taken in to account.

In Suffolk the proposed Bramford to Twinstead reinforcement is largely necessitated in the short term by offshore wind development and therefore the cumulative impacts of these projects should be looked at in tandem. Only if this is then done, can we look at sensible alternatives, for example connecting the offshore wind closer to the point of electricity demand. If the two projects are split, then they arguably predetermine each other (though EN5 states this would not be the case), given that the alternatives would no longer be realistic. We are pleased to note that the IPC seem to agree, for example through issuing their EIA Scoping Opinions, developers are now being asked to look at the cumulative impacts with other major developments including those schemes on the IPC’s Programme of Projects.

It is also worth noting that Regulation 6(1)(b) of The Infrastructure Planning (Applications: Prescribed Forms and Procedure) (APFP) Regulations 2009 states that an application for the construction of an offshore generating station must, amongst other matters, be accompanied by “details of the proposed route and method of installation for any cable”.

Furthermore CLG has produced guidance on the matter of ‘associated development’ in which it states “Associated development should not be an aim in itself but should be subordinate to and necessary for the development and effective operation to its design capacity of the NSIP that is the subject of the application.” And furthermore “The IPC will need to consider the impacts of any associated development in conjunction with the rest of the application to ensure that it identifies the total impact of the proposal.”

So, applicants for projects which necessitate transmission upgrades will need to consider the impacts of those upgrades alongside their own impacts, irrespective of whether it is deemed associated development or not.

Suffolk issues

‘Pylons in your Parish’ & ‘Pylons in the Waveney’ events

National Grid’s aforementioned Offshore Development Information Statement highlights a potential need to reinforce the transmission network between Lowestoft and Diss (either end of the central red area below). This is a distance of 30 miles through the Special Landscape Area of the Waveney Valley and would skirt the Broads and an AONB, and which is currently entirely pylon free in this area.

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8 For example see IPC Scoping Opinion for East Anglia One Offshore Wind Farm (p359)
Suffolk County Council hosted a local event in July to raise awareness of this predicament among the local authorities and communities. Presentations were made by SCC, CPRE and local amenity groups currently affected by the other red area on the map below (Bramford to Twinstead). National Grid and developers East Anglia Offshore Wind were also present and although they reiterated the project is at a very early stage, we believe early and concerted action will be critical if this project is to be avoided. National Grid have appointed a project manager and technical studies are being undertaken which will be reported in the spring.

South Norfolk District Council subsequently hosted its own event on the same issue last month at which National Grid reported the current position, stressing again that connection at Lowestoft was only one option being considered. SCC urged the 200 attendees to lobby for changes to the Electricity Act to rebalance the decision making criteria away from cost and to continue to exert early pressure for an alternative solution. Local MP Richard Bacon was also in attendance.

And finally…

It is interesting to note the Secretary of State’s refusal of a large substation at Little Dunham in North Norfolk which was required to connect an offshore wind farm in the Wash. This was a pre-IPC application with the significant associated cable undergrounding being simultaneously considered by two local planning authorities.

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