

ISLE OF ANGLESEY COUNTY COUNCIL	
MEETING:	COUNTY COUNCIL
DATE:	9th December, 2015
TITLE OF REPORT:	Isle of Anglesey County Council's Response to National Grid Electricity Transmission Ltd (National Grid) Stage Two Consultation
REPORT BY:	Arthur W Owen, Corporate Director of Sustainable Development Lead Case Officer – (01248) 752045 egjpl@anglesey.gov.uk
PURPOSE OF REPORT:	To obtain the approval of Full Council upon the Authority's Response to National Grid's Stage Two Consultation

Recommendation

- (i) The Authority maintains its previously established position as of December 2012 in that no additional electricity transmission lines and pylons are constructed across the island and the Menai Straits.**
- (ii) Issues and concerns identified within this Consultation are addressed within the main body of the report and National Grid shall have due regard to these as part of this non-statutory consultation.**

1.0 Introduction

- 1.1 The legal planning framework for 'Nationally Significant Infrastructure Projects' (NSIP's), which include above ground electricity transmission systems of 132Kv or above for distances over 2km in length, is the Planning Act 2008. Under this planning legislation, to be able to construct a second overhead 400kv high voltage electricity transmission line and towers across Anglesey, National Grid will require a Development Consent Order (DCO). The DCO forms the main planning consent for NSIP's and it is currently envisaged that National Grid will be submitting an application for a DCO towards the end of 2017.
- 1.2 Development which is linked to the NSIP but not part of it is referred to as 'Associated Development' in Wales and cannot be consented under the Planning Act 2008. Offshore consents are granted by the Welsh Government (WG) and onshore Associated Development works such as advance works to improve the existing substations and wider system improvements which will be required (on the island) will be consented by the Isle of Anglesey County Council (IACC) referred to hereafter as the Authority, under the Town and Country Planning Act 1990 (as amended).

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- 1.3 Section 42 of the Planning Act 2008 requires the 'promoter' of an NSIP (being National Grid in this instance) to undertake pre-application consultation with a prescribed list of bodies, local authorities and those with an interest in the land affected by the project before making an application for a Development Consent Order. National Grid's current time table envisages that this statutory process of consultation and engagement will take place in late 2016.
- 1.4 The consultation material which is currently before the Authority and which forms part of National Grid's Stage 2 consultation, which is non- statutory in nature, together with the consultation material for the undergrounding of the Menai Straits which is scheduled to be released during Spring-Summer 2016 is aimed at informing and influencing this process. Notwithstanding the non-statutory nature of National Grid's latest consultation, the gravity and importance of that which is under consideration for the island and its residents cannot be overemphasised and it is against this backcloth that the Authority has framed a response which is as comprehensively detailed and robust such as that which is issued by the Authority as part of its engagement in formal consultation procedures.
- 1.5 The suite of documents submitted as part of National Grid's current submission consists of the following material:

Communications Documents

- Stage 2 Consultation Strategy
- Overview Document
- Project Newsletter
- Question and Answer Sheet
- Feedback Form
- Project Film- 'The challenge of a sub-sea connection'

Technical Documents

- Preferred Route Corridor Selection Report
 - Route Options Report
- 1.6 National Grid's non-statutory second stage consultation for the construction of a second 400kv high voltage electricity transmission line and pylons across Anglesey commenced on the 21st October, 2015 and will run for a period of 8 weeks until the 16th December, 2015. The attached suite of documents provides the formal response of the Authority to this consultation process and consists of:
- Horizon Nuclear Power's letter confirming their position on HVDC sub-sea (Appendix 1)
 - Supporting spreadsheet of IACC Topic Responses (Appendix 2)
 - Independent, technical review of material which has been received from the Authority's external consultants in the form of Arup (Appendix 3)
 - A draft letter which sets out the Authority's priority concerns based on the information provided within National Grids documentation (Appendix 4)

2.0 Background and Project Overview

- 2.1 National Grid Electricity Transmissions Ltd (National Grid) owns and operates the high voltage electricity transmission system in England and Wales. National Grid has a statutory duty to promote competition in the supply of electricity and is obliged to offer to connect to the system anyone who applies for such a connection. On the basis that the existing 400kv overhead electricity transmission system with its limit of 1,800 mega-watts (MW) is incapable of transmitting the power generated by the proposed Wylfa Newydd Nuclear Power Station with its total power output of 2,800 mega-watts (MW), a second connection is required between Wylfa and the main interconnected transmission system.
- 2.2 National Grid has considered various means by which this second connection could be established. The strategic options identified represented a number of ways in which the power generated by the proposed nuclear power station could be exported to a number of different points on the wider transmission system. National Grid consulted on these strategic options with stakeholders between October and December in 2012 and undertook a high level appraisal of the environmental, socio-economic, technical and cost considerations associated with each. The response from this initial consultation and the findings of the appraisal were taken into account and used to inform the selection of a preliminary preferred strategic option before presenting the appraisal findings for wider engagement. National Grid's preliminary preferred strategic option was later confirmed as being the development of a second 400kv overhead electricity line and pylons which linked Wylfa with the existing Grid sub-station at Pentir on the mainland.
- 2.3 Members will recall that the Authority's firm and unequivocal response to this first stage of the consultation process however was that the second transmission connection should be achieved using the HVDC sub-sea solution. In light of these comments Horizon Nuclear Power (HNP) were approached by this Authority in order that their views might be sought with respect to the viability of a HVDC sub-sea connection between Wylfa Newydd and the National Grid. Their response, which has been attached as *Appendix 1* to this report, was that such technology could give rise to fundamental uncertainty in respect of technical and commercial viability and risk issues. These concerns have subsequently been validated by Arup, as independent specialist consultants, through the Planning Performance Agreement which exists between the Council and National Grid.
- 2.4 In parallel with the strategic options appraisal National Grid also undertook an assessment of the constraints which were likely to influence the routing of a new overhead transmission line between Wylfa and Pentir in Gwynedd. This resulted in the identification of four possible route corridors across Anglesey which avoided the most sensitive parts of the island and within which a new overhead line might be developed. National Grid presented these options as part of its public consultation undertaking in late 2012 and sought feedback, albeit through engagement as opposed to consultation, on the relative merits and effects of developing an overhead line within these route corridors and crossing points.
- 2.5 Following identification of a preferred strategic option, National Grid undertook further detailed appraisals of the likely effects that the development of an overhead line within each of the four route corridors and five crossing points might have. National

Grid state that these appraisals took into account the feedback received during public consultation in 2012 and subsequent discussions with a number of statutory consultees. It is claimed that this feedback informed the selection of a preferred route corridor and National Grid's decision to adopt a technical solution that would avoid the need for a second overhead line crossing Anglesey's Area of Outstanding Natural Beauty (AONB) and the Menai Strait.

2.6 National Grid's '*Preferred Route Corridor Selection Report*' offers a detailed explanation as to why the Orange Route Corridor was considered to achieve the best balance of environmental, socio-economic, technical and cost impacts. It also explains why National Grid believes that an overhead line crossing of the AONB and Menai Strait would be in-appropriate, in light of relevant planning policies. It is the Authority's contention however that the planning policies to which National Grid make reference, together with all other relevant legislation which is referred to within the Authority's formal response, provide clear and compelling reasons as to why the 400kv electricity transmission should not be achieved using a second set of overhead lines and pylons which would traverse the length of the island to the detriment of its natural beauty and the general health and well-being of its residents.

3.0 National Policy Position

3.1 National Policy Statement (NPS) for Energy (EN-1) describes the estimates for future electricity demand (59 gigawatt of new capacity required by 2025) and the requirement for diversification of the UK's energy sources, plus greater use of renewable and other low carbon forms of generation. EN-1 sets out a number of 'Assessment Principles' (Part 4). It states that in considering any proposed development, and in particular when weighing up the beneficial and adverse effects, the Planning Inspectorate should take into account:

- The potential benefits, including contributions to energy infrastructure, job creation and any long term or wider benefits.
- The potential adverse effects, including any long term and cumulative adverse effects, as well as any mitigation measures incorporated to reduce these adverse effects.

3.2 NPS for Electricity Networks Infrastructure - EN-5 (paragraph 2.8.8) states that the Government expects it would often be appropriate to fulfil the need for new electricity lines of 132kV and above through the development of overhead lines, though there will be cases where this is not so. Paragraph 2.8.7 supports the use of the 'Holford Rules' when deciding routes for overhead lines, and in relation to designing a connection NPS EN-5 states that:

"... wherever the nature or proposed route of an overhead line proposal makes it likely that its visual impact will be particularly significant, the applicant should have given appropriate consideration to the potential costs and benefits of other feasible means of connection or reinforcement, including underground and sub-sea cables where appropriate." (paragraph 2.8.4).

EN-5 goes on to state:

"... Government has not laid down any general rule about when an overhead line should be considered unacceptable. The IPC should, however only refuse consent

for overhead line proposals in favour of an underground or subsea line if it is satisfied that the benefits from the non-overhead alternative will clearly outweigh any extra economic, social and environmental impacts and the technical difficulties are surmountable.” (paragraph 2.8.9).

- 3.3 National Grid in their consultation document PRSCR p.91 Section 11 ‘Way Forward’ state that... *‘the aim is to develop a set of technically viable alignment options taking into consideration environmental, socio-economic and cost considerations in line with NPS’s EN-1 and EN-5. These options would be presented to stakeholders and the public to obtain their feedback to inform the selection of the preferred route.’*

4.0 Approach to the Authority’s Response

4.1 The main body of the Authority’s response upon National Grid’s non-statutory second stage public consultation has been presented in a tabular/spreadsheet format identified as *Appendix 2* which replicates the approach which was successfully implemented by the Authority as part of its formal response upon Horizon Nuclear Power’s PAC 1 consultation whereby each paragraph for each of the topic areas listed has been reviewed by the relevant specialist(s) in an effort to provide an objective assessment of the impacts of a second high voltage 400kv electricity transmission line and pylons across Anglesey, both positive and negative. This robust framework has resulted in a detailed and comprehensive analysis of National Grid’s submission being carried out which has resulted in some 345 separate comments which penetrate into the heart of National Grid’s consultation material. This is supplemented by an additional document titled *‘High level Review of Material-Consultation Strategy and Content’* identified as *Appendix 3* which has been prepared by Arup who are acting as the Authority’s independent technical specialists in the matter together with a copy of HNP’s Horizon Nuclear Power’s letter confirming their position on HVDC sub-sea which has been attached as *Appendix 1*. This suite of documents will be attached to a separate covering letter (*Appendix 4*) which sets out the Authority’s priority concerns based on the information provided as part of National Grids consultation material.

4.2 Each of the paragraphs reviewed within the tabulated/spreadsheet format were also then assessed on the basis of a traffic light or RAG system (Red, Amber and Green) of which the Members are now familiar, whereby:

- Green Accepted as fact and can be recorded in Statement of Common Ground.
- Amber Statement requires more detail and/or IACC requires additional resource (personnel/specialist advice) in order to provide meaningful comment.
- Red Statement is contrary to IACC/WG/UK Government Policy or Guidance. Must be referenced and recorded with supporting evidence in Local Impact Report.

4.3 Whilst it is acknowledged that the current consultation leading up to the Planning Inspectorate’s Examination is non statutory in nature, it is considered imperative that the issues are identified early on in the process and evidence requirements spelt out if meaningful engagement and tangible progress is to be made which best serves the needs of the parties concerned.

- 4.4 The traffic light /RAG system will be maintained throughout this process to ensure a clear lineage of the 345 separate comments raised, baseline data, objective consideration of impacts of the second overhead 400kv electricity transmission line and pylons across Anglesey, both positive and negative, benefits realisation and mitigation measures. The issues identified will be processed as part of a Master Issues Tracking System which has been developed by the Authority, whereby all changes on comments/issues between the Authority and National Grid will be captured throughout this process and which will eventually form the basis of the Authority's Local Impact Report (LIR) and Statement of Common Ground (SoCG).
- 4.5 Regular engagement with the Authority's Senior Responsible Officer has been a critical element of the 8 week consultation process. This engagement has cascaded throughout all levels of the organisation and in turn has resulted in a significant level of interaction and buy-in from across the Authority's various service areas. The extent of engagement and commitment demonstrated by each of the appointed in-house specialists and support staff who have been involved in this process has ensured a comprehensive and consistent approach which has ultimately resulted in a robust corporate response which best represents the interests of this Authority and its residents.
- 4.6 In addition to the work carried out by the Authority's own in-house specialists, independent technical input has also been received from the Authority's external consultants Arup. The information collated as part of the Authority's response has also been subject to ongoing legal input by the Authority's legal representatives, Burges Salmon. The advice and recommendations of the Authority's leading counsel, Mr Martin Kingston QC, has also been instrumental in the approach adopted by the Authority in preparing its response. The Members attention is also respectfully drawn to the fact that the legal fees payable in this instance are not drawn from the public purse.

5.0 Main Themes Identified

- 5.1 The Authority acknowledges the fact that the current stage 2 consultation is a non-statutory element of National Grid's obligations. However, given the significant impact which the proposal is likely to have upon the island and its residents the Authority recognise the importance of early engagement in this process despite its non-statutory status and have accordingly responded in a robust although constructive manner in an effort to address some major issues and priorities the Authority consider essential to highlight in order that the consultation can be seen to be meaningful and effective. The key issues identified are listed below:

Prematurity and Deficiencies

The prematurity of this consultation and its deficiencies including the lack of information on the proposals for undergrounding the Menai Straits have already been highlighted. This makes for a 'fractured' and unsatisfactory consultation and begs the question as to the need for feedback to be issued to the public prior to undertaking future consultation on the Menai Straits proposals in order for the public and key stakeholders to make meaningful comments on the overall proposals. You will be aware that it is important to avoid "consultation fatigue" arising from repeated consultations.

Socio-Economic

The potential socio-economic implications of the proposed overhead line are seen by the Council as very substantial. Tourism is the largest sector of the Anglesey economy (generating over £260M annually) so the potential effects must be assessed against a robust baseline of local data and projected over a timeframe to be agreed with the Council. To this end the Council expects National Grid to undertake a detailed Tourism Impact Assessment which should include a visitor perception survey and the views of the tourism / accommodation providers. The potential impacts on communities affected by the project also need to be addressed utilising best practice techniques in community engagement. The Council would expect the Community Voice model to be adopted which has been successfully developed through a pilot in the Seiriol ward of Beaumaris, and is being rolled out in other communities on Anglesey. The Council would also expect further dialogue with National Grid on the scope of any studies and meaningful community engagement as soon as possible. In the event that National Grid is either unwilling or unable to proceed in this way the Council will expect to see full reasons provided in order to judge the reasonableness of the approach taken.

Jobs & Supply Chain Opportunities

The construction works for undergrounding the Menai Straits section and the proposed new line present opportunities for local employment and local sourcing. The Council calls for an undertaking by National Grid to maximise these opportunities for local people and businesses and to provide support through education and skills training and supply chain development. Such commitment would be consistent with agreements made by National Grid for the Hinkley Point C Connections Project.

Welsh Language

Welsh Language and culture needs to be viewed by National Grid as a 'golden thread' running through all of their proposals, including the potential impacts and any mitigation. Accordingly the Council impresses upon National Grid the need for the Welsh Language to be central to its community engagement and therefore expects a Welsh Language Impact Assessment to be undertaken and cross referenced with the Environmental and Health Impact Assessments.

Health Impact Assessment

The Council envisages that National Grid provide a Health Impact Assessment irrespective of whether or not this is regarded as a statutory requirement. This is seen as essential to allay legitimate concerns from the general public, and to be very much in the spirit of the new Well-being of Future Generations (Wales) Act 2015.

Cumulative impacts

The implications of a new overhead line alongside an existing line must be considered, as should the potential impacts of other developments nearby both existing and planned. The cumulative impacts and potential for unforeseen effects to impact on communities is of particular concern to the Council, highlighting the need for early engagement with National Grid on a 'tiered strategy' for the mitigation and control of potential effects. This should be undertaken alongside a commitment to a scheme of Community Impact Mitigation, taking into consideration best practice from other Nationally Significant Infrastructure Projects. The Council would also expect National Grid to examine all opportunities to reduce cumulative effects through incorporating existing infrastructure into proposed mitigation strategies (eg undergrounding the existing line at the Menai Straits should be included in current proposals for undergrounding at the Menai Straits).

Mitigation

Much greater detail will be required on how National Grid intend to deal with adverse impacts of the development proposals. Wherever possible, the Council will be looking for adverse impacts to be avoided as an integral aspect of the design. Failing this, appropriate mitigation and control measures will need to be devised drawing on the feedback from an effective community engagement referred to above. Where it is not possible to fully mitigate effects, enhancement or compensation should be provided. It is of critical importance that sufficient and early engagement be undertaken with the Council to establish common ground on detailed proposals for control and mitigation of effects. The Hinkley Point C Connections Project establishes a framework of control documents, requirements and obligations as a reference point for potential solutions. This should be a starting point for discussion with the Council.

Costs

Estimated costs have been included in the consultation documentation. In order to give proper consideration to all of the remaining options, the Council sees it as a requirement that National Grid update these figures in the light of new and more detailed information. The Council considers this to be consistent with National Grid's commitment to 'back-checking'. Also, National Grid should provide total costings, which include mitigation costs for each option, and 'life cycle' costs. These should be presented in a clear and transparent manner that breaks down the various cost elements. This is seen as essential in order to make proper and up to date comparisons between the different options.

6.0 Conclusions

- 6.1 It should be emphasised that the Authority has expressed concerns across a range of topic areas which have been identified within the suite of documents which are attached to the current report.
- 6.2 A number of comments, clarifications and requests for further information have been set out within the attached suite of documents in order that National Grid may address the points raised where necessary and rectify deficiencies where identified. The issues raised are presented in a constructive manner in an effort to provide meaningful engagement throughout this process which will influence, inform and provide direction to National Grid's proposals such that it will ultimately result in a robust submission at formal consultation and the subsequent Development Consent Order (as well as the Town and Country Planning Act) process.
- 6.3 The Members are respectfully requested to endorse this report together with the attached suite of documents which form the Isle of Anglesey County Council's Response to National Grids second stage of this non-statutory process. Subject to the Members' endorsement, together with any additional substantive comments which may be offered which may not have already been included within the Authority's suite of documents, it is also requested that delegated authority be granted to the Chief Executive as the Senior Responsible Owner to carry out those amendments, variations, corrections which are identified and deemed reasonably necessary prior to the formal issuing of the response.

End of Report

Dr Gwynne Jones
Prif Weithredwr / Chief Executive
Cyngor Sir Ynys Môn / Isle of Anglesey County Council
Swyddfa'r Sir / Langefni
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LL77 7TW



14 October 2015

DCRM: HNP-S1-CHO-LET-00047

Dear Gwynne,

Thank you for your letter of September 15 regarding National Grid's plans for connecting Wylfa Newydd to the electricity transmission network. We appreciate the opportunity to set out our position and I hope you find this response helpful.

We recognise that plans to develop a new grid connection on Anglesey are intrinsically linked to our proposals for Wylfa Newydd. It is important a solution is found which allows North Wales to grasp the lasting benefits of Wylfa Newydd and Horizon is committed to working alongside Isle of Anglesey County Council, local communities and National Grid to ensure this is achieved.

Our "in principle" view on the option to use an HVDC sub-sea cable to provide a new grid connection to Wylfa Newydd is broadly as set out in our comment, given under paragraph 6.20, of the latest NG Strategic Options Report (SOR) dated 9 January 2015. We remain of the view that the use of such technology could introduce significant additional technical and programme risk to the project, which we would seek to avoid.

This view is, in part, informed by NG's own assessment of the current level of development of this connection technology as set out in paragraphs 6.15 to 6.20 of the SOR; in particular, the observation that no nuclear power station in the world has been solely connected by HVDC circuits. We are also concerned about the potential for interaction between the HVDC convertors and the power station's turbine generator shaft, and of the complexity of the protection and control schemes which NG identifies would be necessary to ensure transmission system stability and security.

A considerable amount of study work would be needed to support the type of HVDC sub-sea cable connection that would have to be used for Wylfa Newydd. These studies are unlikely to be quick or easy to undertake and there would be no guarantee of a satisfactory outcome. Such a level of uncertainty has the potential to impact on construction costs and, in the worst case scenario, could challenge the overall viability of the Wylfa Newydd Project.

In addition to the lack of any in-service experience using what is known as "Voltage Source Converter" HVDC technology at the 2GW capacity that would be necessary, Horizon also has significant concerns over the time it could take to locate and repair faults on the HVDC submarine cables, possibly up to 6 months. This could, as you identify, potentially give rise to significant losses in generation revenue.

In your letter you also ask specifically about the use of HVDC connections for the Three Gorges hydroelectric scheme in China and the Rio Madeira project in Brazil. Both of these projects are examples of the use of an older form of HVDC (known as "Current Source Converter" technology) that is particularly suited to transmission of large quantities of power over long distances. This technology is not suitable for the Wylfa Newydd connection due to the requirement to accommodate rapid changes in the direction of current flow in the connection.

In the case of the new SPEN/NG Western HVDC Link project, which actually has a 2.2GW capacity, this again uses CSC HVDC technology. The purpose of this new HVDC connection is to provide additional power transfer capacity across the Anglo-Scottish border; it will not be relied upon for ensuring a grid connection for Hunterston B nuclear power station, which is already connected to the wider transmission by four 400kV overhead line circuits. This is in contrast to the Wylfa Newydd situation, where the HVDC circuits would form an intrinsic part of the connection to the wider transmission system and where the power station could be left connected to the wider transmission system solely by the HVDC link in the event of a simultaneous fault or outage of both overhead lines.

You also raise a more general query as to how connections for nuclear plants differ from those of other types of generation. The nuclear industry requires the highest levels of reliability in service, and use of proven technology is one of the key ways of delivering this, in transmission connections as in other aspects of the plant. The challenge for the use of any new technology, such as a VSC HVDC sub-sea cable connection, would be in demonstrating that its reliability matched that of an overhead line connection. To support our investment case we would expect National Grid to demonstrate this comparison, something which is likely to be challenging for a technology that has not yet been developed at the scale required for Wylfa Newydd.

For Wylfa Newydd to succeed we need to rely on a workable, affordable and reliable connection that can be delivered on a timely basis. Whilst ultimately it is for National Grid to find the solution to these challenges, I do hope this letter provides you with an appreciation of our current position on the sub-sea HVDC issue.

If I can be of further assistance, please let me know and I look forward to discussing these issues in more detail at a forthcoming Level 1 meeting.

Yours sincerely,



Alan Raymant
Chief Operating Officer

cfi: Matt Durham
National Grid
IACC Project Management Office

Topic	ID	Document Reviewed	Chapter	Section	RAG Status	National Grid Statement	IACC Comment / Response	Evidence Base	Other Relevant Policies /Legislation or Evidence Base
Built Environment and Landscape	1	Overview Document	Page 9	Technology - making a subsea connection		Subsea HVDC, Subsea AC cables, Hybrid Wylfa west Gwynedd	The three options shown on page 9 only refer/consider 2 of the 3 criteria/rules used in making a decision previously referred to on page 6 Government Guidance i.e. 1. value for money (cost) 2.Safe and efficient (Technology) but no consideration of 3. Communities and Environment. NG duties have not therefore been fully discharged in considering subsea and hybrid options. No consideration of benefits to the environment or communities	See page 6 of overview document Govt Guidance which refers to 3 main duties: 1. Value for money ,2. safe and efficient & 3. communities and environment	Govt guidance and NG duties
Built Environment and Landscape	2	Overview Document	Page 10	Your feedback and our work		A nuclear power station has never been directly connected by HVDC links which is a major technical challenge. We're not sure how long it would take to solve this which could put the project at risk.	The crossing of the Menai has not been resolved which may also place the project at risk. This should not be used to reject an option	Crossing of Menai not included in consultation as no solution currently available	
Built Environment and Landscape	3	Overview Document	Page 11	Route corridor and the Menai Strait		The Menai Strait and Anglesey Area of Outstanding Natural Beauty are iconic places, which you told us are really special. We are putting the connection underground here. For similar reasons, we'll also put it underground within Plas Newydd and the Vaynol Estate Registered Parks and Gardens, if the route we take forward goes through them.	Further consideration should be given to undergrounding the whole route from Wylfa to Pentir with no sealing end compound not just the Strait and Vaynol Estate. This proven technology has no long term detrimental impacts on community or natural environment and no maintenance issues or any significant increase in costs when compared to the subsea options.	NG 3 main duties considered equally i.e. cost, technology and community/environment.	Planning Policy, AONB Management Plan, Anglesey Sensitivity and Capacity Study
Built Environment and Landscape	4	Overview Document	Page 12	Your feedback and our work		When we know the location for the sealing end compounds, we'll look at the routes we could take underneath the Menai Strait and the technology we will use to put the connection underground.	There is a risk that the undergrounding will need to be located much further away than is currently envisaged for the Menai due to ground conditions or other limiting factors. This places a risk on where sealing end compound can be located and may not coincide with proposed locations.	Studies currently being carried out by Bangor University on ground conditions etc. may prove current locations are not feasible.	
Built Environment and Landscape	5	Overview Document	Page 13	Tourism and communities		We commissioned a UK-wide independent study in 2013 to help us understand more about the impact of new connection projects on local businesses, especially those that rely on tourism.	Anglesey wide survey should be carried out and would be more beneficial than UK wide survey as businesses on Anglesey would be most affected.	Tourism should also consider Local Tourism Impact Report not just UK.	
Built Environment and Landscape	6	Overview Document	Page 11	Your feedback and our work		It's away from the coast and largest towns and villages. It's the most direct route so we can keep the connection as short as possible. It offers good opportunities to route the overhead line more sensitively using the natural landscape and is also the least densely populated corridor. All this helps to reduce the impacts of our work.	Without prejudice to the Authority's position, of all the overhead options, it would appear that the orange corridor has more options to reduce impacts.	Away from coast, largest towns, most direct route, use of natural landscape to reduce impacts. Primary mitigation is that there is an existing line and most direct route i.e. shortest.	
Built Environment and Landscape	7	Overview Document	Page 12	Your feedback and our work		Deciding on the best way to put the connection underground is really important. Crossing the Menai Strait with an underground connection will be difficult, but we're confident it can be done.	Tests ongoing. No confirmation as yet although similar difficulties were encountered crossing the Bosphorus Strait in Istanbul (i.e. under seismic plate) i.e. 60 m below GL	The crossing of the Bosphorus Strait is in existence and crosses seismic plate.	
Built Environment and Landscape	8	Overview Document	Page 14	Finding the Right Route		However, where the new pylons are close to the existing ones, we think using a lattice type pylon will have less overall visual impact. A contrasting design, like the new T-pylon, could stand out more.	Both sets of overhead pylons in parallel should be replicated - whether lattice or T-pylon.	Differing styles next to each other would create more visual clutter and more impact.	

Built Environment and Landscape	9	Overview Document	Page 14	Finding the Right Route		There may be other parts of the connection where an overhead line may be less acceptable so we will also look at whether we need to put further sections underground	Further consideration should be given to undergrounding the whole route from Wylfa to Pentir with no sealing end compound. This proven technology has no long term detrimental impacts on community or natural environment and no maintenance concerns	All of Anglesey's landscape is valued which is a limited resource. Route can be seen from AONB and crosses the Special Landscape Area. The Island's landscape is distinct and all effort should be directed towards retaining its integrity for future generations.	
Built Environment and Landscape	10	Overview Document	Page 15	Finding the Right Route		We need to think about important places for plants and animals, like the Anglesey Fens and Llyn Alaw, and habitats around the Menai Strait and along the wider route.	The process should extend beyond that of thinking. Priority should be to avoid, minimise impact, and improve conservation status.	Conservation principles	
Built Environment and Landscape	11	Overview Document	Page 15	Finding the Right Route		We know tourism is really important to the Anglesey and North Wales economy. You told us that the Menai Strait and Anglesey AONB are really special places for communities and visitors.	Tourism is equally important across the whole island not just the Strait and AONB.	Destination Management Plan	
Built Environment and Landscape	12	Overview Document	Page 15	Finding the Right Route		We've done lots of work to look at how we can reduce any impact on the landscape and views. You told us that the Anglesey AONB around the coast of the island is really important and a key destination for tourists. You also told us about the importance of views across	The work needs to be clearly evidenced and considered appropriately in the decision making process in taking the preferred option forward when considering the duties placed on NG by Government	GLVIA 3rd edition	
Built Environment and Landscape	13	Overview Document	Page 15	Finding the Right Route		We've met with local authorities and with organisations such as Natural Resources Wales, Gwynedd Archaeological Trust and Cadw to listen to their specialist knowledge.	National Grid will need to do more than listen. It will need to clearly demonstrate how views have been taken into account and adopted or dismissed based on sound judgement		
Built Environment and Landscape	14	Overview Document	Page 16	Keeping our equipment close together		To give us opportunities to reduce this impact, we are proposing a number of options along the route where the new line moves away from the existing one.	Undergrounding should also be considered within the Orange corridor to reduce impacts		
Built Environment and Landscape	15	Overview Document	Page 20	Section 1 Wylfa to Rhosgoch		Keeping the new line close to the existing line also helps reduce the impact on views and the landscape.	It does, however, increase potential for cumulative impacts on views and landscape.	GLVIA 3rd edition	
Built Environment and Landscape	16	Overview Document	Page 20	Section 1 Wylfa to Rhosgoch		The route options mean that we wouldn't need to remove any of the ancient woodland in the area. Ancient woodland is very rare on the island.	Agree. Ancient Woodland is indeed very rare and the avoidance of impact is supported.		
Built Environment and Landscape	17	Overview Document	Page 22	Section 2 Rhosgoch to Llandyfydog		There are four route options proposed in this section of the route (2A-2D), which mean we could put the new connection to the west or east of the existing line.	Four options plus three options for swap over make this area difficult to visualise therefore 3D visualisations should be considered to help understand local impacts.	GLVIA 3rd edition	
Built Environment and Landscape	18	Overview Document	Page 24	Section 3 Llandyfydog to B5110 north of Talwrn		Option 3A means we can keep the route away from the Anglesey Fens and far enough west of Capel Coch to reduce the potential for the village to feel surrounded	This proposal physically encircles Capel Coch village and introduces a significant diversion from the existing line which does not appear to deliver major benefits.		
Built Environment and Landscape	19	Overview Document	Page 26	Section 4 B5110 north of Talwrn to west of Star		You asked us to avoid Talwrn as much as we could so we're not proposing a route option east of the existing line.	Agree.		
Built Environment and Landscape	20	Overview Document	Page 26	Section 4 B5110 north of Talwrn to west of Star		We might need to remove some trees or alter the woodland within Gylched Covert wildlife site if we choose 4B. This site is thought to be home to red squirrels.	It would appear option 4A may have less impact locally but deviates from existing line to what appears to be higher ground and closer to Llangedfni		
Built Environment and Landscape	21	Overview Document	Page 28	Section 4 B5110 north of Talwrn to west of Star		The route options in this section may change when we know more about how we could cross the Menai Strait and where we could put a sealing end compound.	Have all options to cross the Menai using the existing bridges been exhausted?		
Built Environment and Landscape	22	Overview Document	Page 28	Section 4 B5110 north of Talwrn to west of Star		To make the change from an overhead line to an underground cable, we need to build a sealing end compound which is around an acre in size. We'd need one on Anglesey and one in Gwynedd.	This could be avoided if the underground option was considered for the whole length.		

Built Environment and Landscape	23	Overview Document	Page 28	Section 4 B5110 north of Talwrn to west of Star	The route options in this section may change when we know more about how we could cross the Menai Strait and where we could put a sealing end compound.	Due to so many uncertainties at this time for the Menai Crossing, comments for this section are considered premature as sealing end compound and route will be dictated by final crossing location of the Menai.		
Built Environment and Landscape	24	Route Corridor Selection Report	Chp 5. - Page 29	5.2.17	The transposition of a new line route from one side of an existing line to the other can be achieved on adjacent towers, resulting in up to four bulkier angle towers being located in close proximity.	Too many swap overs would create greater visual impact due to requirement of 4 bulkier towers therefore swap overs should only be used when benefits outweigh visual impacts and this should be clearly demonstrated.	Fig 5.4 page 27 of document depicts one such tower. Holford Rule 3	
Built Environment and Landscape	25	Route Corridor Selection Report	Chp 5. - Page 30	5.2.18	Conductors are replaced after a period of 20 to 60 years, depending upon the local climate, altitude, exposure, and the electrical loads to which they are subjected.	If the overhead option is taken forward would the opportunity to replace the conductors of the existing line be considered to reduce further impacts later.	Overhead Line maintenance	
Built Environment and Landscape	26	Route Corridor Selection Report	Chp 5- Page 30	5.2.19	During this time very little routine maintenance is required other than tower body and cross arm painting approximately every 20 years.	If the overhead option is taken forward would the opportunity to paint the existing towers be considered to reduce further impacts later.	Overhead Line maintenance	
Built Environment and Landscape	27	Route Corridor Selection Report	Chp 5 - Page 30	5.3.2	Therefore, the use of buried cables at transmission voltages is technically more complex and significantly more expensive than an equivalent overhead line.	Buried cables are a proven technology and common practice. How much more expensive than overhead would it be in the long term including ongoing maintenance costs?		
Built Environment and Landscape	28	Route Corridor Selection Report	Chp 5 - Page 31	5.3.4	Additional land will also be needed for access development, the creation of a level development platform (dependent upon site topography) and the creation of peripheral landscape screening.	Will screening be agreed with IACC and be informed by LVIA rather than being determined by amount of land that can be purchased.		
Built Environment and Landscape	29	Route Corridor Selection Report	Chp 5 - Page 31	5.3.5	The overhead line needs to terminate within or adjacent to the compound fence line with the conductors from the last tower connecting to a gantry structure, normally constructed from lattice steelwork. The gantry can be designed to take the full tension from the overhead line, allowing the last tower to be 150-300m from the SEC. Alternatively a heavier tower can be located immediately adjacent to the SEC, allowing the conductors to drop nearly vertically onto a slightly lighter gantry structure located within the SEC.	The option with the least impact should be chosen based on LVIA and local context.		
Built Environment and Landscape	30	Route Corridor Selection Report	Chp 5 - page 34	5.3.18	400kV underground cable that could be pulled through a buried duct is limited by the delivery weight of a single cable drum and the stress placed on the cable when pulling it through the duct. These considerations typically limit maximum lengths to approximately 1 Km	This constraint limits the extent of spacing between sealing end compound on either side of the Menai and reduces options to move sealing end compound further away from the Menai and AONB. This zone should be shown as a constraint over the Menai for Horizontal Directional Drilling option.		
Built Environment and Landscape	31	Route Corridor Selection Report	Chp 5 page 34	5.3.20	Bridge Installation for shorter distances, to cross a linear feature such as a river or railway, it may be possible to install cables on, in or beneath the deck of existing bridges where this would not conflict with its primary purpose	The option of utilising the existing Britannia Bridge across the Menai should be considered further as well as the potential for a new bridge.		
Built Environment and Landscape	32	Route Corridor Selection Report	Chp 5 page 35	5.4.1	5.4 Substations	Will this be required either side of the Menai?		
Built Environment and Landscape	33	Route Corridor Selection Report	Chp 6 page 39	6.4.3	Historic Environment: Holford Rules seek to avoid internationally, nationally and locally designated sites; effects on heritage assets' settings were also considered and may include links to landscape value.	This should also include historic landscapes.	CADW register of historic landscapes	
Built Environment and Landscape	34	Route Corridor Selection Report	Chp 6 page 39	6.4.3	Cost – considered capital cost to construct the proposed development within each route corridor.	Should also consider maintenance costs over the long term.		
Built Environment and Landscape	35	Route Corridor Selection Report	Chp 6 page 39	6.4.5	Should consultation responses identify other topics, receptors or concerns that have not been included as part of this appraisal then these will be considered and, if necessary, a back-check will be carried out to confirm whether their inclusion would have influenced the route identification and selection process.	Has the Anglesey Sensitivity and Capacity study for 400Kv overhead line across Anglesey been considered? If not, then this too needs to be assessed as part of the back-checking process.		

Built Environment and Landscape	36	Route Corridor Selection Report	chp6 page 39	6.4.5		Should consultation responses identify other topics, receptors or concerns that have not been included as part of this appraisal then these will be considered and, if necessary, a back-check will be carried out to confirm whether their inclusion would have influenced the route identification and selection process.	As the Hybrid option includes part overhead should this be considered in evaluating options as all other OH routes have to cross the Menai and this is not included in this consultation. Similarly the hybrid does not need to consider subsea at this stage.		
Built Environment and Landscape	37	Route Corridor Selection Report	Chp 6 page 42	6.4.17		The selection of the preferred route corridor was based upon a qualitative review of the appraisal findings. The selection of the preferred route corridor aimed to balance environmental, socio-economic, technical and cost considerations	Has this balance been demonstrated clearly i.e. has the aim been achieved?		
Built Environment and Landscape	38	Route Corridor Selection Report	Chp 6 page 42	6.5.2		Additional investigations included: Production of indicative photomontages to aid visualisation of cumulative effects from close parallel alignments, deviations away from close parallel, close proximity to other infrastructure (e.g. wind farms, 132kV line).	These should be made available as part of consultation including tower and wirescape impacts from close and long range views.	GLVIA 3rd edition	
Built Environment and Landscape	39	Route Corridor Selection Report	Chp 7 page 46	Consultation 7.4.1		When asked for a preferred crossing option, 92 stakeholders preferred Crossing Option B (out of 131 expressing a crossing option preference) for an overhead line crossing of the Menai Strait.	The overhead crossing of the Menai is not an option and has been discarded by National Grid so the question in effect is irrelevant. If no solution is found to undergrounding then other strategic options need to be considered first.		
Built Environment and Landscape	40	Route Corridor Selection Report	Chp 8 page 48	8.3.1		It is important to note that the high level mitigation measures considered are those that could significantly influence the selection of a preferred route corridor or crossing option.	Need to demonstrate clearly how these are taken into account in finalising the preferred route corridor		
Built Environment and Landscape	41	Route Corridor Selection Report	Chp 8 page 48	8.3.2		Use of lower height towers to avoid technical constraints;	How low are these towers to be considered as high level mitigation and would the lower towers necessitate an increase in overall numbers?		
Built Environment and Landscape	42	Route Corridor Selection Report	Chp 8 page 49	8.3.5		In this respect the following assumptions (illustrated in Figure 5.2) have been made: The standard height of a tower for a 132kV overhead line was assumed to be 27m, compared to the standard height for a 400kV overhead tower at 50m. It was important to understand this difference in scale in order to assess the increased effects of replacing one line with the other.	This is a misleading statement as in the Hybrid option i.e. replacement of 132 Kv cable with 400Kv the option to use the much lower T pylon tower of 33.5m could be the preferred choice.		
Built Environment and Landscape	43	Route Corridor Selection Report	Chp 8 page 49	8.3.5		Any double circuit low height 400kV towers that could be employed were assumed to be 37m in height.	Fig 5.2 page 25 shows lower height tower at 34m not 37m		
Built Environment and Landscape	44	Route Corridor Selection Report	Chp 8 page 49	8.3.6		Whilst the number of cables would result in only a modest change in the potential construction and operational effects, it could have a more significant effect upon the capital costs of the project.	Further information required to understand the capital costs involved .		
Built Environment and Landscape	45	Route Corridor Selection Report	Chp 8 page 49	8.3.10		Such measures might include, for example, on and off-site screen planting, archaeological investigation and cultural heritage interpretation.	How would off site screen planting be secured. Would this be a legal agreement?		
Built Environment and Landscape	46	Route Corridor Selection Report	Chp 8 page 50	Fig 8.1		Tregele to Bodedern Replacement Overhead Line Option.	This new line could follow a new route within purple yellow corridor and not just along current line		
Built Environment and Landscape	47	Route Corridor Selection Report	Chp 8 page 50	Fig 8.1		Fig 8.1 high level mitigation option locations.	Malltraeth Marsh SSSI not shown on Fig 8.1		
Built Environment and Landscape	48	Route Corridor Selection Report	Chp 8 page 51	8.4.3 M1 & M2		It was considered that the significant additional cost associated with this mitigation would not be justifiable in the context of National Grid's statutory duties.	Cost is only one of the considerations that National Grid need to apply as part of their statutory duties		
Built Environment and Landscape	49	Route Corridor Selection Report	Chp 8	8.4.20		This led to a conclusion that, at this stage, an assumption should be made that the 132kV overhead line would be removed if either the Purple or Yellow Route Corridors was taken forward.	Agree		

Built Environment and Landscape	50	Route Corridor Selection Report	Chp 8 page 57	8.4.40		In particular, an overhead line across Anglesey AONB and the Menai Strait within any of the crossing option locations would likely perform less well against the requirements of EN-5 sections 2.8.8 and 2.8.9 (assuming that viable alternatives exist).	If viable alternatives do not prove feasible then National Grid would need to revert to strategic options and not re-consider overhead option crossing the Menai.		
Built Environment and Landscape	51	Route Corridor Selection Report	Chp 8 page 57	8.5		In order to compare route corridor options and select a preferred route corridor, five complete Wylfa to Pentir design solutions were considered.	Should the Hybrid option have been considered here especially the overhead part i.e. replacing existing 132 Kv OH line with new T pylon?		
Built Environment and Landscape	52	Route Corridor Selection Report	Chp 9 page 59	9.2.1		Each landscape takes its character from a combination of elements, including landform, watercourses, land use and pattern, vegetation and habitats, and cultural and historical influences.	No reference to Landmap or Anglesey Landscape Character Areas using Landmap as Welsh Government guidelines / basis for evaluating Landscape Character Areas nationally in Wales		
Built Environment and Landscape	53	Route Corridor Selection Report	Chp 9 page 59	9.2.2		For all the route corridors, the main landscape and visual concerns were:	There appears to be no acknowledgement of cumulative impacts on landscape or on the Landscape Character Areas themselves.		
Built Environment and Landscape	54	Route Corridor Selection Report	Chp 9 page 61	9.2.3		Effects to views may be reduced through careful alignment, taking advantage of the existing overhead line corridor, low lying ground and opportunities for screening and 'back dropping' where the line would be viewed against higher ground in the background.	There appears to be no acknowledgement to Zones of Theoretical Visibility (ZTV) to help inform visual impacts.		
Built Environment and Landscape	55	Route Corridor Selection Report	Chp 9 page 65	9.2.3 Menai Strait crossing		However, these would be largely temporary effects limited to the construction phase and would be significantly less than the permanent landscape and visual effects that an overhead line crossing would have.	Agree		
Built Environment and Landscape	56	Route Corridor Selection Report	Chp 9 page 66	9.2.4		The landscape character of the Orange and then Blue Route Corridors was generally more amenable to the routing of overhead lines than that of the Purple or Yellow Route Corridors, due to the nature of the undulating landform, vegetation and scale of the landscape.	This corridor crosses a number of existing LCA's on Anglesey - reference should be made to these as the ORANGE corridors have not been assessed against Landmap which is the recognised methodology in assessing landscape character in Wales		
Built Environment and Landscape	57	Route Corridor Selection Report	Chp 9 page 67	9.2.5		This was achieved by developing indicative ZTVs, or visual envelopes, to illustrate how many towers might be visible from the lower arms upwards (i.e. from a point on the tower 17m above ground level) within an area 5km either side of an indicative alignment in each route corridor.	No explanation appears to have been provided to explain why the figure of 17m above ground level was used?		
Built Environment and Landscape	58	Route Corridor Selection Report	Chp 9 page 68	Fig 9.5		ZTV	Difficult to interpret the ZTV scale - too small		
Built Environment and Landscape	59	Route Corridor Selection Report	Chp 9 page 83	9.5.7		Given the relative movement of option costs and the fact that only limited weight has been given to the costs as a differentiating factor, the judgements made based upon the above costs continue to be valid.	Cost has been a main factor in considering mitigation and should also be in weighting options so updated costs should be shown due to reduced rating capacity. Would assume undergrounding would proportionally reduce more significantly than the overhead option when comparing rating capacities.		
Built Environment and Landscape	60	Route Corridor Selection Report	Ch 10	10.3.1		Landscape and visual effects were acknowledged as the main and most sensitive effects of a new overhead transmission line development.	Agree		
Built Environment and Landscape	61	Route Corridor Selection Report	Ch 10	10.3.4		AONB differentiating factor	Agree with differentiating factor although the analysis offered is crude.		
Built Environment and Landscape	62	Route Corridor Selection Report	Chp 10 page 86	10.39		The main issues drawn from the ZTVs (see Figure 9.5, in Chapter 9) and photomontages that influenced the choice of corridor were:	Difficult to deduce from the ZTV presented. More evidence needed. No photomontages included in consultation documents.		
Built Environment and Landscape	63	Route Corridor Selection Report	Chp 10 page 90	10.44		Residential Visual Impacts on some Communities more likely to be affected in certain locations	Further evidence required to understand impacts.		

Built Environment and Landscape	64	Route Corridor Selection Report	Chp 10 page 90	10.45	Ultimately, it was concluded that the potential cumulative effects of constructing a second overhead line within the Orange Route Corridor, once detailed design and mitigation measures had been developed, would not be so great as to negate the advantages that the Orange Route Corridor offered over the three alternative corridors considered.	Little work carried out to date on cumulative effects within orange route corridor. More evidence required to confirm assumptions		
Built Environment and Landscape	65	Route Options Report	Chp 8 page	8.1.5	This chapter describes the approach taken to identify and appraise route options for a new overhead line along the Orange Route Corridor between Wylfa and the Menai approach. Based upon these appraisals, a short-list of preferred overhead route options has been developed and taken forward to public consultation in Autumn 2015. This chapter also provides an overview of how the Wylfa to Menai approach has been divided into discrete sections to facilitate the identification and appraisal of route options. These sections have also been assessed in combination so that the identification of the discrete sections and the boundaries between those sections does not exert influence on the final outcome.	There is a risk that by looking at the line in parts i.e. sections 1 to 5 there is a possibility that the whole line could look worse when all parts put together. One must not lose sight of the whole line and impacts beyond the "discrete sections" on a landscape scale.		
Built Environment and Landscape	66	Route Options Report			Provides both an opportunity and a constraint to the development of any new overhead line. By constructing the new overhead line close to the existing line the spread of transmission development, both within the corridor and across the wider island, would be minimised. Whilst this would increase the effects of transmission development within the vicinity, it was generally considered that the cumulative effect would be less than the additional effects of a new overhead line built in one of the alternative route corridors presently unaffected by transmission development	It is an assumption that cumulative effect would be less than "additional effects of" as new overhead line built on alternative route corridor. L&V effects are considered separately to cumulative effects so one could argue the cumulative effects are greater on constructing a new line close to existing than on a new corridor. A general consideration is insufficient evidence and would need to be evidenced		
Built Environment and Landscape	67	Route Options Report	Page 52	8.2.1	The presence of the existing National Grid 400kV line within the Orange Route Corridor provides both an opportunity and a constraint to the development of any new overhead line. By constructing the new overhead line close to the existing line the spread of transmission development, both within the corridor and across the wider island, would be minimised. Whilst this would increase the effects of transmission development within the vicinity, it was generally considered that the cumulative effect would be less than the additional effects of a new overhead line built in one of the alternative route corridors presently unaffected by transmission development..	Cumulative impacts are likely to be greater for parallel alignment when viewed from close medium distance from sensitive receptors such as parts of AONB and residential areas as effects from alternative route corridors will be so far apart as to negate the potential for cumulative impacts from certain residential views and from the AONB. This would need further analysis to justify assumption.		
Built Environment and Landscape	68	Route Options Report		8.2.2	In principle, the more closely that the new overhead line can parallel and mirror the existing overhead line between Wylfa and the Menai approach, the more limited will be the area affected by transmission infrastructure. This opportunity was one of the considerations in selecting the preferred route corridor.	Limited area but potential for greater local impact both visually and potentially in terms of EMF.		

Built Environment and Landscape	69	Route Options Report	Page 52	8.2.5	The ability to develop routes which offered broadly parallel alignment options alongside the existing overhead line was a factor in selecting the Orange Route Corridor; though routes away from the existing overhead line were not discounted. The principle behind this decision was that, all other things being equal, the introduction of a closely routed overhead line is likely to give rise to a lower magnitude of change than the insertion of a new line into a landscape and views where there is currently no overhead line. This is because the existing overhead line already has an effect on views in the surrounding area and is a significant element in the landscape that exerts influence on local landscape character. National Grid will continue to review and back-check this assumption as the identification and assessment of specific routes progresses.	This assumption will need to be confirmed by a LVIA. The principle that the existing line has reduced sensitivity and already influenced landscape character thus reducing magnitude of change will need to be evidenced through detailed LVIA.		
Built Environment and Landscape	70	Route Options Report	Page 53	8.2.10	Finally, the existing overhead line passes through three pinch points defined by the proximity of nationally designated sites and existing settlements (Tregel; Rhosgoch and Rhosybol; and Talwrn), which have locally restricted the extent of the Orange Route Corridor. These sites and settlements also limit the route options for a new overhead line within the corridor to the area close to the existing line. Holford Rule 3 advises to choose the most direct line, with no sharp changes of direction and thus with fewer angle towers. Therefore, parallel or closely related route options leading into and out of these pinch points would potentially comply with Holford Rule 3 better than any nonparallel routes that may require sharp changes and angle towers in their approach to these points.	The principle appears reasonable but local impacts could be significant to justify undergrounding. This assumption will need to be evidenced by detailed LVIA.		
Built Environment and Landscape	71	Route Options Report	Page 55	8.4.2	Alternative tower types to the existing 50m high lattice towers (e.g. low height and T-pylons) could be deployed in situations where the lattice towers give rise to significant visual effects. However, there would need to be a demonstrable benefit to the adoption of alternative tower types when taking account of all considerations, including visual amenity effects of different tower types in the landscape and cost. The selection of tower types would be determined during the detailed design stage.	It is highly unlikely that anything but a similar / identical lattice tower would be used in the parallel option		
Built Environment and Landscape	72	Route Options Report		8.4.3	Route options away from the default 85m offsets ought to avoid oversailing residential properties, but no minimum separation distance between residential properties and the overhead line was prescribed in terms of visual residential amenity.	Minimum distance should be prescribed to avoid overbearing impacts		
Built Environment and Landscape	73	Route Options Report		8.5.2	Production of indicative photomontages to aid visualisation of cumulative effects from close parallel alignments, deviations away from close parallel, close proximity to other infrastructure (e.g. wind farms, 132kV line), skylining and natural screening.	Photomontages should be shared to help with understanding impacts.		
Built Environment and Landscape	74	Route Options Report		9.3.2	Studies are ongoing to identify exactly where within the substation the new line would need to connect, which in turn may necessitate minor changes to the final 1 to 3 spans of the existing line. This possible requirement is indicated by the widening fan of the route options as the overhead line approaches Wylfa, as shown on Figure C1 in Appendix C.	Will this widening fan impact on Dame Sylvia Crowes Mound and should this be regarded as sensitive receptor?		

Built Environment and Landscape	75	Route Options Report	Page 62	9.3.10		With the existing overhead line offering the most direct route to the route corridor pinch point at Rhosgoch, north of Llyn Alaw, a close parallel was preferred, in line with Holford Rule 3; this also reflected consultation feedback to keep close to the existing overhead line.	Route option 1A appears more favourable in landscape terms but may be adverse on residential impacts		
Built Environment and Landscape	76	Route Options Report	Page 71	10.5.1		Route Options 2A, 2B, 2C and 2D were selected for consultation (see Figure C2, in Appendix C) and present four different route options through the full length of Section 2. All the route options are broadly parallel to the existing overhead line, but differ in proximity and the number of localised deviations and thereby number of angle towers required	Due to the number of receptors and constraints in this narrow corridor and combination of four options and further complexity of possible transpositions it is difficult to determine which is preferable. The most significant impacts are likely to be residential i.e. oversailing and encircling. Close paralleling to the west appears to have least impacts on landscape and residential.		
Built Environment and Landscape	77	Route Options Report	Page 76	11.46		Route options between Capel Coch and the SAC may create cumulative effects with other types of lines, such as the existing 33kV lines on wooden poles. However, in selected cases, short sections of the 33kV lines could be placed underground to avoid this effect.	Any opportunity to underground existing infrastructure i.e. 33Kv line should be supported where there are no impacts to other sensitive receptors e.g. archaeology		
Built Environment and Landscape	78	Route Options Report	Page 76	11.49		The landscape and visual amenity preference at this stage was for the proposed overhead line to be as parallel as possible to the existing overhead line. However, due to the SAC constraining close parallel route options to the existing overhead line, the alternative landscape and visual amenity preference would be for western deviations that maximise their distance from residential properties at Capel Coch in order to reduce the risk of adverse visual effects, taking into account the risk of cumulative effects that would result.	The parallel western option 3B is preferable from a landscape impact perspective i.e. away from the AONB and SLA but does have some residential impacts at Cae Fabli. Swap over options may assist and photomontages should be produced to highlight issues better at this location.		
Built Environment and Landscape	79	Route Options Report	Page 81	12.4.1		Consultation feedback indicated a preference for route options to the west of the existing overhead line through Section 4 to keep the new overhead line as far away from Talwrn as possible.	From a landscape impact perspective and residential impact on Talwrn the western route has potentially less impact although impact to woodland would need further analysis to decide on option A or B		
Built Environment and Landscape	80	Route Options Report	Page 88	13.3.7		It is acknowledged that there could be further alternatives to the above overhead route options. However, at this stage the purpose of identifying a potential overhead connection was to determine a feasible route option and understand the potential effects of an overhead connection associated with each of the potential SEC search areas. The route options will also aide the consultation process to identify further matters that should be taken into account.	Due to the fact that other alternative options could be considered but are not currently shown due to the uncertainty of the crossing of the Menai this part of the consultation process is premature. This should be made more abundantly clear for this section of the line.		
Built Environment and Landscape	81	Route Options Report		13.4.6		The B5420 road stretches around the Anglesey North SEC Search Area and vegetation alongside offers established screening from the nearby settlements. The search area lies in a relatively low lying area, with land rising up to the east before it falls towards the Menai Strait. Site visits indicated that potential SEC sites could be relatively well screened from the AONB and Menai Strait area, although the connecting overhead line would be visible from some local properties. There is potential for the lower level SEC structures to be screened with additional surrounding planting.	The Anglesey North search area provides the best combination of least landscape impacts on location of potential SEC and least route impact on designated landscapes of SLA and AONB. Both other SEC search areas will have direct impacts on the proposed SLA. Route 5A,B and C will also cross the A55 and will have an in combination effect with the current 400Kv line crossing the A55 at Llanfair PG.		
Built Environment and Landscape	82	Route Options Report	Page 92	13.4.38		Route Option 5A would pass close to several properties, especially at Llanddaniel Fab, and introduce a 400kV overhead line into a landscape with limited development. However, the pylons for this overhead connection may be less visible from the mainland side of the Menai Strait.	Route 5A will potentially be more visible from high ground on the mainland and will enter an area / landscape currently devoid of power infrastructure which would have a direct impact on the LCA for this part of Anglesey.		

Built Environment and Landscape	83	Route Options Report	Page 100	14.4.1	Identification of the preferred Menai Strait crossing is dependent upon a review of feasible undergrounding technologies (including cabling routes and potential drilling locations), SEC locations and overhead routes to the SECs. Each of these components comprise several options and the overall preferred combination will be based on a balance of environmental, socio-economic, technical and cost factors, informed by a detailed consideration of consultation responses.	The preferred option should also consider the future potential of undergrounding the existing overhead 400Kv line or at the very least does not compromise this option in the future.		
Built Environment and Landscape	84	Route Options Report	Page 100	14.4.3	At this stage, National Grid has commenced feasibility studies into potential undergrounding technologies (including cabling routes and potential drilling locations), SEC locations and overhead routes to the SECs. However, at the time of this report's publication these studies remain on-going.	Due to the uncertainty it is premature to consider options for this area. A further consultation should be considered specifically for this area once there is more certainty on the method used for crossing the Strait and likely direct short term and long term impacts can be better understood.		
Built Environment and Landscape	85	Route Options Report		14.4.10	The principle of tunnelling is also being considered, but is unlikely to be favoured on costs grounds if the above options prove viable.	No costs have been shown and this should be included. We have been previously informed that a budget cost of £50 million has been estimated for the crossing. On what basis has this figure been calculated?		
Built Environment and Landscape	86	Route Options Report		14.4.14	Discussions with Network Rail are ongoing concerning the technical constraints and opportunities that installing cables on the rail deck of Britannia Bridge might present.	More information should have been provided for this option.		
Built Environment and Landscape	87	Route Options Report	Page 106	15.4.4	Route Option 5H's close proximity to the existing overhead line would contribute to integrating a new overhead line into the surrounding landscape and minimising the potential for effects on the setting of the Grade I Registered Vaynol Park and distant views from Anglesey. However, Route Option 5H would also be clearly visible against the skyline from the Anglesey AONB and from the Vaynol Estate Registered Park and Garden, as it passes through the edge of Parc Menai Business Parc.	Undergrounding this whole section to Pentir should be considered.		
Built Environment and Landscape	88	Route Options Report	Page 113	Fig 16.1	N/A	Photomontage / photographs of existing scenarios should have also been included as Fig 16.1 is a view unlikely to be seen i.e. birds eye view. A ground level view would have proven to be far more beneficial.		
Built Environment and Landscape	89	Route Options Report	Page 113	16.2.15	NPS EN-5 recognises that "sometimes positive landscape and visual benefits can arise through the reconfiguration or rationalisation of existing electricity network infrastructure". The route transpositions described above are likely to require several of the existing towers to be replaced, with a number of existing towers being removed. In a similar vein, there may be opportunities to discuss with the distribution network operator the realignment or undergrounding of smaller, wood pole based overhead line infrastructure. This might help mitigate or avoid the creation of discordant wirescapes when viewed in combination with the new 400kV overhead line.	This should have been considered further and as part of the mitigation potentially available around the Menai.		

Built Environment and Landscape	90	Route Options Report	Page 114	16.3.3		Where screen planting is undesirable or cannot be effectively implemented, the development and implementation of landscape enhancement could prove effective to reduce the effects of any new line. At the small scale this could simply involve introducing new focal points into garden landscaping. On a wider scale, landscaping strategies might include extensive planting initiatives involving the creation, enhancement and management of woodland blocks, hedgerows and other habitats. Any such initiative would need to take account of the landscape characteristics and management objectives for the area, as set out in the Councils' landscape strategies, but could be effective in the medium and long-term to better accommodate the line within the surrounding landscape.	More work and analysis of mitigation will be required to help inform preferred options		
Cultural Heritage	91	NG Consultation Feedback Pack	NG Consultation Feedback Form	P1		National Grid confirm that it will be useful to have a copy of their Overview, Oct 2015 to hand. This appears to have been omitted however.	While National Grid state that you can see it on the website or obtain one by post - this could be misinterpreted as being a tactic with the deliberate aim of reducing the amount of feedback.		
Cultural Heritage	92	NG Consultation Feedback Pack	NG Consultation Feedback Form	P1		National Grid open and close questionnaire will provide data on key questions as well as allowing people to voice what they think.	It is considered that the number of open questions could make an analysis of the accuracy of the feedback much more difficult.		
Cultural Heritage	93	NG Consultation Feedback Pack	NG Consultation Feedback Form	P1		Due to anticipated high volumes of feedback they are not able to respond to individuals but instead they will look carefully at every single piece of feedback themes raised and they will be included in a feedback report in Summer 2016.	This type of analysis and feedback follows a generic approach as opposed to a more detailed one and could overlook individual concerns and issues.		
Cultural Heritage	94	Overview Document (October 2015)				Cultural Heritage is one of 9 main factors stated to be taken into account in the balanced process of planning.	From an analysis of all information to date the number of main factors slowly get reduced down from 9 with Cultural Heritage included in Environment.		
Cultural Heritage	95	Stage 2 Consultation Strategy (October 2015)	Introduction			At the Menai Strait we are consulting on search areas for sealing end compounds. Route options underneath the Menai Strait, and the type of technology we could use to install cables underground, are not included within this consultation, etc. These options will be included in the Spring/Summer 2016 consultation.	The fact that the search area along the Menai Strait is more than 6 km wide gives a great deal of uncertainty regarding exactly how and where the final transmission route from Wylfa to Pentir will be.		

Cultural Heritage	96	W-P Preferred Route Corridor Selection Report (October 2015)	2.4. Duty to protect the Environment	2.4.1.	National Grid has a statutory duty to consider the amenity impacts of its work. When formulating a proposal to develop an overhead electricity line, or carry out other works to the transmission system, Schedule 9(1) in Section 38 of the Electricity Act 1989 specifically requires National Grid to "have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and or protecting sites, buildings and objects of architectural, historic or archaeological interest; and shall do what it reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside on such flora, fauna, features, sites, buildings or objects."	The Electricity Act 1989 pre-dates the Planning (Listed Buildings and Conservation Areas) Act 1990 therefore it is questioned that the duty imposed today on National Grid by virtue of the 1989 Act may not, therefore, fully take into account the provisions laid down within subsequent acts such as the aforementioned Planning (Listed Buildings and Conservation Areas) Act 1990 specifically in relation to Section 66(1) which requires decision makers to have special regard to certain matters, including the desirability of preserving the setting of listed buildings , while the 1989 Act only requires National Grid to have 'regard'.	Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 imposed a " <i>General duty as respects listed buildings in exercise of planning functions.</i> " Subsection (1) provides: " <i>In considering whether to grant planning permission for development which affects a listed building or its setting , the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.</i> "	With reference to a very important Landmark Court Case Judgement ;Barnwell Manor Wind Energy Ltd V East Northampton D.C. Justice Lang J. concluded ; " <i>In order to give effect of the statutory duty imposed under Section 66(1), a decision maker should accord considerable importance, special regard and weight to the desirability of preserving the setting of the Listed Buildings when weighting this factor in the balance with other material considerations which have not been given this special statutory status .</i> "
Cultural Heritage	97	W-P Preferred Route Corridor Selection Report (October 2015)	2.7. Other Legislation	2.7.1.	In addition to the Electricity Act 1989, during development of the Wylfa to Pentir transmission connection, National Grid will have to comply with other national legislation and regulations relating to consenting works and protecting the environment; for example (but not limited to): <ul style="list-style-type: none"> • The Planning Act 2008. • The Infrastructure Planning (Environmental Impact Assessment) Regulations 2009. • The Conservation of Habitats and Species Regulations 2010 (as amended). • The Countryside and Rights of Way Act 2000. • The Wildlife and Countryside Act 1981 (as amended). • The Heritage Bill 	While they give the caveat; <i>for example (but not limited to)</i> they do not make reference to the Planning (Listed Buildings and Conservation Areas) Act 1990 or in fact the Ancient Monuments and Archaeological Act 1979, despite the fact that the Overview Document contains specific reference to matters of Cultural Heritage.	Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 imposed a " <i>General duty as respects listed buildings in exercise of planning functions.</i> " Subsection (1) provides: " <i>In considering whether to grant planning permission for development which affects a listed building or its setting , the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses .</i> "	With reference to a very important Landmark Court Case Judgement ;Barnwell Manor Wind Energy Ltd V East Northampton D.C. Justice Lang J. concluded ; " <i>In order to give effect of the statutory duty imposed under Section 66(1), a decision maker should accord considerable importance, special regard and weight to the desirability of preserving the setting of the Listed Buildings when weighting this factor in the balance with other material considerations which have not been given this special statutory status .</i> "
Cultural Heritage	98	W-P Preferred Route Corridor Selection Report (October 2015)	6.4 Route Corridor Appraisal Topics	6.4.3. Environmental. Historic Environment:	Effects on heritage assets settings were also considered and may include links to landscape value.	It appears as though the settings of heritage assets have only been given secondary consideration after seeking option routes that avoided direct contact. Moreover, National Grid's methodology of assessment has been predominantly carried out using Landscape and Visual Impact Assessments and not the appropriate test for assessing the impact on the settings of listed buildings.	Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 imposed a " <i>General duty as respects listed buildings in exercise of planning functions.</i> " Subsection (1) provides: " <i>In considering whether to grant planning permission for development which affects a listed building or its setting , the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses .</i> "	With reference to a very important Landmark Court Case Judgement ;Barnwell Manor Wind Energy Ltd V East Northampton D.C. Justice Lang J. concluded ; " <i>In order to give effect of the statutory duty imposed under Section 66(1), a decision maker should accord considerable importance, special regard and weight to the desirability of preserving the setting of the Listed Buildings when weighting this factor in the balance with other material considerations which have not been given this special statutory status .</i> "

<p>Cultural Heritage</p>	<p>99</p>	<p>W-P Preferred Route Corridor Selection Report (October 2015)</p>	<p>9.Appraisal of Route Corridors</p>	<p>9.2.12 Historic Environment</p>	<p>The following historic environment and main designated features of consideration are illustrated in Figure A-3 in Appendix A, with some features also indicated on Figure 9.7</p> <ul style="list-style-type: none"> • Scheduled monuments; • Listed buildings (Grades I, II* and II); • Registered parks and gardens, including essential settings; • Registered landscapes of historic interest; • Conservation areas; and • National Trust boundaries. 	<p>Fig 9.7 includes some features but not all therefore any assessment made using Fig 9.7 will be incorrect and possibly misleading. Figure A-3 in Appendix A, does provide the main designated features but even this is not comprehensive and if used for any assessment it will also be incorrect and misleading. With reference to listed buildings (LB) indicated as features there needs to be a disclaimer i.e. In some cases as well as the principal LB there may also be curtilage objects and structures such as; gazebos, temples, follies, ice houses, boundary walls and gates. While it is acknowledged that these are not always clearly defined by any description or illustrated on a map they are nevertheless features that are statutorily protected under the Planning (Listed Buildings and Conservation Areas) Act 1990.</p>	<p>Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 imposed a "General duty as respects listed buildings in exercise of planning functions." Subsection (1) provides: " In considering whether to grant planning permission for development which affects a listed building or its setting , the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses ."</p>	<p>With reference to a very important Landmark Court Case Judgement ;Barnwell Manor Wind Energy Ltd V East Northampton D.C. Justice Lang J. concluded ; " In order to give effect of the statutory duty imposed under Section 66(1), a decision maker should accord considerable importance, special regard and weight to the desirability of preserving the setting of the Listed Buildings when weighting this factor in the balance with other material considerations which have not been given this special statutory status ."</p>
<p>Cultural Heritage</p>	<p>100</p>	<p>W-P Preferred Route Corridor Selection Report (October 2015)</p>	<p>9.Appraisal of Route Corridors</p>	<p>9.2.13</p>	<p>National Grid confirms that direct effects upon Listed Buildings and Scheduled Ancient Monuments would be avoided through detailed alignment (This could be a statement of common ground) but National Grid goes on to say " Therefore the appraisal considers the risk of a transmission line affecting the settings of the above designated historic features in the route corridor or within 1km of the route corridor. All the route corridors share the same risk to settings of Scheduled Ancient Monuments, Historic Parks and Gardens, Listed Buildings and Conservation Areas in and near the Northern and Southern Common Areas ."</p>	<p>The fact that detailed alignment would be able to steer its way through what has been referred to as a 'pepper pot' affect of Listed Buildings along all coloured corridors does not mean that the appraisal has given the proper consideration regarding the statutory duty imposed under Section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990. There will need to be a Listed Building Setting Heritage Impact Assessment (HIA) completed as specified in published guidance before this can be properly assessed.</p>	<p>Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 imposed a "General duty as respects listed buildings in exercise of planning functions." Subsection (1) provides: " In considering whether to grant planning permission for development which affects a listed building or its setting , the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses ."</p>	<p>English Heritage Guidance on the effects on setting.</p>
<p>Cultural Heritage</p>	<p>101</p>	<p>W-P Preferred Route Corridor Selection Report (October 2015)</p>	<p>10. Selection of Preferred Route Corridor</p>	<p>10.3.15.</p>	<p>All the proposed route corridors and crossing options were considered to have the potential to result in adverse effects on designated heritage assets, including scheduled monuments, registered parks and gardens, listed buildings and the Dinorwig Registered Outstanding Landscape of Historic Interest. Between Wylfa and the Menai Strait there was the potential for alignments to be designed to avoid direct effects and minimise any potential effects on the settings of these assets. Appropriate archaeological measures could also be implemented to mitigate any effects on archaeological remains.</p>	<p>It's quite clear from this statement that regardless of whichever route corridor was chosen the potential of adverse effects on designated heritage assets had been considered. National Grid's statement is confined solely to the over ground proposals and it is felt that this should be made clearer than it has. It is also clear that National Grid are keen to avoid any direct effects on heritage assets and heritage receptor settings. However, a proper analysis of the documentation serves to demonstrate that they are keen to minimise those effects as opposed to avoiding them altogether. Once again this serves to demonstrate the dominance placed upon the Electricity Act as opposed to the equally important obligations imposed by virtue of the Planning (Listed Buildings and Conservation Areas) Act 1990.</p>	<p>Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 imposed a "General duty as respects listed buildings in exercise of planning functions." Subsection (1) provides: " In considering whether to grant planning permission for development which affects a listed building or its setting , the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses ."</p>	<p>With reference to a very important Landmark Court Case Judgement ;Barnwell Manor Wind Energy Ltd V East Northampton D.C. Justice Lang J. concluded ; " In order to give effect of the statutory duty imposed under Section 66(1), a decision maker should accord considerable importance, special regard and weight to the desirability of preserving the setting of the Listed Buildings when weighting this factor in the balance with other material considerations which have not been given this special statutory status ."</p>

Cultural Heritage	102	W-P Preferred Route Corridor Selection Report (October 2015)	10. Selection of Preferred Route Corridor	10.3.17.	The argument for and against various options for crossing the Menai Strait is underlined here by National Grid stating " A potential differentiator between the crossing options was the risk of sky lining against panoramic views of Snowdonia from the north by an overhead line crossing the high ground between a SEC zone S1 and Pentir; for example, potentially affecting views from the Plas Newydd, Vaynol and Llanidan Registered Park and Gardens along the Menai Strait. However, this may be outweighed by the adverse landscape and visual effects of underground cabling works through the Plas Newydd and Vaynol Registered Parks and Gardens to reach SEC zones S2 and S3.	Until such time as the examination of what is potentially achievable at the Menai Strait has been concluded it would be premature to put forward one preference over the other. From the IACC perspective all the route options including HVDC subsea and a hybrid solution should not be ruled out at this stage.		
Cultural Heritage	103	W-P Preferred Route Corridor Selection Report (October 2015)	10. Selection of Preferred Route Corridor	10.3.18, 10.3.19 & 10.4.4.	National Grid clearly state " No route corridor or crossing option was clearly able to avoid effects on designated historic asset or its setting, since further analysis of potential effects on setting required development of a specific route alignments , it was determined that there; were no potential effects on the historic environment that were considered to be significant differentiators between route corridors."	Such a statement in respect to the statutory protection of designated historic assets and their settings is disconcerting as without further detailed assessment and analysis of the degree and level of adverse impact on certain historic assets how could National Grid hope to be able to narrow the field down to a specific route corridor especially in light of the fact that not all heritage assets have yet been identified. (Listed Building curtilage objects and structures)	Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 imposed a "General duty as respects listed buildings in exercise of planning functions ." Subsection (1) provides: " In considering whether to grant planning permission for development which affects a listed building or its setting , the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses ."	
Cultural Heritage	104	W-P Route Options Report, Final. (October 2015)	2. National Grid Duties and Policies	2.4 Duty to protect the environment, 2.4.1.	National Grid has a statutory duty to consider the amenity impacts of its work. When formulating a proposal to develop an overhead electricity line, or carry out other works to the transmission system, Schedule 9(1) in Section 38 of the Electricity Act 1989 specifically requires National Grid to "have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and or protecting sites, buildings and objects of architectural, historic or archaeological interest; and shall do what it reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside on such flora, fauna, features, sites, buildings or objects."	The Electricity Act 1989 pre-dates the Planning (Listed Buildings and Conservation Areas) Act 1990 therefore it is questioned that the duty imposed today on National Grid by virtue of the 1989 Act may not, therefore, fully take into account the provisions laid down within subsequent acts such as the aforementioned Planning (Listed Buildings and Conservation Areas) Act 1990 specifically in relation to Section 66(1) which requires decision makers to have special regard to certain matters, including the desirability of preserving the setting of listed buildings , while the 1989 act only requires National Grid to have 'regard'.	Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 imposed a "General duty as respects listed buildings in exercise of planning functions ." Subsection (1) provides: " In considering whether to grant planning permission for development which affects a listed building or its setting , the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses ."	With reference to a very important Landmark Court Case Judgement ;Barnwell Manor Wind Energy Ltd V East Northampton D.C. Justice Lang J. concluded ; " In order to give effect of the statutory duty imposed under Section 66(1), a decision maker should accord considerable importance, special regard and weight to the desirability of preserving the setting of the Listed Buildings when weighting this factor in the balance with other material considerations which have not been given this special statutory status ."

Cultural Heritage	105	W-P Route Options Report, Final. (October 2015)	2. National Grid Duties and Policies	2.7. Other Legislation	National Grid has a statutory duty to consider the amenity impacts of its work. When formulating a proposal to develop and overhead electricity line, or carry out other works to the transmission system, Schedule 9(1) in Section 38 of the Electricity Act 1989 specifically requires National Grid to ;“have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and or protecting sites, buildings and objects of architectural, historic or archaeological interest; and shall do what it reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside on such flora, fauna, features, sites, buildings or objects.”	While they give the caveat; “for example (but not limited to)” they do not make reference to the Planning (Listed Buildings and Conservation Areas) Act 1990 or in fact the Ancient Monuments and Archaeological Act 1979, despite the fact that the Overview Document contains specific reference to matters of Cultural Heritage.	Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 imposed a “General duty as respects listed buildings in exercise of planning functions .” Subsection (1) provides: “ In considering whether to grant planning permission for development which affects a listed building or its setting , the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses .”	
Cultural Heritage	106	W-P Route Options Report, Final. (October 2015)	5. Electricity Transmission Developments	5.2.5, 5.2.6 & Fig 5.2 and 5.3.	National Grid provide some detail on the "as existing" and "as proposed" types of Electricity Transmission Towers.	Having examined this information, it would appear that our previous perception of the typical 400kv transmission tower and proposed being identical (the same) was wrong as it appears that the typical 2015 transmission towers indicated on Fig 5.2 & 5.3 have a slightly stronger and wider upper lattice construction than the as existing typical transmission towers which currently traverse the island.		
Cultural Heritage	107	W-P Route Options Report, Final. (October 2015)	6. Factors influencing the identification of route options and scope of the appraisal.	6.4.3. Environmental - Historic Environment.	Effects on heritage assets settings were also considered and may include links to landscape value.	It appears as though the settings of heritage assets have only been given secondary consideration after seeking option routes that avoided direct contact. Moreover, National Grid's methodology of assessment has been predominantly carried out using Landscape and Visual Impact Assessments and not the appropriate test for assessing the impact on the settings of listed buildings.	Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 imposed a “General duty as respects listed buildings in exercise of planning functions .” Subsection (1) provides: “ In considering whether to grant planning permission for development which affects a listed building or its setting , the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses .”	With reference to a very important Landmark Court Case Judgement ;Barnwell Manor Wind Energy Ltd V East Northampton D.C. Justice Lang J. concluded ; “ In order to give effect of the statutory duty imposed under Section 66(1), a decision maker should accord considerable importance, special regard and weight to the desirability of preserving the setting of the Listed Buildings when weighting this factor in the balance with other material considerations which have not been given this special statutory status .”

<p>Cultural Heritage</p>	<p>108</p>	<p>W-P Route Options Report, Final. (October 2015)</p>	<p>9. Section 1 Route Options: Wylfa to Rhosgoch.</p>	<p>9.2.5.</p>	<p>Llanfechell has many Listed Buildings and a Conservation Area, plus scheduled monuments in the surrounding area. Llanfechell is noted for its important heritage setting, reflected by the links between the settings of many of these assets with the wider landscape. For example, the Standing Stones Scheduled Monument AN030 stands in an open field in a prominent position on high ground to north of Llanfechell, plus the twisted tower of the Grade II* Church of St Mechell is visible from the higher ground surrounding Llanfechell.</p>	<p>Option 1B pays some recognition to the need to give special regard to the setting of Listed Buildings in accord with Section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990. In addition to this, Option 1B also pays some recognition to the national duty to have regard to the desirability of preserving or enhancing the character or appearance of the CA or the setting of designated conservation areas such as Llanfechell. In the absence of an understanding of what level of duty needs to be paid to the setting of specific Scheduled Monuments the justification for the precise route alignment snaking between CA's LB's and SAM's and other types of designated protected assets would be difficult to evaluate.</p>	<p>Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 imposed a "General duty as respects listed buildings in exercise of planning functions." Subsection (1) provides: " In considering whether to grant planning permission for development which affects a listed building or its setting , the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses ."</p>	<p>Planning Policy Wales Chapter 6 Conserving the Historic Environment paragraph 6.5.17. clearly states: " Should any proposed development conflict with the objective of preserving or enhancing the character or appearance of a conservation area, or its setting, there will be a strong presumption against the grant of planning permission. In exceptional cases the presumption may be overridden in favour of development deemed desirable on the grounds of some other public interest. The Courts have held that the objective of preservation can be achieved either by development which makes a positive contribution to an area's character or appearance, or by development which leaves character and appearance unharmed."</p>
<p>Cultural Heritage</p>	<p>109</p>	<p>W-P Route Options Report, Final. (October 2015)</p>	<p>9.4. Appraisal of Route Options.</p>	<p>9.4.10.to 9.4.13 Historic Environment.</p>	<p>Heading south-east from Wylfa, the parallel route options would not affect the setting of the Grade II Registered Cestyll Garden (GD45) or a number of Grade II listed buildings. Site visits, to gain an appreciation of cultural heritage assets and their settings, indicated that keeping east of the existing overhead line north-east of Llanfechell would avoid encirclement of a Standing Stone Scheduled Monument (AN080) and minimise the effect on its setting, as well as on the setting of a group of standing stones (Scheduled Monument AN030) north of Llanfechell. South-east of Llanfechell the parallel east and west route options would minimise effects on the setting of the Pen-y-Morwyd Round Barrow (AN110) and Llifad Enclosure (AN079) Scheduled Monuments, as well as on the setting of the Grade II* Listed Church of St Mechell (5383), the neighbouring Grade II Listed Rectory (5384) and Grade II Bryn Ddu house (25171). In contrast, as well as being closer to Llanfechell the non-parallel western route option, south of Llanfechell, would encircle the Grade II Bryn Ddu house (25171); although this property is well screened by mature vegetation etc.</p>	<p>National Grid states by keeping east of the existing line north-east of Llanfechell would avoid encirclement of the standing stones (SAM AN080) and minimise the effect on its setting. In response to this, as they appear to be trying to follow the Holford Rules while at the same time trying to balance minimal effects upon heritage receptor settings the route is having to snake its way through the pepper pot effect referred to previously.</p>	<p>Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 imposed a "General duty as respects listed buildings in exercise of planning functions." Subsection (1) provides: " In considering whether to grant planning permission for development which affects a listed building or its setting , the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses ."</p>	<p>Planning Policy Wales Chapter 6 Conserving the Historic Environment paragraph 6.5.17. clearly states: " Should any proposed development conflict with the objective of preserving or enhancing the character or appearance of a conservation area, or its setting, there will be a strong presumption against the grant of planning permission. In exceptional cases the presumption may be overridden in favour of development deemed desirable on the grounds of some other public interest. The Courts have held that the objective of preservation can be achieved either by development which makes a positive contribution to an area's character or appearance, or by development which leaves character and appearance unharmed."</p>

<p>Cultural Heritage</p>	<p>110</p>	<p>W-P Route Options Report, Final. (October 2015)</p>	<p>10. Section 2 Route Options: Rhosgoch to Llandyfrydog</p>	<p>10.2.5.</p>	<p>There are a number of listed buildings in the surrounding area, such as Grade II buildings near Hafodol-Ganol and Capel Parc. At the very southern end of Section 2, Llandyfrydog's heritage setting is noted due to the Grade II* Church of Tyfrydog (5360) and five Grade II listed buildings in the Llandyfrydog area. There is also the Grade II Melin Escob (24834) north-east of Llandyfrydog.</p>	<p>National Grid recognises the effects of the proposals on the setting of SAM's and Listed Buildings but not it would appear the level of adverse effect. In order to carry out a correct assessment National Grid would need to be able to identify or quantify the magnitude of the level on each historic receptor.</p>	<p>Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 imposed a "General duty as respects listed buildings in exercise of planning functions." Subsection (1) provides: " In considering whether to grant planning permission for development which affects a listed building or its setting , the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses ."</p>	<p>Planning Policy Wales Chapter 6 Conserving the Historic Environment paragraph 6.5.17. clearly states: " Should any proposed development conflict with the objective of preserving or enhancing the character or appearance of a conservation area, or its setting, there will be a strong presumption against the grant of planning permission. In exceptional cases the presumption may be overridden in favour of development deemed desirable on the grounds of some other public interest. The Courts have held that the objective of preservation can be achieved either by development which makes a positive contribution to an area's character or appearance, or by development which leaves character and appearance unharmed."</p>
<p>Cultural Heritage</p>	<p>111</p>	<p>W-P Route Options Report, Final. (October 2015)</p>	<p>11. Section 3 Route Options: Llandyfrydog to B5110 North of Talwrn (Capel Coch Area options)</p>	<p>11.2.4.</p>	<p>There are listed buildings and scheduled monuments distributed throughout this area: · Grade II* Church of Tyfrydog (5360) and five Grade II listed buildings in the Llandyfrydog area, plus Grade II Listed Melin Escob to the north-east (24834). · Llys Einion Standing Stone (AN077) and Maen Chwyf Chambered Tomb (AN076) Scheduled Monuments, north-west of Llandyfrydog. · Carreg Leidr Standing Stone Scheduled Monument (AN067), north of Clorach. · Four Grade II* listed buildings at Llwydiarth Esgol Farm (24866 – 24839). · Maen Addwyn Standing Stone Scheduled Monument (AN069) and Grade II Listed Church of St Michael (5390) close to the existing overhead line near Cae Fabli. · Llech Golman Standing Stone Scheduled Monument (AN070), north-west of Capel Coch. · Listed buildings along the B5111 and Grade II Listed Windmill nearer the centre of Capel Coch. · Grade II* Church of St Caian (5403), the nearby Grade II Listed Plas Tregayan house (5404) plus a further nine Grade II listed buildings which make up elements of the Tregayan estate.</p>	<p>National Grid once again acknowledge the duty imposed under Section 66(1) but fail to give it full cognisance.</p>	<p>Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 imposed a "General duty as respects listed buildings in exercise of planning functions." Subsection (1) provides: " In considering whether to grant planning permission for development which affects a listed building or its setting , the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses ."</p>	<p>With reference to a very important Landmark Court Case Judgement ;Barnwell Manor Wind Energy Ltd V East Northampton D.C. Justice Lang J. concluded ; " In order to give effect of the statutory duty imposed under Section 66(1), a decision maker should accord considerable importance, special regard and weight to the desirability of preserving the setting of the Listed Buildings when weighting this factor in the balance with other material considerations which have not been given this special statutory status."</p>

Cultural Heritage	112	W-P Route Options Report, Final. (October 2015)	12 Section 4 Route Options: B5110 North of Talwrn to West of Star.	12.4.7 to 12.4.9. Historic Environment.	There appears to be less heritage receptors within this section but National Grid has the difficult task of trying to arbitrate between the adverse affects to Scheduled Ancient Monuments against ones to Listed Buildings.	National Grid once again recognise the duty imposed under Section 66(1) but again fail to give it full and proper cognisance.	Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 imposed a "General duty as respects listed buildings in exercise of planning functions." Subsection (1) provides: " In considering whether to grant planning permission for development which affects a listed building or its setting , the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses ."	With reference to a very important Landmark Court Case Judgement ;Barnwell Manor Wind Energy Ltd V East Northampton D.C. Justice Lang J. concluded ; " In order to give effect of the statutory duty imposed under Section 66(1), a decision maker should accord considerable importance, special regard and weight to the desirability of preserving the setting of the Listed Buildings when weighting this factor in the balance with other material considerations which have not been given this special statutory status."
Cultural Heritage	113	W-P Route Options Report, Final. (October 2015)	13. Section 5 Route options (North of Menai Strait) : North - West of Star to Anglesey AONB.	Sealing End Compound considerations.	National Grid have identified 3 large search areas. National Grid claim that heritage receptors are relatively well screened and any likely effects on cultural heritage assets could in their opinion be managed, such as through visual screening of a sealing end compound.	It should be noted that even though the visual screening of a sealing end compound might be possible it would be extremely challenging and the transition from the overhead power line to the sealing end compound would be virtually impossible to screen.	Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 imposed a "General duty as respects listed buildings in exercise of planning functions." Subsection (1) provides: " In considering whether to grant planning permission for development which affects a listed building or its setting , the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses ."	With reference to a very important Landmark Court Case Judgement ;Barnwell Manor Wind Energy Ltd V East Northampton D.C. Justice Lang J. concluded ; " In order to give effect of the statutory duty imposed under Section 66(1), a decision maker should accord considerable importance, special regard and weight to the desirability of preserving the setting of the Listed Buildings when weighting this factor in the balance with other material considerations which have not been given this special statutory status."
Cultural Heritage	114	W-P Route Options Report, Final. (October 2015)	14 Section 5 Route Options: Menai Crossing.	14.2.6 to 14.2 10	The designated status of the land and buildings on either side of the Menai Strait is recognised in the sections of the Chapter referred to.	It would appear that NG has given these greater regard than the regard highlighted in Section 66 (1) of the Planning (Listed Buildings and Conservation Areas) Act 1990.	Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 imposed a "General duty as respects listed buildings in exercise of planning functions." Subsection (1) provides: " In considering whether to grant planning permission for development which affects a listed building or its setting , the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses ."	With reference to a very important Landmark Court Case Judgement ;Barnwell Manor Wind Energy Ltd V East Northampton D.C. Justice Lang J. concluded ; " In order to give effect of the statutory duty imposed under Section 66(1), a decision maker should accord considerable importance, special regard and weight to the desirability of preserving the setting of the Listed Buildings when weighting this factor in the balance with other material considerations which have not been given this special statutory status."

Cultural Heritage	115		14 Section 5 Route Options: Menai Crossing.	14.4. Route Options and Underground Crossing Techniques Considered. 14.4.1. to 14.4.16.		The Chapters and Section in regard of this are to a greater degree feasibility studies under investigation and as such it would be inappropriate to make any assumptions at this stage in the absence of evidence.			
Cultural Heritage	116	W-P Route Options Report, Final. (October 2015)	14 Section 5 Route Options: Menai Crossing.	14.5. Summary. 16.2.9.		New Tower design clarifies what was identified and raised in Chapter 5 on the previous document. 16.2.9. "The towers used on the existing overhead line route are lattice steel towers with a typical height of around 50m. This design is typical of pylons across Wales and is a regular feature within Welsh landscapes. As described in Chapter 5, a variety of alternative tower designs are available that would achieve the technical requirements for the new connection; these are shown on Figure 5.2 and represented in the photomontages shown on Figure 5.3 in Chapter 5. The tower types range in form from a lattice tower, which is the modern equivalent of the towers used on the existing route, to low height lattice towers and the newly developed 'T-pylon'. The low height lattice tower carries the conductors that would be suspended from the third set of cross arms on wider bottom cross arms, allowing the height of the standard tower to be reduced to 34m. The T-pylon uses a steel monopole and a single set of cross arms that carry all three sets of conductors that would normally be carried by separate cross arms. This allows the height of a typical pylon to be reduced to around 33m. This is a very different form of tower in terms of its visual appearance, particularly so at locations where there is a sharp change in route direction, where a double monopole construction would be required.	National Gridv point out the impact of alternative line support options and their respective impacts on the environment but do not make any attempt to emphasise the fact that the design, massing and architectural style of the proposed standard pylon is (subjectively) less pleasing than that of the existing pylons from Wylfa to Pentir.		
Cultural Heritage	117	W-P Route Options Report, Final. (October 2015)	Appendices	FIG A2		Fig A2.	Similar to figures in the previous document 9.7 this figure is incorrect in respect to all Listed Buildings and the ability to correctly view the boundaries of designated conservation areas. Similarly other area designations are of a standard such that a meaningful assessment cannot be made.		
Ecology and Nature Conservation	118	Wylfa to Pentir Preferred Route Corridor Selection Report		Fig 3.1, Fig 8.1		Stated position: 'Overhead line assumed throughout'	Yellow corridor: Some undergrounding options should have been included. There is an option for using the existing western line route which heads towards Valley, and then undergrounding alongside the A55 to the Strait. Suggest that this be considered and costed as an alternative kind of 'hybrid' option, which would avoid many adverse impacts but presumably be lower risk and cheaper than undersea options. Also, that undergrounding further back from the Strait be costed for the orange corridor.		

Ecology and Nature Conservation	119	Wylfa to Pentir Route Options Report				Overall coverage of detailed ecological approach	Note that at stages which require more detail, consideration of local habitat areas, ecological records (both existing and gathered to inform National Grid works) will be required. Protected species such as crested newt and reptiles will need to be given due attention, including within methodology and so forth.		Habitats Regulations (2010), Wildlife and Countryside Act (1981, as amended) and others
Ecology and Nature Conservation	120	Wylfa to Pentir Route Options Report	8	8.5.2		Bird strike risk review of vulnerable/sensitive bird species, sites on Anglesey designated for these vulnerable species and known movements of sensitive species on Anglesey to identify locations where construction / operation of overhead line may increase the risk of bird strikes with overhead lines.	The review does not appear in the Initial Wylfa-Pentir Corridor Report referred to, but may have been helpful to have somehow covered main findings in the present consultation. The ongoing gathering of sufficient data on birds in the proposal area is important, particularly for example Whooper Swans which use areas near to Llyn Alaw SSSI.		Habitats Regulations (2010), Wildlife and Countryside Act (1981, as amended) and others
Ecology and Nature Conservation	121	Wylfa to Pentir Route Options Report	8	8.5.2		Review of habitats within the Cors Erddreiniog SSSI and National Nature Reserve (NNR), which is part of the Corsydd Môn (Anglesey Fens) Special Area of Conservation (SAC) and Corsydd Môn a Llyn (Anglesey and Llyn Fens) Ramsar site, to identify those sensitive to the development of an overhead line, and to identify whether towers for a new overhead line could be positioned within the SAC close to the existing overhead line without directly affecting designated features.	This information does not appear to be in the present consultation; although not essential at this stage, more detail will be required in future to inform detailed siting and methodology.		Habitats Regulations (2010)
Ecology and Nature Conservation	122	Wylfa to Pentir Route Options Report	9	9.5.5		Of these two options, only Route Option 1B passes close to an ancient woodland. Woodland habitat is uncommon on Anglesey, but during the detailed design of both route options it should be possible to minimise the risk of direct effects on woodland habitat.	Support minimising risks.		
Ecology and Nature Conservation	123	Wylfa to Pentir Route Options Report	10	10.4.17		The overwintering populations of Whooper Swans and other wildfowl and waders that reside within the SSSI may be affected by the risk of collisions with the overhead line conductors if their foraging areas are to the east of the reservoir. Further survey work and consultation with local ornithological groups is needed to confirm the risk of this effect. Mitigation in the form of flight diverters fitted to the upper conductors, which increase the visibility of the line, might be possible, but these would add to the visual effects. Therefore, by applying the precautionary principle at this stage, route options to the east of the existing overhead line would be preferred from an ecological perspective.	Agree on precautionary principle of going further east, but the gathering of the ornithological information referred is important information. It is understood that there are important Whooper Swan feeding areas in the section covered in 11, to the south.		Wildlife and Countryside Act (1981, as amended) and others
Ecology and Nature Conservation	124	Wylfa to Pentir Route Options Report	11	11.4.16		In light of the above, from an ecology perspective at this stage, route options outside of the SAC and as far from the SAC as possible were preferred (i.e. a non-parallel route option west of Capel Coch), so as to avoid the risk of any significant effect on the SAC. The risk of not being able to accurately predict the risk and scale of significant effects that might be caused to the Fen, and the consequent confidence around the statutory tests pertaining to effects upon the integrity of the site, were causes of concern.	Support avoiding the SAC as part of a precautionary approach due to the complexity of data likely to be required to assess whether there would be significant effects under the Habitat Regulations (2010).		Habitats Regulations (2010)
Ecology and Nature Conservation	125	Wylfa to Pentir Route Options Report	12	12.4.10		North-west of Talwrn the western deviation route options adjoin the boundary of the Neuadd Wen Wildlife Site, which is also part of the Anglesey Fens SAC and Caeau Talwrn SSSI. Neuadd Wen covers part of an area comprising marshy grassland, valley mire, basic flush and a small area of woodland. Whilst direct effects upon the site could be avoided (i.e. avoiding construction activities within the site),	Slight text inaccuracy: the Wildlife Sites (in three parts) and SAC/SSSI do not overlap, but cover different areas bordering one another.		

Ecology and Nature Conservation	126	Wylfa to Pentir Route Options Report	12	12.4.11	Towards Llangefnï, the western parallel route option would oversail the Gylched Covert Wildlife Site, which is a broad-leaved semi-natural woodland of county-level importance. The woodland potentially supports a population of red squirrels (a protected species); this would have to be confirmed via appropriate survey at later stages in the project development. A site visit to understand the potential effect on the woodland from an overhead line indicated that the permanent removal of mature trees would be likely. Therefore, route options in Section 4 that avoided the need for mature tree removal were preferred on ecology grounds.	Agree that this area should be avoided if possible on ecological grounds; if the site cannot be avoided due to other considerations, early gathering of data on red squirrels will be essential, and appropriate mitigation is likely to be required. (Note - red squirrels have been expanding range on Anglesey in recent years.)		Wildlife and Countryside Act (1981, as amended)
Ecology and Nature Conservation	127	Wylfa to Pentir Route Options Report	12	12.5.3	Further design and assessment is needed to confirm the significance of the likely effects upon the residential property and the Gylched Covert woodland from an overhead line along the western parallel route corridor 4B. Therefore, the route option has been retained pending this further work. The slightly longer western deviation of Route Option 4A has also been presented for consultation as a feasible alternative. Shorter deviation options were dismissed to avoid sharp changes in the direction of the route and the larger pylons that this would necessitate.	If the alternative route, not directly impacting Gylched Covert is chosen, a robust case should be set out to show that avoiding the woodland would not impact on red squirrels. If there is doubt, mitigation would be requested.		Wildlife and Countryside Act (1981, as amended)
Ecology and Nature Conservation	128	Wylfa to Pentir Route Options Report	13	13.1.1	This section [Section 5] of the Orange Route Corridor introduces many additional complexities to the design of the connection, including the need to identify onshore routes for the proposed buried cables, technically and environmentally acceptable means of crossing the Menai Strait using cables, and the need to site permanent above ground facilities in the form of the secure SECs.	More information on how the Menai can be crossed is essential, and not having this limits the present consultation for potential line routes. The Strait's SAC designation will almost certainly make options at the Strait more limited. It would have been helpful had more information been provided on emerging geological and ecological issues for the present consultation (see also comment on Chapter 14 below).		Habitats Regulations (2010)
Ecology and Nature Conservation	129	Wylfa to Pentir Route Options Report	13	13.4.11	Anglesey North SEC Search Area contains the Coed Braint / Syglen / Dyfnia Wildlife Sites, which is a wetland site known for a variety of breeding birds. Afon Rhyd-Eilian passes through the centre of Anglesey North, from north-east to south-west, and its associated flood zones support the wetland sites. A SEC could be positioned to avoid these constraints, although consideration would need to be given to the indirect risks posed by flood and groundwater effects. A SEC closer to the Menai would allow an overhead line to oversail these sites and minimise the risk of direct adverse effects.	Concerns that the Wildlife Sites might appear as a low priority alongside other considerations and be impacted as a result. Also, the potential to spend much time on this and other questions helps underline the need to better understand and address Strait crossing options and limitations first.		
Ecology and Nature Conservation	130	Wylfa to Pentir Route Options Report	13	13.4.40	Coed Glanyrafon Wildlife Site and Ancient Woodland is located in the middle of Anglesey South SEC Search Area, whilst Route Option 5A crosses the Gwydryn grassland Wildlife Site. A SEC could be sited to avoid the woodland, but may also benefit from using it as established visual screening. Route Option 5A could possibly be designed to oversail the grassland Wildlife Site without the need for pylons to be located within it as it is less than 200m wide where crossed.	If unavoidable, would favour oversailing both sites. Note that if there are potential impacts on the woodland site, this will almost certainly trigger need for red squirrel survey.		Wildlife and Countryside Act (1981, as amended)

Ecology and Nature Conservation	131	Wylfa to Pentir Route Options Report	14	All	Principle of not consulting on Menai Crossing at this stage, but rather giving this outline coverage at this stage, ahead of further information.	More information on how the Menai can be crossed is essential, particularly for potential line routes near to the Strait. The Strait's SAC designation will almost certainly make options at the Strait more limited. More information required as a matter of priority on geology and other aspects to be taken into consideration.		Habitats Regulations (2010)
Ecology and Nature Conservation	132	Wylfa to Pentir Route Options Report		14.2.13 and Fig C5, Appendix C	Lack of mention of Wildlife Sites near to Strait	No Anglesey Wildlife Sites are mentioned, but it would have been helpful to note these for the record (there are three within Anglesey side of the crossing area as shown within black dashed lines Fig C5 in Appendix C).		
Energy Island	133	Project News		Page 1		Headings/content too vague on what Consultation covers. Second set of pylons/wires, sealing end compounds needs to be more explicitly stated from start. Use of vague terminology like 'route options' and 'undergrounding' is deceptive. Feared that this will lead to lack of / reduced engagement		
Energy Island	134	Project News		Page 1		Does not tell recipient from outset that the reason they have received this is their proximity to proposed work. Feared that this will lead to lack of or reduced engagement		
Energy Island	135	Project News		Page 1		Photos are deceptive as they depict one set of pylons. Artists' impression showing double set would have been more transparent		
Energy Island	136	Project News		Page 1		Orange route option is almost presented as a fait accompli. Extra bullet point needed explaining what happened to subsea/hybrid options, or cross-reference to where answers may be found.		
Energy Island	137	Project News		Page 1		Sealing end compounds concept is introduced, would be useful to cross refer to p3 here		
Energy Island	138	Project News		Page 1		How you can give us your Feedback' - should also have referred to Events, with cross-reference		
Energy Island	139	Project News		Page 1		'All our contact details are on back page' - clearer to refer to back page by number, namely p4. By the time document has been opened out to see the map, it is unclear what the 'back page' is. This occurs several times.		

Energy Island	140	Project News		Page 2		Prominence given to subsea option is good. However the options outlined here differ to those on p5 of Phase Two Consultation Strategy document, which might confuse those who read all the recommended documents. Why is 'The Challenge of Subsea Connection' film not cross-referred to here? It would also have aided like-for-like comparison if National Grid had provided similar statistics for their preferred option i.e. listing approximate cost, cable length/type, practical reasons this works etc.		
Energy Island	141	Project News		Page 2		Unclear whether hybrid option is affected by fault-fixing issue as per subsea (up to 6 months to fix, reduced running of power etc.). The reason this is not clear is because hybrid is not described here as subsea whereas the other two clearly are. There also seems to be an error on the 4th bullet point of the hybrid diagram - the hybrid does not go underground at the Menai Strait according to the map.		
Energy Island	142	Project News		Page 2		Unclear from page 2 why hybrid option was not pursued. If it is cost, need to state this more explicitly		
Energy Island	143	Project News		Page 3	Finding the right route - we'll also look at alternative pylon designs	Visuals needed here or cross refer to where they can be found		
Energy Island	144	Project News		Page 3	Undergrounding	Need to explain impact of undergrounding or cross-refer to explanation. Also if possible, cross-refer to reports by independent authority such as NRW for their view on impacts of different options.		
Energy Island	145	Project News		Page 3	Crossing the Menai	Refers to Overview Document Oct 2015 but it is unclear how to get hold of this - need cross reference to centre page information points or to online link. Also unclear how tall sealing end compounds are and how far they must be sited from the nearest residential / business premises.		
Energy Island	146	Project News		Page 4		It is unclear how to provide feedback or how to obtain feedback forms. Too many obstacles to providing feedback. It is considered that a Feedback Form with prepaid postage should have been included with the Project News.		
Energy Island	147	Project News		Page 4	Government ultimately decides	Statement makes it unclear to what extent feedback is genuinely given meaningful consideration. It is possible that matters could be mis-construed to the effect that the exercise might be considered to be a fait accompli based on the cheapest price.		
Energy Island	148	Project News		Page 4	Contact us	Would have been useful to cross refer to events details on centre pages, also link/cross-reference to how you get a Feedback Form needed here.		

Energy Island	149	Project News		Page 4	Useful Documents	Link to film 'The Challenge of a Subsea Connection' needed here		
Energy Island	150	Project News		Centre Page		The map which formed part of National Grid's project news was presented in a clear and concise format. Cross-reference to online interactive map would have been useful however as it would then have been possible to search specific postcodes. It is hoped that the Consultation Events will have proper visuals in terms of infographics and 3-D mapping as it is hard for people to realistically visualise the effect of the proposals without these. This is especially relevant where there are hard either/or choices to be made to the route e.g. red squirrel wood or our view/house value. Opinions from independent bodies like NRW would help inform opinion here e.g. expert views on how this will affect the red squirrel population; and expert opinion on how pylons will affect house value etc. It would be useful to have visuals showing what the 2 lines of pylons will look like, and 3-D mapping would work well in this respect. Without visuals, people are having to guess as to what they think the best routes are.		
Energy Island	151	Project News		Centre Page section 3		Need to explain impact of equipment or cross-refer to where it is explained.		
Energy Island	152	Project News		Conclusions on Document		<p>It is unclear what the Consultation is about. Woolly terms such as 'route options', 'undergrounding' and 'new connection' hide the reality that we are talking about a second set of pylons, wires and large sealing end compounds and substations. This needs to be made more explicit so as to engage people such as:</p> <ul style="list-style-type: none"> • Need reference to Q&A document. • Q&A document needs to be online and interactive. • Unclear how to get a Feedback Form. • Should have included prepaid Feedback Form when sending out Project News. Unclear that there will be second set of pylons. • Unclear why we can't use existing line after Magnox stops generating, and just add another wire to that. • Unclear with subsea option why can't default to existing Magnox line if fault develops, there will be 'space' for it once generation ends. • Unclear if Magnox line will be dismantled once generation stops. Unclear why hybrid option was not pursued. • Unclear whether 'value for money' really means 'go for the cheapest option' regardless of other factors. • Greater use of visuals/infographics would have helped people 'see' what the Consultation was about, with cross-references to you-tube style films explaining in simple terms what the consultation concerns and why xyz are not options, and why the preferred option was deemed best. <p>These and similar questions could go into Q&As.</p>		

Energy Island	153	Review of Overview document Oct 2015		Page 1		Front page depicts one line of pylons. This could be construed as being deceptive and misleading. Title needs to be more explicit on what Consultation is about i.e. second set of pylons needed, new substations, (disruptive) undergrounding plus sealing end compounds to be put in place.		
Energy Island	154	Review of Overview document Oct 2015		Page 3		Top left, needs to be more transparent and explicit about what is being proposed (pylons, substations, undergrounding, sealing end compounds). It is important to get these messages in the titles so as to capture interest immediately.		
Energy Island	155	Review of Overview document Oct 2015		Page 5		It is unclear which route Codling Park/Greenwire will take? Page 5 of the Overview Document seems to be different to that stated on p4-5 of the Stage Two Consultation Strategy document.		
Energy Island	156	Review of Overview document Oct 2015		Page 9		Unclear why hybrid option was not taken up. There also seems to be an error in the text which mentions undergrounding at the Menai Strait for the hybrid. The map shows differently.		
Energy Island	157	Review of Overview document Oct		Page 12		Height of sealing end compound unclear. Also how far away does it have to be from houses.		
Energy Island	158	Review of Overview document Oct 2015		Page 13		Were these statistics taken from areas which were comparable to Anglesey and where a double line of pylons was proposed? If not, they are misleading and irrelevant and serve only to dis-credit NG's consultation.		
Energy Island	159	Review of Overview document Oct 2015		Page 14		Needs cross-reference to document which shows what different pylons look like. 3-D mapping here would be even better to illustrate the point.		
Energy Island	160	Review of Overview document Oct 2015		Page 16		People need to see the options and how it affects the landscape to make an informed choice about location of the line. Reports from experts e.g. NRW would help informed decision-making, where such reports are available.		
Energy Island	161	Review of Overview document Oct 2015		Page 22		Bullet point 3 'closer to several properties'. How close? Visuals/3-D mapping would be useful for informed choice-preferences		
Energy Island	162	Review of Overview document Oct 2015		Page 24		Last bullet point: explain impact or cross-refer to document which does. People need to have more information, visual and otherwise, on length and type of disruption so that they can make informed choice preferences		
Energy Island	163	Review of Overview document Oct 2015		Page 26		Difficult choices would benefit from information from experts e.g. impact on red squirrel population etc. If this information is not available, then it needs to be pointed out. This type of information needs to go into the Q&A's.		
Energy Island	164	Review of Overview document Oct		Page 28		Bullet point 4 - unclear what benefits option 5A are as they are not stated.		

Energy Island	165	Review of Overview document Oct 2015		Page 28		Inadequate information given for informed feedback. What is impact? How close can undergrounding go to houses? How close can pylons go? 'Electromagnetic Field Studies' links given do not clarify answers to these questions, and this information should go into the Q&As.		
Energy Island	166	Review of Overview document Oct 2015		Page 30		Unclear what influence Feedback will have. It is intimated here, and elsewhere several times in the Consultation documents, that it is ultimately the Government's decision. Needs to be clearer why Feedback is nevertheless crucial. Many will feel there is no point giving their opinion unless this is clarified.		
Energy Island	167	Review of Overview document Oct 2015		Page 31		Unclear how to provide Feedback. Cross-references or greater guidance needed. This issue could have been avoided had a Feedback Form with prepaid postage been sent with the Project News.		
Energy Island	168	Review of Overview document Oct 2015		Page 32		Unclear how wide the area to be stripped will be.		
Energy Island	169	Review of Overview document Oct 2015		Page 33-34-35		Useful information. It would be good to have cross-referred to this more in the other documents so that people can give more informed feedback.		
Energy Island	170	Review of Overview document Oct 2015		Page 34		'Long term visual impact low' - people also need to know short and mid-term impact as this will affect feedback on preferred routes.		
Energy Island	171	Review of Overview document Oct 2015		Page 35		How tall is a typical gantry?		
Energy Island	172	Review of Overview document Oct 2015		Back page		IACC stress-tested National Grid's website to try to find the 'The Challenge of a subsea Connection' film by following the link on the back page, namely www.nationalgrid.com/northwalesconnection . We could not locate the film here, nor was there an obvious button to the Consultation part of the site. It took a while to realise that there was a section for the consultation, entitled 'North Wales Connection Project'. There needs to be a 'Consultation Open' button on the opening page of the main National Grid website, and not just on the 'North Wales Connection Project' site (where we eventually found the film). This was a circuitous process.		
Energy Island	173	Feedback Form		Opening paragraph		It is not clear what the Consultation is about. The presence of pylons etc. needs to be explicitly stated.		

Energy Island	174	Feedback Form		Opening page		The Overview Document is needed in order to fill in this form, yet this is lost in the script and people may not realise they need both to fill it in as these instructions are not in bold or given prominence. Some may give up if they have not got all the documents, as some people do not want to go online to get it. This potential obstacle can be easily removed by making it clear in a bold box that the Overview Document is needed.		
Energy Island	175	Feedback Form		Opening Page		This page should also refer to the Q&As as these might help people fill in the form and some may not realise that the Q&As exist.		
Energy Island	176	Feedback Form		Q1		Unclear why this just says subsea and not also hybrid. The space given to reply here needs to be far longer.		
Energy Island	177	Feedback Form		Section 5 page 5, last paragraph		Need to state that feedback given now could well influence the next stage, so it is important not to wait until spring/summer 2016 only to be confronted by already-restricted options based upon the current Consultation responses. It is not clear how influential the current responses will be nor how they will inform the next set of options.		
Energy Island	178	Questions & Answers		General comment on whole document		The questions and answers would benefit greatly from being online and interactive, so that new questions from the public can be posted online, and so encouraging valid questions which may not have been covered by National Grid's set of questions, which are very limited in scope. For example, questions are needed on several aspects including: consultation events/locations/times; what happens to the existing 'magnox' overhead line once generation finishes there; more information on EMFs, distances pylons / substations / undergrounding etc. need to be from nearest house; Answers on how to provide feedback; Answers on Technical documents list and how to access them.		
Energy Island	179	Questions & Answers		Q1		Pylons are not mentioned - this needs to be more explicit		
Energy Island	180	Questions & Answers		Page 1		Refers to Project News Autumn 2015 - needs a link or cross-reference to page 8		
Energy Island	181	Questions & Answers		Page 1		Reiterate deadline in prominent location and bold at top of page 1		
Energy Island	182	Questions & Answers		Page 2		Pylons not mentioned - needs to be more explicit		
Energy Island	183	Questions & Answers		Page 3		Hybrid is not covered and there is a distinct lack of detail on why this option was not pursued		
Energy Island	184	Questions & Answers		Page 3 Q3		Is this survey like-for-like. If not, these results could be misleading and would serve to undermine NG's efforts of meaningful engagement.		

Energy Island	185	Stage two consultation Strategy Document		Page 3		Needs to be more explicit that the consultation is about a second set of pylons/undergrounding/substations/sealing end compounds.		
Energy Island	186	Stage two consultation Strategy Document		Page 5		Unclear what is meant by ' <i>we continue to keep all options under ongoing review</i> ' - does this mean the orange route options, or that the subsea/hybrid etc. are still potentially on the table. This is not clear.		
Energy Island	187	Stage two consultation Strategy Document		Page 7		' <i>Construction of a new overhead line</i> ' - woolly, need to be more explicit about what this entails and will look like i.e. second set of pylons, substations, sealing end compounds etc. Need clarity on whether existing line will remain here. Visuals would help.		
Energy Island	188	Overall Conclusions		All documents in the October 2015 Consultation		<p>1. Lack of clarity over what the Consultation is really about is a fundamental flaw which runs through all the documents. Sanitising terms such as 'new connection' 'orange corridor' need to be accompanied by terms such as 'second set of pylons in places', 'new substations' 'large sealing end compounds' etc. Greater transparency on this would lead to greater engagement by those potentially affected and better proportion of feedback. 2. The photographs used invariably show one overhead line, which reinforces the perception that not much will change visually. We fear that many people will not have grasped what this consultation is really about. 3. There are 80 pages of text in total, which is far too much for the average person. 4. There could have been far greater use of visuals, infographics, You Tube videos etc. to present the information in a more accessible and easy-to-grasp manner. There could have been more use of fabulous digital tools, to make the information easier to understand. 5. The Feedback Form should have been sent out with the Project News Oct 2015 document. 6. And so could the Overview Document which is needed to complete the form. 7. There is not enough cross-referencing in the texts - one cannot be expected to read all 80 pages to reach the bottom of what the Consultation is about. 8. Finally, the option of undergrounding was not covered in the options list, so people will not be feeding back on this. This (and many other questions and answers) needs to go into the Questions and Answers, which should 9. be online and interactive.</p>		

Environmental Services	189	Wylfa to Pentir Preferred Route Corridor Selection Report.		Figure 9.7		The island is pepper potted with prehistoric features which is testament to its rich historic lineage. Figure 9.7 shows many scheduled monuments within the orange route.	At a time when the government are considering spending over £1bn tunnelling the A303 at Stonehenge in order to protect the historic landscape, it is perplexing to note that overhead lines (which will detract from Anglesey's monument settings) are being considered. It is possible that future generations may place greater importance on these structures and recognise Anglesey's importance in pre-history and choose to address this issue and seek to restore some of these prehistoric landscapes. It seems sensible and cost effective to have the foresight to take action now to prevent any further impacts rather than leave this until later.	In figure 9.8, (pg. 73) the existing overhead line can be clearly seen in the background of the Llanfechell Standing Stones photograph.	One of the wellbeing Goals in the Wellbeing of Future Generations (Wales) Act 2015 is "A society that promotes and protects culture, heritage and the Welsh language, and which encourages people to participate in the arts, and sports and recreation.
Environmental Services	190	Wylfa to Pentir Preferred Route Corridor Selection Report.	2	2.1.2.		National Grid has approximately 7,200 kilometres (km) of overhead lines and a further 700km of underground cabling. However, National Grid document "Undergrounding high voltage electricity transmission lines - The technical issues" (January 2015) suggests that it is 7,200km overhead and 1,400km underground. Closer to 20%.	Approximately 20% of National Grid's transmission system is underground. Suggesting that this is not a rare occurrence.	SEE ROW 8.	National Grid have recently decided to underground cables in Snowdonia because of landscape concerns. Undergrounding now, may avoid these decisions being re-visited in the future.
Environmental Services	191	Wylfa to Pentir Preferred Route Corridor Selection Report.	5	5.3.10		The main disadvantage with underground cabling buried in trenches is the technical constraints, environmental effects during construction and costs associated with their operation, maintenance and replacement; for example, any faults would necessitate excavation in order to access the cables. Once in place, the construction of buildings, planting of trees and use of deep cultivating equipment are prohibited over the cables. During operation, a corridor of approximately 35m wide encompassing the buried cable would still be required for maintenance access; referred to as an easement.	A recent study by the Institution of Engineering and Technology and Parsons Brinckerhoff suggest that operational costs of underground cables are similar to those required for overhead lines.	SEE ROW 8.	
Environmental Services	192	Wylfa to Pentir Preferred Route Corridor Selection Report.	5	5.3.7 -5.3.10		Direct Buried Cable Installations : Cable installation can be done using a variety of techniques. The most common method is by open cut trenching. Each trench would be approximately 1.5m wide by 1.2m deep (see Figure 5.9). Typically two or four trenches are required, each accommodating three separate cables (one for each of the three electrical phases). A central construction haul route is established, and peripheral drainage installed along the construction corridor. The soils excavated from the access track and working areas are also stored within the corridor. These requirements result in a typical working width of between 40m and 50m (see Figure 5.9), although this can be reduced significantly in localised areas to avoid sensitive sites or features.	The status of the Island as a Geopark should be borne in mind and the possible effects not just on Biodiversity but also Geological Conservation as outlined in EN-1. Furthermore, the impacts on noise and dust generated from excavation activities are likely to be more significant. Particular regard will also need to be given to drainage and the impact any excavations could have on private water supplies and septic tank drainage systems, of which there are a great number on the island.		Horlock Rules for Substations and Sealing End Compounds.
Environmental Services	193	Wylfa to Pentir Preferred Route Corridor Selection Report.	5	5.3.21		For all cabling works, vegetation would be cleared and topsoil stripped from the areas of ground to be disturbed in the working area. Where required, drainage improvement works would be implemented to maintain existing land drainage arrangements. Once the cables have been laid and, where necessary, any excavations backfilled, the temporary haul road and access tracks would be removed and soil replaced. Cables have 40 year life.	Cabling work may have more significant implications for noise, dust, ecology, archaeology, hydrology and geology.		

<p>Environmental Services</p>	<p>194</p>	<p>Electricity Transmission Cost Study: How does the independent report compare to National Grid's view?</p>	<p>Grid Website</p>		<p>On 31 January 2012, the Institution of Engineering and Technology and Parsons Brinckerhoff published a report into the costs of new electricity transmission infrastructure. The report analyses the costs of installing and maintaining new high voltage transmission circuits under the ground, under the sea and overhead.</p>	<p>The report finds that, excluding build costs, the cost of operation, maintenance and energy losses over the life of the connection is broadly the same for undergrounding and overhead lines. However, the report also concludes that the capital build costs on their own vary greatly – undergrounding is approximately 10 times more expensive to build than overhead lines. When the two amounts are combined and the total cost over the life of the connection (build costs and operational and maintenance costs) is calculated, undergrounding costs around five times more than overhead lines.</p>	<p>see: http://www2.nationalgrid.com/uk/In-your-area/Projects/North-Wales/Capital Cost Build/km = £1.6m Overhead v £16.7m Underground. Total Lifetime £4m overhead v £18.9m underground.</p>	
<p>Environmental Services</p>	<p>195</p>	<p>Wylfa to Pentir Preferred Route Corridor Selection Report.</p>	<p>6</p>	<p>6.4.12</p>	<p>Using publicly available information and site visits, maps were produced to show the 'baseline' environmental and socio-economic data within the study area. These data were reviewed to identify potential issues or sensitive locations or designations for each of the appraisal topics (see Section 8). The review also confirmed there was no need to modify the route corridors presented for public consultation in 2012.</p>	<p>The Local Authority has prepared an SPG on Onshore Wind Energy (Jan 2013) http://www.anglesey.gov.uk/Journals/2013/04/03/m/p/c/S PG_Wind_Energy_Adopted_2013.pdf and Appendix 3 of that document has a series of maps showing:-</p> <ul style="list-style-type: none"> • Visual and sensory evaluation • Cultural landscape evaluation • Historic landscapes • Geological landscapes • Landscape habitats 	<p>Schedule 9(1) in Section 38 of the Act requires National Grid to consider the effects of its works on amenity by having regard to: "the desirability of preserving natural beauty, of conserving flora, fauna, and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest". The Maps in the SPG seem to indicate that an OHL would not meet this requirement along the orange route.</p>	<p>National Grid have clearly not considered these designations in their appraisal, because the orange route clearly impacts on several areas designated in these maps as being "high" or "outstanding". The "linear" effect of the Overhead Line is surely as significant if not more so, than a single turbine or group of turbines. Indeed, section 1.7.2 of EN-5 (National Policy statement for Electricity Network Infrastructure) states: "electricity networks infrastructure development has similar effects to other types of energy infrastructure, although because of the linear nature of electricity lines, effects are spread across a wider area".</p>
<p>Environmental Services</p>	<p>196</p>	<p>Wylfa to Pentir Preferred Route Corridor Selection Report.</p>	<p>2</p>	<p>2.4.1</p>	<p>Schedule 9(1) in Section 38 of the Electricity Act 1989 specifically requires National Grid to: "<i>have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and or protecting sites, buildings and objects of architectural, historic or archaeological interest; and shall do what it reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside on such flora, fauna, features, sites, buildings or objects.</i>"</p>	<p>We do not believe that National Grid's decision to erect an Overhead Line from Wylfa to Llanfair PG conforms with these duties for several reasons which will be explained in greater detail in the Council's response. Furthermore, the consultation does not take into account the damaging effects already done by the existing line and cumulative impact.</p>	<p>Local Authority's Onshore Wind SPG shows constraint maps which seem to show that the orange route would have impacts – contrary to the requirements of section 38. Many, but not all of these constraints are mentioned in the document:-</p> <ul style="list-style-type: none"> • Anglesey Fens Special Area of conservation and Corsydd Mon. • Various SSSIs • Historic woodlands and houses. • Areas of cultural and historical value. • Many Grade I & II Listed buildings. 	<p>NPS EN-5 states that: "... wherever the nature or proposed route of an overhead line proposal makes it likely that its visual impact will be particularly significant, the applicant should have given appropriate consideration to the potential costs and benefits of other feasible means of connection or reinforcement, including underground and sub-sea cables where appropriate." (paragraph 2.8.4).</p>

Environmental Services	197	Wylfa to Pentir Preferred Route Corridor Selection Report.	9	9.2.4		States that "adverse effects on views from the AONB would be less on the orange route"	This implies, as we already suspect, that there will still be some adverse effects from the AONB and once again the development of OHL fails the tests which are required to be met.	Schedule 9(1) in Section 38 of the Act requires National Grid to consider the effects of its works on amenity by having regard to: "the desirability of preserving natural beauty, of conserving flora, fauna, and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest".	
Environmental Services	198	Wylfa to Pentir Preferred Route Corridor Selection Report.	4	4.2.24		The legal policy framework is strongly supportive of preserving the natural landscape and heritage within the AONB	The Well-being of Future Generations (Wales) Act 2015 implies a wider sense of preservation e.g. a "Resilient Wales", is classified as a nation which maintains and enhances a biodiverse natural environment with healthy functioning ecosystems that support social, economic and ecological resilience and the capacity to adapt to change. It doesn't just apply to the AONB.	The Well-being of Future Generations (Wales) Act 2015	
Environmental Services	199	Wylfa to Pentir Preferred Route Corridor Selection Report.	8	8.1.3		National Grid mentions the use of underground cables as an alternative to a new overhead line where there are adverse environmental or socio-economic effects.	If we use this criteria, it is difficult to see where there is justification for an overhead line on the island as this will impact upon many areas of high or outstanding landscape, cultural, historical and geological importance. Furthermore, a health Impact assessment has not been conducted to determine the likely effects on health and wellbeing, including socio-economic effects and we question whether an OHL conforms with the sustainable development principles outlined in the Wellbeing of Future Generations Act 2015.	One of the Wellbeing goals is "A society in which people's physical and mental well-being is maximised and in which choices and behaviours that benefit future health are understood. Note the word maximised: if cost is the main driving factor behind choosing overhead lines then health is clearly "compromised" for the sake of cost. See 2.8.9.	In paragraph 2.8.9 of the Wylfa to Pentir Route Corridor Selection Report it says: "... Government has not laid down any general rule about when an overhead line should be considered unacceptable. The IPC14 should, however only refuse consent for overhead line proposals in favour of an underground or subsea line if it is satisfied that the benefits from the non-overhead alternative will clearly outweigh any extra economic, social and environmental impacts and the technical difficulties are surmountable."
Environmental Services	200	Wylfa to Pentir Preferred Route Corridor Selection Report.	3	3.4.2		The decision to single out Plas Newydd and Vaynol Estates as requiring special treatment.	Other property owners on the island may feel their properties deserve equal protection. Also, this favours larger more wealthy property owners and fosters social inequality. There is also no consideration of a buffer zone, the effect doesn't stop at the boundary of these properties.	Wider Determinants of Health and Social Inequality.	The Well-being of Future Generations (Wales) Act 2015
Environmental Services	201	Wylfa to Pentir Preferred Route Corridor Selection Report.	8	8.2.3 & 8.4.29		Document singles out specific properties for special consideration.	This could be construed as unequitable and unjust for those residents and communities not deemed significant enough to be considered in a similar light.	Wider Determinants of health and WHIASU Guidance on conducting HIAs	The Well-being of Future Generations (Wales) Act 2015
Environmental Services	202	Wylfa to Pentir Preferred Route Corridor Selection Report.	6	6.4.7		Reference to NPS EN-1 and the generic list of issues	EN-1 makes reference to health and wellbeing. The generic list is not a comprehensive list of the "wider determinants of health". While NG have ruled out many of the subjects on the generic list as not being of assistance in informing the route options appraisal (6.4.9) a Health Impact Assessment (HIA) could have been of value in determining the benefits of various subsea, hybrid, and underground and over ground options.	Wider Determinants of health and WHIASU Guidance on conducting HIAs	

Environmental Services	203	Wylfa to Pentir Preferred Route Corridor Selection Report.	2	2.5.1	National grid mention the need to take into account noise and various issues into consideration and yet in 6.4.9 they highlight that this and other issue that may affect health have been given limited weight because they are similar to all routes.	National Grid have repeatedly been advised to undertake a HIA, and to date have not done so. Undergrounding of cables would be a significant mitigating factor in allaying fears about the pylons and a HIA could have been undertaken in the options appraisal stage.	Wider Determinants of health and WHIASU Guidance on conducting HIAs	The Well-being of Future Generations (Wales) Act 2015
Environmental Services	204	Wylfa to Pentir Preferred Route Corridor Selection Report.	2	2.6.3.	Once a preferred route corridor and alignment is selected, National Grid will proceed through the Environmental Impact Assessment (EIA).	By this time, the opportunity to consider some of the wider determinants of health will have been lost as the route and method of transmission will have already been determined.	Wider Determinants of health.	One of the Wellbeing Goals in the Well-being of Future Generations (Wales) Act 2015 is "a society in which people's physical and mental well-being is maximised and in which choices and behaviours that benefit future health are understood".
Environmental Services	205	EN-5		paragraph 2.8.9	... Government has not laid down any general rule about when an overhead line should be considered unacceptable. The IPC14 should, however only refuse consent for overhead line proposals in favour of an underground or subsea line if it is satisfied that the benefits from the non-overhead alternative will clearly outweigh any extra economic, social and environmental impacts and the technical difficulties are surmountable.	This statement should be considered carefully. It is debatable if it takes into account the current OHL where there are clearly existing adverse visual impacts which will only be compounded by the addition of a second. A second line cannot be considered in the same context as a single new line and the benefits of non-overhead justify the extra expenditure. In every section of the orange route (apart from the possible exception of near Cors Erddeiniog) National Grid state that there are no known environmental or technical reasons to preclude burying cables.	EN-5	It is possible to draw similarities between this development and the Wind Turbines. The Local Authority has prepared an SPG on Onshore Wind Energy (Jan 2013) http://www.anglesey.gov.uk/Journals/2013/04/03/m/p/c/SPG_Wind_Energy_Adopted_2013.pdf and Appendix 3 of that document has a series of maps showing:- <ul style="list-style-type: none"> • Visual and sensory evaluation • Cultural landscape evaluation • Historic landscapes • Geological landscapes • Landscape habitats
Environmental Services	206	Planning Policy Wales (November 2012)		12.13.8	Health considerations can be material considerations in determining applications for planning permission and prior approval as, in principle, can public concerns in relation to such effects.	In a landscape pepper potted with properties it is inevitable that the overhead lines will cause concern to some residents. In light of this fact National Grid have on several occasions been advised to undertake a HIA, and to date have not done so. Undergrounding of cables would be a significant mitigating factor in allaying fears about the pylons.	The Well-being of Future Generations (Wales) Act 2015 places a well-being duty on public bodies in Wales and imposes a requirement to implement sustainable development defined as:- <i>"... the process of improving the economic, social, environmental and cultural well-being of Wales by taking action, in accordance with the sustainable development principle, aimed at achieving the well-being goals"</i>	There are seven well-being goals which are described as being indivisible from each other and explain what is meant by the well-being of Wales. The sustainable development principle is a fundamental part of how public bodies should operate and stipulates that they must act in a manner which seeks to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs, by taking account of the sustainable development principle.

Environmental Services	207	Overarching National Policy Statement for Energy [EN-1]]		4.10.2	Paragraph 4.10.2 states that :- <i>"The planning and pollution control systems are separate but complementary. The planning system controls the development and use of land in the public interest. It plays a key role in protecting and improving the natural environment, public health and safety, and amenity, for example by attaching conditions to allow developments which would otherwise not be environmentally acceptable to proceed, and preventing harmful development which cannot be made acceptable even through conditions. Pollution control is concerned with preventing pollution through the use of measures to prohibit or limit the releases of substances to the environment from different sources to the lowest practicable level. It also ensures that ambient air and water quality meet standards that guard against impacts to the environment or human health".</i>	Despite a number of requests for a Health Impact Assessment this has yet to be undertaken for the strategic overhead option being considered compared to undersea or undergrounding.	The electricity distribution system is not subject to the same pollution control regimes as most if not all energy generation upon commissioning and therefore it is imperative that health impacts are fully considered at the planning stage.	One of the Wellbeing Goals in the Well-being of Future Generations (Wales) Act 2015 is <i>"a society in which people's physical and mental well-being is maximised and in which choices and behaviours that benefit future health are understood"</i> .
Environmental Services	208	Overarching National Policy Statement for Energy [EN-1]]		4.13.1	The overarching National Policy Statement for Energy states that <i>"Energy production has the potential to impact on the health and well-being ("health") of the population. Access to energy is clearly beneficial to society and to our health as a whole. However, the production, distribution and use of energy may have negative impacts on some people's health."</i>	Despite several requests by the Local Authority a Health Impact Assessment has yet to be undertaken for the strategic overhead option being considered compared to undersea or undergrounding. This is despite Welsh Government's commitment to its use. Whereas the Environmental Statement is required to consider health related issues this will be undertaken for the preferred route not the overall strategic options.	Planning Policy Wales states that <i>"Health considerations can be material considerations in determining applications for planning permission and prior approval as, in principle, can public concerns in relation to such effects."</i>	WHIASU Guidance 2012
Environmental Services	209	Wylfa to Pentir Preferred Route Corridor Selection Report.	6	6.3.5	Noise and vibration (EN-5 notes that noise from overhead lines is unlikely to lead the determining authority to refuse an application);	A Development Consent Order offers a defence against Statutory Nuisance proceedings under Part III of the Environmental Protection Act 1990. This is particularly relevant in relation to issues of noise. Factors which determine the likely noise impact include proximity to nearby sensitive receptors. Overhead Lines, by their character and elevated nature offer little in the form of possible attenuation if audible buzzing and crackling is heard during damp weather (which is currently reported to occur near to the existing overhead line). The buzzing or humming noise is likely to be within the Low Frequency Spectra which is more difficult to attenuate by building structures. Consequently, there is little or no control over noise from overhead lines. Those likely to be living close to the new OHL will naturally be concerned about this issue.	DEFRA Guidance on Low Frequency Noise.	Overarching National Policy Statement for Energy [EN-1]] paragraph 4.10.2

Environmental Services	210	The Well-being of Future Generations (Wales) Act 2015		Draft Guidance		“Resilient Wales”, the nation is considered as being one which maintains and enhances a biodiverse natural environment with healthy functioning ecosystems that support social, economic and ecological resilience and the capacity to adapt to change (for example climate change).	It is difficult to imagine how the erection of an overhead power line will help to deliver this and a number of other goals. There remains a question mark over whether or not National Grid is a “Public Body” falling within the confines of the Act but Local Authorities, National Park Authorities, Natural Resources Wales and Welsh Government certainly are. National Grid make repeated reference to guidance and views of some of these bodies, but it should be aware that all these precede this 2015 Act, whose guidance still remains in the consultation stage.	Specific Draft Guidance	
Environmental Services	211	Wylfa to Pentir Preferred Route Corridor Selection Report.	6	6.3.3.		States that the Planning Inspectorate must have regard to any NPS. These National Policy Statements are described on the National Infrastructure Planning web site as produced by Government and they give reasons for the policy set out in the statement, and must include an explanation of how the policy takes account of Government policy relating to the mitigation of, and adaptation to, climate change. They include the Government’s objectives for the development of nationally significant infrastructure in a particular sector and state: <ul style="list-style-type: none"> • How this will contribute to sustainable development. • How these objectives have been integrated with other Government policies. • How actual and projected capacity and demand have been taken into account. • Consider relevant issues in relation to safety or technology. • Circumstances where it would be particularly important to address the adverse impacts of development. • Specific locations, where appropriate, in order to provide a clear framework for investment and planning decisions. 	Other Government Policies must surely include the policies of the devolved administration in Wales and if so, sustainable development is a fundamental core of the Well-being of Future Generations (Wales) Act 2015.	The project should comply with the Wellbeing Goals.	Well-being and Future Generations (Wales) Act 2015 draft Guidance:- http://gov.wales/consultations/people-and-communities/future-generations-act-how-do-you-measure-a-nations-progress/?lang=en
Environmental Services	212	EN-5		2.10.9		The Government has developed with the electricity industry a Code of Practice, “Power Lines: Demonstrating compliance with EMF public exposure guidelines – a voluntary Code of Practice”, published in February 2011 that specifies the evidence acceptable to show compliance with ICNIRP (1998) in terms of the EU Recommendation. It goes on to advise that: “Before granting consent to an overhead line application, the IPC should satisfy itself that the proposal is in accordance with the guidelines, considering the evidence provided by the applicant and any other relevant evidence.”	The document titled “Electric and Magnetic Fields” - Produced by the Energy Networks Association (January 2012), included on the NG website, does not rule out some increased risks from exposure to magnetic fields. Many residents living near to the proposed routes will not be reassured by this and the “perception” of risk can cause anxiety and concern which in turn affects health.	Paragraph 12.13.8 of Planning Policy Wales (November 2012) states that:- “Health considerations can be material considerations in determining applications for planning permission and prior approval as, in principle, can public concerns in relation to such effects.”	Paragraph 2.10.12 of EN5 states that “undergrounding of a line would reduce the level of EMFs experienced, but high magnetic field levels may still occur immediately above the cable”. There is no restriction in the UK on EMF grounds on how close a house can be to an overhead line (ENERGY NETWORKS ASSOCIATION - JANUARY 2012)
Environmental Services	213	EN-1		4.13.2		The overarching guidance National Grid are supposed to adhere to states that where there is more than one development which may affect people simultaneously, the applicant and IPC should consider the cumulative impact on health.	There are many Energy Island Projects which could impact cumulatively with this project yet the cumulative impacts on health do not appear to have been considered in options appraisal stage.	There is strong evidence to suggest that a Health Impact assessment should have been undertaken in order to assist the options appraisal process.	WHIASU Guidance 2012

Environmental Services	214	Wylfa to Pentir Preferred Route Corridor Selection Report.		4.2.19		Makes reference to the New Nuclear SPG,	We would suggest that some of the guidance contained in the Onshore Wind SPG may also be relevant as Appendix 3 of that document has a series of maps showing:- <ul style="list-style-type: none"> • Visual and sensory evaluation • Cultural landscape evaluation • Historic landscapes • Geological landscapes • Landscape habitats 	In the context of Schedule 9(1) in section 38 of the Electricity Act 1989 these constraints are equally valid for Electricity Pylons. Consequently, it is difficult to see how an overhead power line option as presented could be seen to comply with the requirements of this section.	Section 38 of the Electricity Act 1989
Environmental Services	215	Wylfa to Pentir Preferred Route Corridor Selection Report.	6	6.5.2		Talks about the review of various strategies.	The documents fail to make reference to the Authority's SPG for Onshore Wind Energy 2013.	Holford Rules: supplementary note on "Designations of County, District and Local Value". "Where possible choose routes which minimise the effect on Special Landscape Areas, areas of Great Landscape Value and other similar designations of County, District or Local value".	
Environmental Services	216	Wylfa to Pentir Preferred Route Corridor Selection Report.	6	6.3.2		In England, a DCO application would usually also include all additional development associated with the overhead line. In Wales, applications for any associated development, which does not form part of the NSIP, would be determined by the relevant local planning authority. However, development which forms part of the overhead line would be included within the DCO.	What are these TCPA applications?		
Environmental Services	217	Wylfa to Pentir Preferred Route Corridor Selection Report.	6	6.4.14		Refers to mitigation	It is difficult to see what mitigation could be implemented in areas such as Rhosgoch where the present line of towers is seen stretching for miles across the island with Snowdonia in the distance. The cumulative effects of two OHL would be wholly unacceptable in this area. Deviations and crossovers would exacerbate the effect. It may be helpful to have photographs taken from various important vistas on the island e.g. AONB, Mynydd Bodafon etc.	(Figure 8.2 on page 51 of the preferred route corridor shows a view of the existing line looking West towards Treglele). The north east of the island already has an OHL and several wind farm developments.	

<p>Environmental Services</p>	<p>218</p>	<p>Wylfa to Pentir Preferred Route Corridor Selection Report.</p>	<p>8 8.3.1</p>		<p>Refers to mitigation</p>	<p>Potential development near to residential properties raise concern and anxiety. It is unfortunate that greater detail could not be given about mitigation at this stage. Residents will naturally have concern about property prices.</p>	<p>Wider determinants of health. However, "in common with other planning decisions, the effect on property value is not a material consideration. House prices are also not considered in the relevant National Policy Statement". National Grid - Our transmission infrastructure and its effect on local people, communities and the local economy [Reference: CRFS11/01/15] Available At: http://www2.nationalgrid.com/uk/In-your-area/Projects/North-Wales/</p>	<p>One of the Wellbeing Goals in the Well-being of Future Generations (Wales) Act 2015 is "a society in which people's physical and mental well-being is maximised and in which choices and behaviours that benefit future health are understood".</p>
<p>Environmental Services</p>	<p>219</p>	<p>Wylfa to Pentir Preferred Route Corridor Selection Report.</p>	<p>7 7.4.1</p>		<p>Refers to that of the 153 members of the public who expressed a route corridor preference, 121 expressed a preference for the Orange Route Corridor.</p>	<p>We question the usefulness of the repeated reference to this throughout the documents as it is neither statistically representative nor adjusted for any skew / bias.</p>		
<p>Environmental Services</p>	<p>220</p>	<p>Wylfa to Pentir Preferred Route Corridor Selection Report.</p>	<p>8 8.2.1</p>		<p>Refers to pinch points.</p>	<p>It is unacceptable and unjust to expect properties which are close to the existing OHL to be flanked by a new OHL or to become sandwiched between two closely located OHL routes.</p>	<p>A Health Impact Assessment should have been undertaken as part of the wider options appraisal considering the wider determinants of health.</p>	<p>One of the Wellbeing Goals in the Well-being of Future Generations (Wales) Act 2015 is "a society in which people's physical and mental well-being is maximised and in which choices and behaviours that benefit future health are understood".</p>
<p>Environmental Services</p>	<p>221</p>	<p>Wylfa to Pentir Preferred Route Corridor Selection Report.</p>	<p>8 8.4.3 -8.4.8</p>		<p>The views from properties on the edge of Cemaes, and between Cemaes and Tregle, creating close range, skylined views of multiple overlapping overhead lines. There could also be adverse effects on views from the AONB along the coast to the north-east and from neighbouring elevated locations, including Mynydd Mechell (located in the proposed JLDP SLA)".</p>	<p>It is evident from figure 8.2 that the existing pylons are already intrusive. Cumulative impacts in this area with Wylfa and A5025 developments provides strong justification for undergrounding. High level mitigation suggests "undergrounding from Wylfa to east of Llanfechell where a SEC would be required". Despite this, National Grid suggests that OHL is acceptable and would comply with its statutory duties. There are no known environmental or technical reasons to preclude burying cables. By its own admission, National Grid recognise there will be adverse effects on views and therefore the cables should be undergrounded. Line 1A takes the OHL closer to Llanfechell while 1B results in some properties being sandwiched between two OHL. This will naturally cause concern an anxiety to those residents and as previously stated, National Grid have not undertaken a HIA as part of their options appraisals.</p>	<p>Schedule 9(1) in Section 38 of the Act requires National Grid to consider the effects of its works on amenity by having regard to: "the desirability of preserving natural beauty, of conserving flora, fauna, and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest". By their own admission, NG will not meet this objective in this area.</p>	<p>NPS EN-5 states that: "... wherever the nature or proposed route of an overhead line proposal makes it likely that its visual impact will be particularly significant, the applicant should have given appropriate consideration to the potential costs and benefits of other feasible means of connection or reinforcement, including underground and sub-sea cables where appropriate." (paragraph 2.8.4).</p>

<p>Environmental Services</p>	<p>222</p>	<p>Wylfa to Pentir Preferred Route Corridor Selection Report.</p>	<p>8</p>	<p>8.4.22 - 8.4.26</p>		<p>The villages of Rhosgoch and Rhosybol are already affected by OHL which pass very close to nearby properties.</p>	<p>There are recognised pinch points in these areas and it is possible that a line swap would be required creating a dog leg. The line swaps will probably need heavier towers in order to take the additional strain which will do nothing to lessen the impact. The centre line of the easterly route in Rhosgoch over-sails a property which is totally unacceptable. Several of the options result in properties been sandwiched between OHL. The high level mitigation suggests undergrounding from the north west of Rhosgoch to Rhosybol but NG have concluded that the "effect on residential views would not be so great as to preclude the use of an overhead line". This reasoning is flawed. The close proximity to nearby properties and southerly views of pylons are some of the most intrusive on the island. The existing OHL is already prominent from many elevated locations including the Parys Mountain SLA. As there are no environmental or technical reasons identified as to why cables cannot be buried in this area the LAs position should be that cables are taken underground.</p>	<p>Schedule 9(1) in Section 38 of the Act requires National Grid to consider the effects of its works on amenity by having regard to: "the desirability of preserving natural beauty, of conserving flora, fauna, and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest". NG will not meet this objective in this area with an additional OHL. Holford Rule 3 "Where possible choose inconspicuous locations for angle towers, terminal towers and sealing end compounds".</p>	<p>9.2.3 States that there would be there would be unavoidable visual effects to both close and longer range views from Capel Coch and at corridor pinch points near Rhosgoch, Rhosybol and Talwrn, as well as on a number of other viewpoints. NG state that these effects may be reduced through "careful alignment, taking advantage of the existing overhead line corridor". However, this appears to be contrary to the Holford Rule which suggest that when country is flat and sparsely planted (as much of Anglesey) high voltage lines should be kept as far as possible independent of smaller lines, converging routes, distribution poles and other masts, wires and cables, so as to avoid a concentration of lines or "wirescape". Clearly, this proposal would be a concentration.</p>
<p>Environmental Services</p>	<p>223</p>	<p>Wylfa to Pentir Preferred Route Corridor Selection Report.</p>	<p>8</p>	<p>8.4.22 - 8.4.26</p>		<p>Route 2A & 2B take the OHL closer to Llyn Alaw and SSSI.</p>	<p>EN-5 Identifies the risks posed to birds by overhead lines. 9.2.8 Reaffirms this claim by stating that all route corridors carry a risk of bird strike through the erection of overhead line. Surely, the location of overhead lines close to many wetland sites along the preferred orange corridor (e.g. Llyn Alaw and Anglesey Fens) is a further argument for undergrounding.</p>	<p>Schedule 9(1) in Section 38 of the Act requires National Grid to consider the effects of its works on amenity by having regard to: "the desirability of preserving natural beauty, of conserving flora, fauna, and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest". NG will not meet this objective in this area with an additional OHL.</p>	

<p>Environmental Services</p>	<p>224</p>	<p>Wylfa to Pentir Preferred Route Corridor Selection Report.</p>	<p>8</p>	<p>8.4.22 - 8.4.26</p>		<p>National Grid fail to give adequate consideration to the "Cumulative landscape".</p>	<p>Paragraph 2.8.2 of EN-5 refers to the "Cumulative landscape" and the visual impacts that can arise where new overhead lines are required along with other related developments such as substations, wind farms and/or other new sources of power generation. It should note that this section refers to this cumulative landscape in terms of "new overhead lines" not additional overhead lines as proposed in this case. It may be argued that this state has already been reached with the large number of wind turbine developments already in this area and the proposed repowering of the Rhyd y Groes wind farm with 13 turbines up to 79m to the tip. The addition of an additional OHL would bring about a "tipping point" of unacceptability. In addition, separation distances between wind turbines and OHL based upon blade throw may sterilize large tracks of prime agricultural land which could otherwise be suitable for wind generation, and provide much required income to a depressed farming sector.</p>	<p>Figure A1 only show the 3 major wind farms in the North of Anglesey and fails to identify the two 92.5m Turbines at Ysgellog and the many other smaller turbines in and around the Rhosgoch / Rhosybol area.</p>	<p>One of the Holford Rules recommends that " where country is flat and sparsely planted, keep the high voltage lines as far as possible independent of smaller lines, converging routes, distribution poles and other masts, wires and cables, so as to avoid a concentration of lines or "wirescape". It is difficult to see how a parallel section of OHL here and in many other parts of the island meet the requirement of this rule and provide added incentive on NG to underground. And as a supplementary Note the Holford Rules recommend that for Residential Areas, avoiding "routeing close to residential areas as far as possible on grounds of general amenity".</p>
<p>Environmental Services</p>	<p>225</p>	<p>Wylfa to Pentir Preferred Route Corridor Selection Report.</p>	<p>8</p>	<p>8.4.27 - 8.4.32</p>		<p>National Grid state quite clearly that "<i>new 400kV overhead line past Capel Coch could have potentially significant effects, depending on its final route</i>".</p>	<p>The existing line already passes close to residential properties and is situated partly within European designated features at Corsydd Môn / Anglesey Fens SAC of Cors Erddreiniog. An alternative route 3A is put forward which avoids Cors Erddreiniog but takes the OHL into an area where there were previously none. 3B and 3C include swap-overs which will significantly affect nearby properties particularly if heavier towers are required. This will naturally cause concern and anxiety to householders and as has previously been stated, National Grid has not undertaken a HIA. No technical or environmental issues have been identified which would prevent undergrounding of this section.</p>		
<p>Environmental Services</p>	<p>226</p>	<p>Wylfa to Pentir Preferred Route Corridor Selection Report.</p>	<p>8</p>	<p>8.4.33 - 8.4.41</p>		<p>National Grid confirm their decision to underground the Menai and AONB</p>	<p>It is not clear whether this extends the entire length of this section. The Local Authority support the principle of undergrounding this entire section. The northerly underground route appears to be more favourable because it avoids crossing the A55 and railway track as well as a number of other sensitive receptors to the south of Llanfair P.G. The route corridor will ultimately depend upon the precise location of the Menai crossing. Clearly, given the challenges of Horizontal Directional Drilling or tunnelling under the Menai. It may be that ultimately utilizing the existing Britannia Bridge may be the preferred choice.</p>	<p>Holford Rule 7: Approach urban area through industrial zones, where they exist; and when pleasant residential and recreational land intervenes between the approach line and the substation, go carefully into the comparative costs of the undergrounding, for lines other than those of the highest voltage.</p>	

<p>Environmental Services</p>	<p>227</p>	<p>Wylfa to Pentir Preferred Route Corridor Selection Report.</p>	<p>8</p>	<p>8.4.33 - 8.4.41</p>	<p>National Grid argue that landscape impacts from the construction of an additional OHL in this region would be contrary to national and local planning policies.</p>	<p>It is fortunate that residents living in these areas have this landscape designation. However, the lack of a special landscape designation does not detract from the beauty of the vast majority of the island and many residents living outside these areas will feel aggrieved at the reduced priority given to their landscapes and iconic views of Snowdonia. We are aware of these concerns from numerous representations made to the council in recent years as objections to wind turbine developments from residents and tourist accommodation alike. The linear nature of OHL is identified in paragraph 1.7.2 of EN-5 as being spread across a wider area compared to other energy infrastructure, to which we assume they are referring to generation sites and subsequently, by implication, this must include single or small numbers of wind turbines.</p>		
<p>Environmental Services</p>	<p>228</p>	<p>Wylfa to Pentir Options Report.</p>	<p>6</p>	<p>6.5.4</p>	<p>Many sections of the route corridor pass close to residential properties. Section 6.5.4 on Page 46 of the Options Report identifies that Underground cables do not give rise to operational noise effects.</p>	<p>EN5 identifies the potential for overhead lines to produce crackle or a pure tone hum. This is particularly prevalent during periods of rain or high moisture. Many properties would experience this hum for the first time or additional noise from a parallel line. EN-5 at paragraph 2.9.11 States that "noise from overhead lines is unlikely to lead to the IPC refusing an application, but it may need to consider the use of appropriate requirements to ensure noise is minimised as far as possible". With no recourse to statutory nuisance following completion this offers little reassurance to residents.</p>		<p>Horlock Rules Govern Substations and Sealing End Compounds and noise and other environmental effects to a reasonably practicable minimum by allowing sufficient space for screening of views by mounding or planting. Considering appropriate noise attenuation measures where necessary.</p>
<p>Environmental Services</p>	<p>229</p>	<p>Wylfa to Pentir Preferred Route Corridor Selection Report.</p>	<p>9</p>	<p>9.3.5</p>	<p>Refers to tourist accommodation</p>	<p>There are many tourist accommodation properties in the area described as the "rural hinterland" and NG themselves identify Tre-Ysgawn Hall (one of only two 4 star Hotels) which is itself located in this area. Apart from this property, there are many other smaller family run business located within the area and in a number of locations around the centre of the island including Carmel, Llanerchymedd, Llangefni and Penmynydd who actively promote their properties as having panoramic views of Snowdonia and Anglesey. It appears that little consideration has been given to the possible impact of additional OHL on these properties. Figure A-4 fails to identify this myriad of other smaller holiday accommodation which is readily identifiable from the simplest of internet searches. As such, the report fails to provide a truly accurate perspective of the impact on tourist accommodation.</p>		

Environmental Services	230	Wylfa to Pentir Preferred Route Corridor Selection Report.		Figure 9.10	Figure 9.10 shows that a number of National Cycle Routes crisscross the orange corridor.	Cycling is a popular pastime particularly in a tourist destination such as Anglesey. There are five quality evaluations set as design criteria for a cycle route one of which is the attractiveness of the area, namely: "A route that complements and enhances its environment in such a way that cycling is attractive"[1]. Once again, this reaffirms the Council's claims regarding the island's beauty and special appeal. It is imperative that the landscape remains protected in order to maintain its special identity so that outdoor activities such as cycling and walking, which are also of significant benefit to the island's economy, can be promoted.	1. The National Cycle Network - Guidelines and Practical Details issue 2 (Route and Planning Criteria). http://www.sustrans.org.uk/sites/default/files/documents/criteria.pdf	
Environmental Services	231	Wylfa to Pentir Preferred Route Corridor Selection Report.		Table B-1 NG	In Table B-1 NG have identified in row S6 that the National Cycle route are not at risk of significant permanent visual and landscape amenity effects and as such, are not at risk of failure to comply with legislation.	It is questioned how this can be when attractiveness is an evaluation criterion for a national cycle route and the existing routes crisscross the orange corridor. Existing National Cycle Routes pass under or close to the existing OHL at 7 locations and the additional overhead line will add a further 3 or 4 crossing locations.		
Highways	232	N/A	N/A	N/A	General comments upon submission.	The principle of OHL lines is not agreed to across the island. Schedule 9 of the Electricity Act 1989 requires NG to have regard to the desirability of preserving natural beauty ... and shall do what it reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside ...	National Grid will need to agree a TMP, an enforcement regime and joint highway/footway condition surveys before any works commence.	Schedule 9 of the Electricity Act 1989
Highways	233	N/A	N/A	N/A	General comments upon submission.	There will be a need for a detailed Construction Phase Traffic Management Plan (TMP) to identify suitable access routes and without knowing the route or construction method, we would envisage the need for extensive highway improvements for access, especially along anything other than a Class A or Class B road. This could be junction splay widening for large vehicles to negotiate, widening of narrow pinch points or bends, edge and surface strengthening. Many routes along the proposed lines are totally unsuitable for the type of traffic flows and vehicles anticipated in terms of sub-standard horizontal and vertical geometry, lack of pedestrian facilities and surface condition with little to minimal residual life.		Highways Act 1980 and relevant Planning or DCO Conditions
Highways	234	N/A	N/A	N/A	General comments upon submission.	There may be environmental damage to historic and environmentally valuable trees, boundaries and cloddiau if narrow country lanes are used as access routes.		
Highways	235	N/A	N/A	N/A	General comments upon submission.	Some highway improvements may be required on a road safety basis to protect other members of the public travelling on haulage access roads including cyclists and pedestrians.		Active Travel Act
Highways	236	N/A	N/A	N/A	General comments upon submission.	All affected highways may be subject to extraordinary damage from construction vehicles in accordance with Section 59 of the Highways Act. We envisage the need to agree condition surveys on all routes agreed in the TMP before any works commence or that their surfaces are upgraded in advance by NG along with any improvements works identified in a Section 106 Agreement.		Highways Act 1980

Highways	237	N/A	N/A	N/A	General comments upon submission.	We would not support any OHL lines running parallel with any public footpath, but accept the need to cross over some paths. We would seek compensation for temporary or permanent closure and loss of amenity.		
Highways	238	N/A	N/A	N/A	General comments upon submission.	There may be a need to divert public footpaths temporarily during construction. If walkers are to be diverted onto other parts of the network, we would seek opportunities to upgrade alternative paths at the developer's expense together with Section 106 Agreement contributions in recognition of the visual impact of O/H lines and the effect of diversions in making paths less attractive.		Highways Act
Highways	239	N/A	N/A	N/A	General comments upon submission.	National Grid have not convinced officers that the sub-sea option is not viable (similarly with the underground alternative). The presentations and proposals to date all appear to be commercially driven and take little account of the visual, environmental, conservation and tourism effect that secondary OHL lines would have. Ynys Mon is a beautiful location which attracts thousands to live and visit for its rural features and deserves to be protected.		
Highways	240	N/A	N/A	N/A	General comments upon submission.	The cost of OHL lines should also include the cost of loss of amenity and vista etc. including the depreciation in property values and the permanent effect on the tourism industry.		
Highways	241	N/A	N/A	N/A	General comments upon submission.	National Grid were asked at the Isle of Anglesey Local Access Forum to provide details of how much more it would cost per UK household, per month over the next 30 years to take the electricity under the sea. This information remains outstanding. How can alternative proposals be dismissed without this data?		
Highways	242	N/A	N/A	N/A	General comments upon submission.	We encourage National Grid to consider removing the existing pylons across Afon Menai should there be a third bridge crossing. If the existing pylons cannot be removed as part of this Wylfa-Pentir connection, then the current works should be designed to accommodate the option of incorporating ducting in the new bridge and removing the existing pylons.		
Highways	243	N/A	N/A	N/A	General comments upon submission.	The route would inevitably cross a number of roads and public footpaths. Whilst this is far from desirable, it is unavoidable. Efforts should be taken to ensure that the lines do not run parallel to any road or public footpath.		Highways Act 1980
Highways	244	N/A	N/A	N/A	General comments upon submission.	At present there is insufficient detail available on the exact location of pylons and whether or not any would be sited on any public footpath. What is National Grid policy on siting pylons on public footpaths in terms of exclusion zones?		
Highways	245	N/A	N/A	N/A	General comments upon submission.	There will be a need for many temporary footpath diversions during construction at National Grid expense.		
Highways	246	N/A	N/A	N/A	General comments upon submission.	The main concern is over the logistics of construction. What will be the access routes? There will need to be detailed Traffic Management Plans (TMP) for each section, showing clearly the routes to be used. There may also be the need for junction improvements or carriageway widening.		

Highways	247	N/A	N/A	N/A		General comments upon submission.	Are any logistic centres proposed? If so highway links must be considered in detail and a TMP submitted and agreed.		
Highways	248	N/A	N/A	N/A		General comments upon submission.	How will compliance with the approved TMP be managed?		
Highways	249	N/A	N/A	N/A		General comments upon submission.	There is potential for extraordinary damage to the highway and the Authority would seek to agree pre-condition surveys and photos of agreed routes and seek major contributions for any Highways Act Section 59 damage to the highway.		
Highways	250	N/A	N/A	N/A		General comments upon submission.	As above but with public footpaths.		
Highways	251	N/A	N/A	N/A		General comments upon submission.	Would National Grid contribute an infrastructure levy sum towards improving public footpaths and roads affected by their works (in addition to any Section 59 damage)? This is due to the loss of amenity value, both during and post construction.		
Planning Policy	252	Preferred Route Corridor Selection Report	Policy Context	4.2.1		Omission	Section would benefit from clarification why national and local planning policies are of relevance, i.e. role in formulating the DCO application and in dealing with DCO and any development associated with it that lie outside the DCO process.		IACC & Gwynedd Council Planning Policy Review (August 2015)
Planning Policy	253	Preferred Route Corridor Selection Report	Policy Context	4.2.2 - 4.2.4		Describes national planning policy as set out in the Wales Spatial Plan and Planning Policy Wales	The section focuses on guidance relating to the low carbon economy. Future publications would benefit from a more balanced description of planning policy, which also set out the requirements in relation to environmental, amenity and economic considerations. This would align with the requirements of the NPs and the 1987 Electricity Act	Planning Policy Wales, particularly Section 5	IACC & Gwynedd Council Planning Policy Review (August 2015)
Planning Policy	254	Preferred Route Corridor Selection Report	Policy Context	4.2.5		Describes the planning policy function of the JPPU	(i) Replace JPPU with Anglesey and Gwynedd Joint Planning Policy Unit, and (ii) clarify in any future publications that the planning policy service the Unit provides covers the Gwynedd Local Planning Authority area and therefore does not include parts of Gwynedd included in Snowdonia National Park. (iii) The Unit was established in May 2011, - the principle of setting up a Joint Unit was established in 2010.		
Planning Policy	255	Preferred Route Corridor Selection Report	Policy Context	4.2.5		Describes the JLDP - "in development"	Future publications would benefit from a more detailed description of the status of the JLDP. At the moment it is at the post Deposit Stage (Regulations 18 & 19).		
Planning Policy	256	Preferred Route Corridor Selection Report	Policy Context	4.2.6		Describes the Gwynedd UDP	Future publications would benefit from reference to SPGs that support the UDP.		
Planning Policy	257	Preferred Route Corridor Selection Report	Policy Context	4.2.7		Provides a schedule of plans that make up the 'development plan' for Anglesey	Remove the Stopped UDP from the schedule. Given its unadopted status it can't be regarded as forming part of the 'development plan'.		http://www.anglesey.gov.uk/planning-and-waste/planning-policy/current-plans-and-policies/
Planning Policy	258	Preferred Route Corridor Selection Report	Policy Context	4.2.8		Refers to the status of the Anglesey UDP	Text implies that only the IACC apply the stopped UDP as material planning consideration. Letter from Welsh Government confirms its status.		http://www.anglesey.gov.uk/planning-and-waste/planning-policy/current-plans-and-policies/

Planning Policy	259	Preferred Route Corridor Selection Report	Policy Context	4.2.8		Refers to SPGs	Text implies that the SPGs only support the 'development plan'. Some also support the stopped UDP.		http://www.anglesey.gov.uk/planning-and-waste/planning-policy/current-plans-and-policies/
Planning Policy	260	Preferred Route Corridor Selection Report	Policy Context	4.2.8		Omission	The IACC has adopted 2 Interim Planning Policies to facilitate new housing development on large sites near the main centres as well as defined clusters. Reference would provide a full context.		http://www.anglesey.gov.uk/planning-and-waste/planning-policy/current-plans-and-policies/
Planning Policy	261	Preferred Route Corridor Selection Report	Policy Context	4.2.10 - 4.2.16		Refer to policies that relate specifically to electricity transmission lines and identifies perceived omissions.	Whilst National Grid is correct in stating that the development plan and the stopped UDP do not include policies that relate specifically to electricity transmission lines, it is considered that future publications should convey the fact that development plans are expected to include policies and guidance that are relevant to known issues in the Plan area. The adopted development plan and the stopped UDP pre-date the NPSs and the emerging Wylfa Newydd Project.		IACC & Gwynedd Council Planning Policy Review (August 2015)
Planning Policy	262	Preferred Route Corridor Selection Report	Policy Context	4.2.17 - 4.2.18		Refer to elements of the emerging JLDP	Text refers to Preferred Strategy document, not the Deposit Plan (February 2015)		IACC & Gwynedd Council Planning Policy Review (August 2015) & http://www.anglesey.gov.uk/planning-and-waste/planning-policy/joint-local-development-plan-anglesey-and-gwynedd/
Planning Policy	263	Preferred Route Corridor Selection Report	Policy Context	4.2.10 - 4.2.18		Omission	Future publications would benefit from a more balanced description of local planning policies, i.e. include reference to policies relevant to proposed transmission infrastructure, particularly those that relate to landscape, visual amenity and ecology. These are important for assessing the socio-economic impacts of the project.		IACC & Gwynedd Council Planning Policy Review (August 2015)
Planning Policy	264	Preferred Route Corridor Selection Report	Policy Context	4.2.17 - 4.2.18		Omission	Future publications would benefit from reference to topic papers and background studies that support the JLDP's content. Some are referred to elsewhere in the document and are referred to in the Route Options Report. Would improve internal consistency and ensure that all relevant information is captured.		IACC & Gwynedd Council Planning Policy Review (August 2015)
Planning Policy	265	Preferred Route Corridor Selection Report	Policy Context	4.2.19		Describes the Wylfa SPG	For the avoidance of doubt, ensure that future publications clarify that the SPG was adopted by the IACC. Current text states "the Council"		
Planning Policy	266	Preferred Route Corridor Selection Report	Policy Context	4.2.21 - 4.2.23		Describes the Mon & Menai Regeneration programme and Mon - Menai Coastal Action Plan	These documents do not form part of the adopted development plan nor the emerging JLDP. Therefore question their relevance to this section of the report. Also the Mon & Menai Regeneration programme has been 'completed'. Therefore, would question its relevance.		
Planning Policy	267	Preferred Route Corridor Selection Report	Policy Context	4.2.24		Describes local policies that seek to preserve the natural landscape and heritage within the AONB	(i) Future publications would benefit from linking the local policy approach with national planning policy and the relevant legislation. (ii) Text needs to clarify why the area along the Menai Strait near Menai Bridge, Plas Newydd and the Vaynol Estate are specifically referred to.		

Planning Policy	268	Preferred Route Corridor Selection Report	Policy Context	4.2.25		Refers to work commissioned by Joint Planning Policy Unit to review Special Landscape Areas.	Suggest that future publications should clarify that the study informs the emerging JLDP and is considered to be a material planning consideration for development management purposes in the interim period.		
Planning Policy	269	Route Options Report	Policy Context	4.3.6		Describes the JLDP	(i) Suggest amending to explain that JLDP policies should explain how national planning policy will be applied locally. (ii) Update to refer to Deposit Plan in order to improve internal consistency and provide an up-to-date context.		http://www.anglesey.gov.uk/planning-and-waste/planning-policy/joint-local-development-plan-anglesey-and-gwynedd/
Planning Policy	270	Route Options Report	Policy Context	4.3.7		Refers to an AONB Management Plan	Suggest that text clarifies which AONB is referred to.		
Planning Policy	271	Route Options Report	Policy Context	4.3.7		Provides a schedule of documents	Should include reference to Landscape Sensitivity and Capacity Study & Special Landscape Study to improve internal consistency of document		http://www.anglesey.gov.uk/planning-and-waste/planning-policy/joint-local-development-plan-anglesey-and-gwynedd/
Planning Policy	272	Route Options Report	Policy Context	4.3.24		Refers to work commissioned by Joint Planning Policy Unit to review Special Landscape Areas.	Current wording is misleading as JLDP has not been adopted. Suggest rewording to clarify that the Deposit Plan includes strategic and detailed policies that provide an emerging policy framework covering development in SLAs.		http://www.anglesey.gov.uk/planning-and-waste/planning-policy/joint-local-development-plan-anglesey-and-gwynedd/
Planning Policy	273	Route Options Report	Policy Context	4.3.27		Describes the study about separation distances between turbines and residential properties	Expand to provide a more complete description of the study's recommendations.		
Planning Policy	274	Route Options Report	Policy Context	4.3.28		Refers to documents that have been reviewed.	Suggest that a schedule of documents should be included in future publications.		
Planning Policy	275	Route Options Report	Policy Context	4.3.29		Provides a schedule of types of development	Text implies that a decision has been made about the location of development associated with the Wylfa Newydd project		
Planning Policy	276	Route Options Report	Policy Context	4.3.33		Describes the Candidate Sites Register	Future publications would benefit from a revised description of the CSR. Work undertaken to prepare the Deposit Plan has ruled out several sites.		
Planning Policy	277	Preferred Route Corridor Selection Report	Appraisal Process	6.5.2		Schedule of factors considered	Refers to views from AONB and A55, - should views of AONB from the mainland be considered?		
Planning Policy	278	Preferred Route Corridor Selection Report	Appraisal of route corridors	9.3.3		Schedule of important sites	Consider reference to Llanfairpwll. - an important bridgehead settlement and Gateway to Anglesey that includes important tourist destination points.		
Planning Policy	279	Preferred Route Corridor Selection Report	Appraisal of route corridors	Figure 9.10		Map showing key sites	Parc Menai - wrong location		
Planning Policy	280	Preferred Route Corridor Selection Report	Appraisal of route corridors	9.3.9		Describes anticipated developments associated with Wylfa Newydd	Misleading as it implies that associated development will be concentrated in the east and north east of the Island.		
Planning Policy	281	Preferred Route Corridor Selection Report	Appraisal of route corridors	9.4.2		Refers the proposed Caernarfon by-pass	Update the information accordingly.		
Planning Policy	282	Route Options Report	Appraisal Process	6.1.1		Refers to 'planning policy'.	Suggest that the text should clarify that both national and local planning policies have been considered.		
Planning Policy	283	Route Options Report	Appraisal Process	6.4.3		Provides a schedule of topics.	Should reference be made to the Holford Rules under the landscape and visual heading, and to the Holford and Horlock Rules under the local economy heading.		

Planning Policy	284	Route Options Report	Appraisal Process	6.5.4		Provides a schedule of topics.	Air quality and emissions - compared to an overhead line it is probable that the effects would be more than of a temporary nature if the option includes undergrounding - longer construction period, more heavy machinery? The same comment applies to traffic and transport - longer construction period, more vehicles or vehicles present over a longer period.		
Planning Policy	285	Route Options Report	Appraisal Process	6.5.4		Provides a schedule of topics.	Coastal change - not considered - particular reference made to the fact that the assessment of the Menai Strait section of the route has not advanced far enough to be included in this consultation material. The effect on coastal processes in this sensitive location is pivotal - could lead to a decision that an alternative route or undergrounding would be more realistic/ more in line with NPSs and national/ local planning policy. It is considered that the engagement should have been delayed until this option had been fully explored.		
Socio-Economic	286	WP Route Options Report	w	Sections - Route Options 9.4.17 - 9.4.20 10.4.18 - 10.4.21 11.4.13 - 11.4.16 12.4.13 13.4.13 -13.4.15		All Local Economy Sections in route options.	There is a paucity of detailed socio-economic information provided to justify the selection of the preferred route – particularly in comparison to the number of assessments in relation to landscape, ecology and the historic environment etc. National Grid need to recognise/ appreciate that socio-economic impacts consist of more than just impacts on the tourism sector.		
Socio-Economics	287	WP Route Options Report		6 6.4.3		Following construction of the towers, all temporary site compounds, access tracks and machinery are removed and the land is returned to its original condition. However, where it is necessary to route across areas of trees or tall shrubs, National Grid may need to clear or trim these back on a regular basis to maintain safety clearances to the conductors above.	There is a worrying lack of socio-economic details within the report which would enable the Authority to provide robust comments. For such a likely investment there is a fundamental need to understand the potential positive/ negative implications on the local (and wider) economy.		New Nuclear Build at Wylfa: SPG Section 4.1 and GP2 & Topic Paper 4: Economic Development
Socio-Economic	288	Wylfa to Pentir Options Report		6 6.4.3		Local Economy: considered potential effects upon settlements and residential areas, tourism features, recreational facilities, commercial forestry and planning development allocations. Tourism is an important employment industry for the area, with concerns about effects on this sector raised in consultation feedback.	The limited socio-economic analysis of route options serves to undermine the National Grid Stage 2 consultation on the North Wales Connection project. It appears that National Grid are adept at attributing a financial cost to differing options, but lack credibility in terms of balancing out the cost-benefit analysis to justify the selection of preferred options. There needs to be a criterion table referring to each option and providing a score against each criterion for each option.		
Socio-Economic	289	Wylfa to Pentir Options Report	Chapters 9 -15	Sections - Route Options 9.4.17 - 9.4.20 10.4.18 - 10.4.21 11.4.13 - 11.4.16 12.4.13 13.4.13 -13.4.15		All Local Economy Sections in route options.	The above is true at the macro level for the Strategic Route Options and also at the micro level when assessing sub-routes within the orange corridor. Although the Authority appreciates and understands the need for National Grid to identify the most cost-effective option, the socio-economic and environmental cost must also be considered in detail to justify and evidence the way forward.		EN-1 Section 5.12.3 - This assessment should consider all relevant socio-economic impacts. EN-1 Section 5.9 - Landscape & Visual (links Tourism)

Socio-Economic	290	Wylfa to Pentir Route Options Report	Chapters 9 -15	Sections - Route Options 9.4.17 - 9.4.20 10.4.18 - 10.4.21 11.4.13 - 11.4.16 12.4.13 13.4.13 -13.4.15		All Local Economy Sections in route Options	Identified socio-economic receptors but have not measured the socio-economic impact. The socio-economic impact needs to be measured to understand whether the impacts are negligible/moderate or significant. Subsequently, whether any mitigation proposals are required and to what level.		EN-1 Section 5.12.8 - consider any relevant positive provisions the developer has made or is proposing to make to mitigate significant impacts in relation to socio-economic impacts.
Socio-Economic	291	N/A	N/A	N/A		N/A	There is a lack of detail with respect to the socio-economic impacts of the route on Llanfechell, Rhosybol, Llanerchymedd, Talwrn, Llanfair P.G. and Menai Bridge.		
Socio-Economic	292	Wylfa to Pentir Route Options Corridor	N/A	N/A		N/A	There is a lack of detail measuring the actual impacts on communities (Tregele, Rhogoch, Rhosybol, Capel Coch) and proposals are required to assess what is considered as an appropriate way forward (detailed mitigation or undergrounding).		EN-1 Section 5.12.8 - consider any relevant positive provisions the developer has made or is proposing to make to mitigate significant impacts in relation to socio-economic impacts.
Socio-Economic	293	N/A	N/A	N/A		N/A	Due to insufficient evidence, recommended that independent local socio-economic, community, tourism survey is to be undertaken to ascertain residents and visitors perception towards the impacts of transmission infrastructure on Anglesey. It is expected that the viewpoints of local people will differ to the average person due to Anglesey being recognised and identified as an area of beauty and having open countryside space which is why people are attracted to Anglesey as a place to live and visit. Anglesey is recognised as one of the areas in the UK most reliant on tourism for its economy and way of life. In light of these facts it is considered that a Tourism Impact Assessment and Perceptions Survey which is specific to Anglesey would provide a robust and meaningful evidence base which could accurately inform National Grids assessment.		Area of Outstanding Natural Beauty Management Plan WRITTEN EVIDENCE TO THE BUSINESS & ENTERPRISE COMMITTEE OF THE NATIONAL ASSEMBLY FOR WALES inquiry into tourism
Socio-Economic	294	Wylfa to Pentir Route Options Report	9 to 15	Sections - Route Options 9.4.17 - 9.4.20 10.4.18 - 10.4.21 11.4.13 - 11.4.16 12.4.13 13.4.13 -13.4.15		All Local Economy Sections in route options	The impact on the local economy is considered when the new line has been developed. Significant consideration also needs to be given to the impact on the local economy during the constructions period. Much of the impacts noted are based on the local economy related to the tourism sector. However, what are the wider implications on local businesses and communities?		
Socio-Economic	295	Wylfa to Pentir Route Options Report	N/A	N/A		N/A	The value and importance of central Anglesey as a retreat from the island's coastline is increasing. The area's peace, tranquillity and solitude are integral to its appeal and popularity.		

Socio-Economic	296	WP Route Options Report		3	3.5.1		Socio-economics (Local Economy): All route corridors contained sensitive tourism facilities and attractions, with most tourism receptors on the coast near the Menai Strait, which were common risks to all route corridors. Any risk to tourism is intrinsically linked to landscape and visual amenity concerns (see above). From a landscape perspective, the Orange Route Corridor was preferred and, given the lack of other differentiators, this was therefore also preferred from a Socio-economic perspective.	The impact on Tourism, from construction through to implementation, given its value to the island's economy warrants its own section within National Grid's Consultation document.		New Nuclear Build at Wylfa: SPG GP 20 - Important landscapes including the Anglesey AONB and Heritage Coast; Local landscape character with reference to Special Landscape Areas and Landscape Areas, Seascape with reference to Seascape Character Areas and the Wales Coast Path.
Socio-Economic	297	WP Route Options Report		3	3.5.1		Socio-economics (Local Economy): All route corridors contained sensitive tourism facilities and attractions, with most tourism receptors on the coast near the Menai Strait, which were common risks to all route corridors. Any risk to tourism is intrinsically linked to landscape and visual amenity concerns (see above). From a landscape perspective, the Orange Route Corridor was preferred and, given the lack of other differentiators, this was therefore also preferred from a Socio-economic perspective.	Aligned to the above it isn't possible to put a monetary value on the potential for getting this wrong on Anglesey. Once the lines have been erected it is impossible to revert back. Tourism is an economy which is highly sensitive to landscape harm and the effects could impact upon neighbouring areas such as Gwynedd who are also dependent on tourism as an industry.		New Nuclear Build at Wylfa: SPG GP5 Supporting the Visitor Economy - The NNB and any associated development should ensure that during construction and operation that there is no adverse affect to the value and importance of tourism to the island. SPG GP 20 - Important landscapes including the Anglesey AONB and Heritage Coast; Local landscape character with reference to Special Landscape Areas and Landscape Areas, Seascape with reference to Seascape Character Areas and the Wales Coast Path.
Socio-Economic	298	N/A	N/A	N/A	N/A	N/A	N/A	Insufficient information has been provided (Route Options Report) to identify/ outline the cumulative and in-combination effects of a new overhead line, especially in relation to the existing transmission and local distribution networks; telecommunication infrastructure; wind turbines and other significant land uses. There is a real risk of a proliferation of wirescapes and an industrialisation of the island's landscape		
Socio-Economic	299	National Grid Overview Document (Connecting new low carbon energy in North Wales)	Tourism & Communities	Overview doc page 13			77% of people felt their business had not experienced any impact from construction work. 82% of people felt there had no been impact on the local area as a result of new infrastructure.	Notwithstanding the general perception amongst the island's residents to National Grid's proposed activities on the Island, the figures provided as part of an UK-wide independent study in 2013 which state that 77% say <i>the construction work doesn't impact</i> and that 82% <i>had no effect on their local area</i> should be treated with caution. Construction of this scale on a small rural community will have a different impact to that of a built-up or industrial centre irrespective of what statistics National Grid might wish to publish in the matter.		

<p>Socio-Economic</p>	<p>300</p>	<p>Wylfa to Pentir Options Report</p>	<p>8 & 9</p>	<p>8.2.4 & 9.4.6</p>	<p>In identifying the preferred route corridor, desk and field based reviews confirmed the potential to achieve a broadly close parallel line within the Orange Route Corridor. It was also acknowledged that there would be constraints along the Orange Route Corridor, such as designated sites and residential properties, which would likely require deviations from a close parallel route alignment or consideration of wider non-parallel route options. Considerations included: identifying individual properties and their views; understanding the role of vegetation in screening views; appraising views from the A55 (especially towards Snowdonia); identifying recognised cultural heritage assets (e.g. standing stones and listed buildings) and their settings; and significant or protected wildlife habitats (e.g. ancient woodlands and the Anglesey Fens SAC). However, it was considered that the visual and cumulative effects arising from such deviations were not likely to be so significant as to negate the benefits of seeking a close parallel alignment, where possible, or shift the balance in favour of a wholly non-parallel alignment either in this or in another route corridor. A parallel route option through Section 1 would provide the opportunity to create a simpler view of the new overhead line, as long as pylons and spans can be lined up and synchronised to a reasonable degree. This has been observed in other cases, such as at Stockton where National Grid's landscape advisers visited a similar parallel arrangement to gain an appreciation of potential effects and issues. Although following the existing overhead line may result in cumulative effects, in principle the potential landscape and visual effects were considered to be less than adding a new overhead line into another area that would result in more widespread change.</p>	<p>What is the cumulative effect of multiple lines, and how is this being measured? Are the pylons staggered, alongside or a composite, as the exact location is not shown it is hard to make an informed decision</p>		
<p>Socio-Economic</p>	<p>301</p>	<p>Wylfa to Pentir Options Report</p>	<p>16</p>	<p>Section 3</p>	<p>A full range of mitigation measures would be developed to reduce all aspects of the environmental and social-economic effects of the final proposal.</p>	<p>Disappointing that mitigation measures have not been further considered and presented within this consultation exercise. The mitigation measures seem to relate to when the development has been completed - the socio-economic effects during construction also need to be considered and mitigated where appropriate.</p>		
<p>Socio-Economic</p>	<p>302</p>	<p>Wylfa to Pentir Route Corridor Selection Report</p>	<p>Chapter 8</p>	<p>8.4.6</p>	<p>The sites and features in this section of the route corridors were considered, feedback from consultation was reviewed, and taken into account, and a site visit carried out to better understand the distribution of residential properties and the sensitivity of the main receptors...An assumption should be made that an overhead line route could be identified in this area that would comply with all relevant legislation and planning policies</p>	<p>There is insufficient evidence to suggest that an overhead line is appropriate for this particular section. An 'assumption' is made that this part of the route would not include an underground section. Is there an evidence base which can be relied upon to support this assertion? A more detailed analysis is required to measure the impacts on all receptors including: socio-economic, visual, ecological to determine the most appropriate mitigation action.</p>		<p>EN-1 Section 5.12.8 - consider any relevant positive provisions the developer has made or is proposing to make to mitigate significant impacts in relation to socio-economic impacts.</p>

Socio-Economic	303	Wylfa to Pentir Route Corridor Selection Report	8	8.4.24	... This led to a conclusion that, at this stage, an assumption should be made that an overhead line route could be identified in this area that would comply with all relevant legislation and planning policies. In particular, the effect upon residential views would not be so great as to preclude the use of an overhead line. Whilst no environmental, socio-economic or technical considerations appeared to preclude the use of buried cables in this area, it was considered that the significant additional cost associated with this mitigation could not be justified at this stage in the context of National Grid's statutory duties.	There is insufficient evidence to suggest that an overhead line is appropriate for this particular section. An 'assumption' is made that this part of the route would not include an underground section. Is there an evidence base which can be relied upon to support this assertion? A more detailed analysis is required to measure the impacts on all receptors including: socio-economic, visual, ecological to determine the most appropriate mitigation action.		EN-1 Section 5.12.8 - consider any relevant positive provisions the developer has made or is proposing to make to mitigate significant impacts in relation to socio-economic impacts.
Socio-Economic	304	Wylfa to Pentir Route Corridor Selection Report	8	8.3.2	Future opportunities for avoidance or mitigation of effects through detailed alignment at the next stage of project development were considered.	Mitigation needs to be identified as soon as possible as this could have a significant effect on cost. There is a lack of detail regarding the mitigation measures to be adopted and therefore quantifying the actual socio-economic impact is difficult at this stage. We would welcome close collaboration with National Grid officers to ensure that these mitigation measures are appropriate.		EN-1 Section 5.12.8 - consider any relevant positive provisions the developer has made or is proposing to make to mitigate significant impacts in relation to socio-economic impacts.
Socio-Economic	305	Wylfa to Pentir Route Corridor Selection Report	8	8.3.2	Future opportunities for avoidance or mitigation of effects through.	No detailed information is presented with respect to landscape mitigation. A landscape of high scenic quality coupled with an unique coastline are identified as key attributes within the national tourism strategy. The Authority needs to ensure that this is retained and that we do not support developments which run contrary to that stated within the strategy.		Natural Environment: A central reason why visitors choose to holiday in Wales is the quality and accessibility of the natural environment. We have three National Parks of distinctive character, five areas of outstanding natural beauty and, since 2012, a 870 mile long Wales Coast Path, the only one of its kind anywhere in the world. We need to take full account of the major asset represented by Wales's natural environment and consider how to use its characteristics for growing tourism sustainably;
Socio-Economic	306	Wylfa to Pentir Route Corridor Selection Report	8	8.3.2	Detailed alignment at the next stage of project development were considered.	Limited information is contained regarding National Grid's potential mitigation activities (i.e. type, scale, location, cost). The Authority is committed to ensuring that the potential adverse impacts of any major development on Anglesey are identified and avoided. Where adverse impacts cannot be avoided, the Authority will expect that the project promoter implements appropriate mitigation and/ or compensation measures.		
Socio-Economic	307	Wylfa to Pentir Options Report	16	Section 3	A full range of mitigation measures would be developed to reduce all aspects of the environmental and social-economic effects of the final proposal.	This approach is welcomed and should include mitigation measures in respect of the impact on the Welsh Language & Culture.		
Socio-Economic	308	Wylfa to Pentir Options Report	16	Route selection and transpositions (16.2.9)	As described in Chapter 5, a variety of alternative tower designs are available that would achieve the technical requirements for the new connection	See previous comment - synchronisation in terms of tower designs is essential.		

Socio-Economic	309	N/A	N/A	N/A		N/A	All communities should benefit directly from the use of their local resources and are compensated for the disruption and inconvenience during both the construction and operation (and ultimately decommissioning) of all major developments on the island. It is important to differentiate between statutory (planning system) and voluntary community benefits. Community benefits can support the sustainability, quality of life and wellbeing of the island and its communities. These benefits can be delivered through both statutory (planning) and voluntary mechanisms. The whole of the island is recognised as a major project host community. The distribution of community benefits should reflect potential localised impacts, especially through the statutory mechanisms. There is no legal requirement upon a developer to offer CBCs. CBCs are not a mechanism to make a development acceptable in planning terms, and they are not taken into account when determining an application for planning consent.		Isle of Anglesey County Council's Community Benefit Contributions Strategy (adopted March 2014)
Socio-Economic	310	N/A	N/A	N/A		N/A	Expected some information and/or commitment from National Grid in terms of the Project's local socio-economic benefits and opportunities i.e. employment, training, supply chains etc.		
Socio-Economic	311	Not in content	N/A	N/A		N/A	Despite being a regulatory body the planned investment on these works is significant and will ultimately cost hundreds of millions. On that basis alone this warrants a strategy that will benefit the communities that will be disrupted not only through the works but also from the additional pylons once completed.		NPS EN-1 para 5.12.3 on consideration of impacts on local services and infrastructure and 5.12.8 on the mitigation of significant impacts and ensuing legacy benefits. PS6 of the emerging JLDP, also highlights legacy benefits including local economic and community benefits.
Socio-Economic	312	Not in content	N/A	N/A		N/A	Linked to the above, IACC would expect that all procurement activities will be advertised through Sell2Wales and that linkages should be made to HE and FE establishments to ensure the potential for local employment and training is retained wherever possible. Early engagement with the Energy Island Programme should also be made.		NPS EN-1 para 5.12.3 on consideration of impacts on local services and infrastructure and 5.12.8 on the mitigation of significant impacts and ensuing legacy benefits. PS6 of the emerging JLDP, also highlights legacy benefits including local economic and community benefits.

Socio-Economic	313	Not Included	N/A	N/A		N/A	IACC acknowledges the fact that Community Benefit contributions associated with the development of transmission infrastructure by the National Grid differs from that of other Private Sector developments, however, it is considered that National Grid should be escalating their efforts to demonstrate how it can work in collaboration with local communities to maximise the positive benefits to local businesses and people.		JLDP Anglesey & Gwynedd 2011-2026 STRATEGIC POLICY PS8: Proposals for Large Infrastructure Projects
Socio-Economic	314	North Wales Connection - Connecting New Low Carbon Energy In North Wales	Finding the right route	P.14		There may be other parts of the connection where an overhead line may be less acceptable so we will also look at whether we need to put further sections underground.	Disappointed with the methodology on how National Grid have dismissed the sub-sea options on technical and commercial grounds and thereafter have gone immediately to the overhead line option without really addressing the strategic option of undergrounding in much detail.		
Socio-Economic	315	Wylfa to Pentir Route Options Report	8.6	8.6.1		<p>For the purposes of providing a structure to the options appraisal process, the Orange Route Corridor between Wylfa and the Menai approach has been divided into four sections, referred to as Sections 1 – 4:</p> <ul style="list-style-type: none"> • Section 1: Wylfa Power Station to Rhosgoch, comprising a predominantly linear route corridor along the route of the existing overhead line and passing Treglele, Cemaes and Llanfechell. • Section 2: Rhosgoch to Llandyfrydog, passing between Rhosybol and Capel Parc to the east and Llyn Alaw reservoir to the west. • Section 3: Llandyfrydog to the B5110 north of Talwrn, encompassing the Capel Coch area and keeping east of Llanerchymedd. • Section 4: B5110 north of Talwrn to west of Star, generally following a corridor around the existing overhead line between Llangefni and Talwrn to a point where the existing overhead line turns sharply eastward, at a location west of Star. <p>8.6.2 The route options (as detailed in Chapters 9 to 12) taken forward for consultation have been colour coded according to the section of the corridor that they are located within, and have also been given specific alpha-numeric references. For example, the two route options presented in Section 1 have been identified as Route Options 1A and 1B and are both coloured purple. At this stage, the route options have been shown as 100m wide bands as described in Chapter 8, Part 3.</p>	The proposed Orange Route would be located across a number of significant/ important locations/ sites. Given the wide open vistas currently enjoyed in these areas, there is scope to underground the route to best protect and maintain one of the island's few competitive advantages which is the quality of its internationally renowned natural environment.		

Socio-Economic	316	North Wales Connection - Connecting New Low Carbon Energy In North Wales	Finding the right route	P.14		Finding the right route for the new connection is a difficult balance...Our proposed route options are 100 metres wide...we'll work hard to reduce the effects of the new connection further. And if there are opportunities to take advantage of natural screening and put the connection outside of these routes we will look at this as well. There may be other parts of the connection where an overhead line may be less acceptable so we will also look at whether we need to put further sections underground.	It is accepted that the subsea option may not be technically or commercially viable. However, it is disappointing to note that the undergrounding of cables was not considered as a possible strategic option along the orange corridor. We would welcome the opportunity to review the cost multiplier formulae utilised by National Grid to compare overhead cables versus undergrounding, and request further detail on this issue. Furthermore, we would be eager to investigate the possibility of undergrounding options along the orange route where there is a substantial cumulative impact based on landscape, economy and communities. All such options should continue to be open for discussion at this stage.		
Socio-Economic	317	Wylfa to Pentir Route Options Report	10.4	Appraisal of route options		Though the Llyn Alaw visitor car parks and picnic sites lie over 1 km from the nearest route option, route options to the west of the existing overhead line do bring the new line closer to the reservoir and pose a risk of affecting the tourist attracting setting at the eastern end of the reservoir, although on inspection this area appeared to be less frequented.	Notwithstanding the present level of use, which is based on observation as opposed to evidence, bringing the OHL closer to these visitor areas is likely to have an adverse impact upon the setting irrespective of the visitor numbers currently making use of the area.		
Socio-Economic	318	Wylfa to Pentir Route Options Report	9	9.3.4 (and others)		Whilst final details of the Horizon layout remain under development, consideration was given to a non-parallel route to the west as an alternative to close parallel options north of the A5025.	If changed how much of an impact will the final Horizon layout have?		
Socio-Economic	319	Wylfa to Pentir Route Options Report	8	8.3.5		Where even lower height towers might be required for technical reasons, such as to prevent infringement of safety clearances in the vicinity of RAF airfield, it was assumed that two lines of single circuit towers could be used with a tower height of approx. 28m.	Within this section it refers to lower height towers for technical reasons e.g. RAF. However, it does not clarify whether additional towers numbers would be required as a result of their reduction in height. Furthermore it refers to RAF Mona but doesn't include the flight paths of RAF Valley.		
Socio-Economic	320	Wylfa to Pentir Route Options Report	10.4	Appraisal of route options		Though the Llyn Alaw visitor car parks and picnic sites lie over 1 km from the nearest route option, route options to the west of the existing overhead line do bring the new line closer to the reservoir and pose a risk of affecting the tourist attracting setting at the eastern end of the reservoir, although on inspection this area appeared to be less frequented.	The impact of Route Option 2a on Llyn Alaw along with other areas. Parts of Llyn Alaw are recognised as a SSSI. This is an area which can be seen from across the island where undergrounding should be justifiably presented as an option.		
Socio-Economic	321	Wylfa to Pentir Route Options Report	11	11.4.7		The wider western deviation options would avoid the constraints described above around Cae Fabli and the Anglesey Fens, but the most westerly non-parallel route option (Route Option 3A) would be less than a kilometre from the B5111 highway and associated properties / settlements. Therefore, Route Option 3A would result in visual amenity effects within a wider and currently unaffected landscape, although these may be less significant than those experienced by residential properties to the north of Capel Coch. The non-parallel route options to the west, between Route Option 3A and Capel Coch, posed a risk of encircling Capel Coch with views of overhead lines from both sides of the settlement.	As above, Section 3 should also be looked upon favourably for undergrounding given the adverse impacts which both options are likely to have upon the character of the area and the amenities currently enjoyed by the residents of the area.		

Socio-Economic	322	Wylfa to Pentir Route Options Report	3	3.5		<p>The selection of the Orange corridor was based on the following considerations:</p> <ul style="list-style-type: none"> • Landscape and Visual Amenity • Ecology • Historic Environment • Socio-Economic • Consultation (Feedback) • Technical Constraint • Costs 	<p>It is acknowledged that National Grid's preferred route is the orange route. However, from the information provided (Overview & Route Options Report) it is apparent that the cost is the main driver for the decision.</p> <p>The need for a "balanced process" (Overview) appears open to misinterpretation given National Grid's tendency to dismiss other options on the basis of cost.</p> <p>Is the "balanced process" truly based upon a robust assessment process, based upon both quantitative and qualitative measures?</p>		
Socio-Economic	323	Wylfa to Pentir Route Options Report	8	Transmission Technology Considerations		<p>Alternative tower types to the existing 50m high lattice towers (e.g., low height and T-pylons) could be deployed in situations where the lattice towers give rise to significant visual effects</p>	<p>Use of alternative tower types needs careful consideration during detailed design. The use of current pylon types in a synchronised fashion may reduce the effect of negative visual impact.</p> <p>The use of a number of alternative tower types would be visually jarring and detrimental to the local landscape.</p> <p>Holford Rule 6 (8.2.9) should be given cognisance.</p>		<p>New Nuclear Build at Wylfa: SPG GP 20 - Important landscapes including the Anglesey AONB and Heritage Coast; Local landscape character with reference to Special Landscape Areas and Landscape Areas, Seascape with reference to Seascape Character Areas and the Wales Coast Path.</p>
Socio-Economic	324	WP Route Options Report	5	5.2.6		<p>Figure 5.3 provides a visual comparison of an L13, L6 and L12 low height lattice towers and a T-pylon. These are photomontages of each tower type in a generic rural setting, not dissimilar to that found on Anglesey, to provide a visual comparison of the tower differences with all else being equal.</p>	<p>Is there a preference for which type of pylon will be used. Some unknowns remain with the T-pylon in terms of what their visual impacts will be; impact on migratory birds; impact on bats etc.</p> <p>If it's envisaged that a line swap will be required on any / all route options – clarity should be sought early regarding the type of pylons that would be ruled out. It appears from discussions at the workshop that any line swap option would render the T-Pylon design redundant.</p> <p>These should all be considered further.</p>		<p>New Nuclear Build at Wylfa: SPG GP 20 - Important landscapes including the Anglesey AONB and Heritage Coast; Local landscape character with reference to Special Landscape Areas and Landscape Areas, Seascape with reference to Seascape Character Areas and the Wales Coast Path.</p>
Socio-Economic	325	N/A	N/A	N/A		N/A	<p>There is a general lack of information at this stage on the exact location of the pylons as this could impact significantly on the general area where they are located. Are they staggered, alongside or a composite of both as this will vary the impact enormously</p>		
Socio-Economic	326	Wylfa to Pentir Options Report	5	5.2.14		N/A	<p>Concerned that at every directional change or cross over there will be a need for 4 strengthened lattice pillars. There is limited information on the exact number that will be needed or the impact these will have visually</p>		
Socio-Economic	327	Wylfa to Pentir Options Report	5	5.2.6		<p>Figure 5.3 provides a visual comparison of an L13, L6 and L12 low height lattice towers and a T-pylon. These are photomontages of each tower type in a generic rural setting, not dissimilar to that found on Anglesey, to provide a visual comparison of the tower differences with all else being equal.</p>	<p>The new pylons are of a different construction to present pylons. Has this been considered terms of the visual impact, and differences which will draw the eye. There would be less impact if the pylon design would be exactly the same.</p>		

Socio-Economic	328	WP Route Options Report	14	14.4.14		Discussions with Network Rail are ongoing concerning the technical constraints and opportunities that installing cables on the rail deck of Britannia Bridge might present.	Is there potential that the dis-used track within the Britannia Bridge could be utilised for any cabling? This matter needs discussion with Network Rail to define further the scope to utilise what is currently a redundant asset.		New Nuclear Build at Wylfa: SPG Section 4.1 and GP2 & Topic Paper 4: Economic Development
Socio-Economic	329	Wylfa to Pentir Options Report	13	13.4.41		The A4080 is a tourist route from the A55, past Plas Newydd and onto to some of the tourist areas on the south and west coasts of Anglesey. In addition, Bryn Celli Ddu is being promoted as a gateway site to the archaeology of Anglesey. To the south of Anglesey South SEC Search Area lies the Plas Coch Lodge Homes Site and Leisure Club, whilst the overhead connection corridor crosses Penrhyn Golf Course. Therefore, siting a SEC within this search area would need to consider any potential effects on these tourism receptors.	The search area for sealing end compounds to the south impacts on a number of historical/heritage amenities and needs to be carefully considered.		
Socio-Economic	330	Wylfa to Pentir Options Report	13	13.4.13		The Pili Palas Nature World butterfly farm is located on the eastern edge of Anglesey North SEC Search Area and a National Cycle Route No.8 passes through the southern and western edges, albeit along the main roads. However, vegetation and topography would help screen views of a SEC from users of these tourism features.	Search area for sealing end compound N3 lies directly behind a popular visitor attraction. There is a need to be mindful that this doesn't have a detrimental effect on this business or visitors to Anglesey. This is during construction and on completion as vegetation to screen could take years and this could have a detrimental impact on tourism businesses in the area. NG need to consider that the A5025 (East) is one of the main tourism roads which leads tourists from the bridge to Benllech/Pentraeth/Red Wharf. On the basis of proximity to businesses, it may prove advisable to have the SEC located further inland to Section 4.		
Socio-Economic	331	Wylfa to Pentir Options Report	14.4.3	Section 5 Route Options: Menai Strait Crossing		At this stage, National Grid has commenced feasibility studies into potential undergrounding technologies (including cabling routes and potential drilling locations), SEC locations and overhead routes to the SECs. However, at the time of this report's publication these studies remain on-going.	In light of these facts, is the current process of engagement premature?		
Socio-Economic	332	Wylfa to Pentir Route Options Report	Section 15	N/A		N/A	SEC Search areas are large. It is imperative that National Grid clarify how stakeholders will be consulted and offered an opportunity to influence these proposals.		
Socio-Economic	333	Not in content	N/A	N/A	N/A	N/A	The Authority would have expected information which provided high level detail relating to: <ul style="list-style-type: none"> • Will there be opportunities for local people to be part of the workforce during construction and maintenance period? • What skills are required? • Also, will there be opportunities for local companies to be part of the supply chain or is it simply a matter of transferring equipment? 		
Socio-Economic	334	Not Included	N/A	N/A		N/A	This major infrastructure project will have a serious detrimental impact to the landscape, economy and communities of Anglesey and every effort should be made in these early stages to ensure that positive benefits are capitalised. The provision of apprenticeships, education and training should start in earnest; and business support and supply chain opportunities need to be planned in advanced.		

Socio-Economic	335	WP Route Options Report		5 5.2.9 - 5.2.11		<p>Construction of lattice pylons requires the following activities:</p> <ul style="list-style-type: none"> • Construction of temporary access tracks and construction areas to every pylon site (metal or stone) where existing roads are not present (e.g. in a farmers field); see Figure 5.5. • Localised vegetation clearance and soil excavation, if required, in the area the pylon is to be located. • Implementation of drainage works, if required. • Creation of site compounds to store materials, equipment and provide welfare facilities for workers during the construction period. • Installation of temporary fencing around working areas around the tower bases, the size of which is dependent on tower type (typically 30m x 30m around the base of the suspension towers or 50m x 50m around tension towers). • Creation of the foundations for each pylon, which are normally made of concrete, although piles may be needed in certain ground conditions. • Construction of the tower (see Figure 5.6) using a range of machinery, such as excavators, cranes, winches and delivery vehicles. The cranes used tend to be large to allow the full height of the tower to be reached with the crane arm. <p>5.2.10 Once the towers are erected, the conductors are brought to site on drums and winched and secured into position. Winches would not be needed at the majority of tower sites, but where needed would be located some distance from the tower itself. Where the overhead line crosses roads, other electricity lines or telephone wires, these are protected; for example, scaffolding and nets are erected over roads, and lower voltage lines are made dead, relocated or protected with scaffolding.</p>	<p>Much more detail is required on the impact that the construction phase will have on Anglesey. The potential for a 3-year build is likely to have significant detrimental and negative impacts across many different areas which again requires careful mitigation. Detail on aspects such as Transport; Traffic; Site Compounds; Working Hours; Noise; Environmental/ Emission Concerns etc. all require addressing in a separate document which can be scrutinised and challenged.</p>		<p>New Nuclear Build at Wylfa: SPG Policy GP7 within the SPG is concerned with protecting the population from environmental effects including noise and dust</p>
Socio-Economic	336	Not in content	N/A	N/A	N/A	N/A	<p>Because of the scale and nature of the proposed works, there is a need to undertake a detailed Health Impact Assessment. There is no mention within the document of an HIA. Aspects that warrant and justify the completion of one includes the significant construction works which will have an impact on residents and also the installations of pylons which could cause some distress to residents if they are nearby and have not been subjected to one previously.</p> <p>Is there a precedence for parallel-tracking pylons of this scale? Are the increased force-fields and their impacts properly understood? Any detrimental impact on health will have a corresponding impact on socio-economic aspects – We do not have sight of the Health Impact Assessment -these points need to be properly understood</p>		<p>Policy GP7 within the New Nuclear Build at Wylfa: SPG is concerned with protecting the population from environmental effects including noise and dust</p>
Socio-Economic	337	Stage 2 Consultation Strategy		5 How will we consult		N/A	<p>Unclear whether any verbal comments will be accepted from the public exhibitions.</p> <p>Hard to reach groups are a recognised consultee, however many of these would not choose to submit written comments.</p> <p>How people can give us their feedback section - only details written feedback.</p>		
Socio-Economic	338	Overview Document	Page 31	Page 31		We'll aim to publish a feedback report by Summer 2016	Feedback/ Feedback deadline is essential to ensure transparent/ clear communication.		

Socio-Economic	339	Overview Document	Page 31	Page 31		We'll carry out more work and come back and talk to you in spring/summer 2016 about what we need to do to build the underground connection at the Menai Strait	Significant work remains to be done on the underground connection at the Menai Strait - it is unclear from this statement whether there will be opportunity to comment on proposals.		
Socio-Economic	340	Wylfa to Pentir Preferred Route Corridor Selection Report	N/A	3.3.5		North Wales Strategic Options Reports also considered wider reinforcement works that would be required to the existing transmission system on the mainland in North Wales.	Although undertaken separately to the Wylfa to Pentir works the cumulative impacts need to be considered - particularly the socio-economic impact.		
Socio-Economic	341	Wylfa to Pentir Route Options Report	9 to 15	Sections - Route Options 9.4.17 - 9.4.20 10.4.18 - 10.4.21 11.4.13 - 11.4.16 12.4.13 13.4.13 -13.4.15		All Local Economy Sections in route options.	Consideration needs to be given on impacts to public footpaths (potential diversions / closure) and on cycle paths. This impacts on both the tourism sector and residents from a health and well being perspective. More consideration is required on the level of impacts on these facilities.		
Welsh Language	342	Not in content	N/A	N/A		N/A	There is a lack of detail within the documentation in respect of the Welsh Language & Culture. Given the scale of this project, a Welsh Language Impact Assessment should be considered.		
Welsh Language	343	Not in content	N/A	N/A		N/A	Welsh Language and Culture should be central to and embedded within every aspect of National Grid's proposals.		
Welsh Language	344	Not in content	N/A	N/A		N/A	There is a lack of detail within the document of the implementation of communication with communities; Welsh Language and Culture is one of the key aspects to consider within these communities.		
Welsh Language	345	Not in content	N/A	N/A		N/A	National and local planning policy publications are considered to give relevant guidance on planning and the Welsh Language.		Technical Advice Note 20 - Planning and the Welsh Language (2013) / Supplementary Planning Guidance: Planning and the Welsh Language (2007).

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Project title	North Wales Connections Project	Job number	229321-00
cc		File reference	
Prepared by	Charlotte Brown Helen Peake Peter Hulson	Date	4 November 2015
Subject	High Level Review of Material Provided for Consultation Stage 2 – Consultation Strategy and Content		

1 Introduction

Arup have been commissioned by Isle of Anglesey County Council (IACC) and Gwynedd Council (GC) to provide technical, independent support to inform the Council's continued dialogue with National Grid on the North Wales Connections Project, in accordance with a Planning Performance Agreement (PPA). The following note has been prepared in support of IACC's response to the National Grid Stage Two consultation period running from October to December 2015.

2 Scope of Review

The following review provides commentary on the strategic nature of information provided by National Grid as part of the Stage Two consultation documentation. It considers:

- The North Wales Connection Stage Two Consultation Strategy (October 2015) published by National Grid, and its' relationship to the wider project consultation strategy in order to inform a continuing dialogue on adequacy of consultation.
- The North Wales Connection Wylfa to Pentir Preferred Route Corridor Selection Report (Oct 2015), in respect of overall content and consultation strategy. As agreed with IACC, the technical content of the document is to be reviewed and commented on by IACC Officers. It does not form part of the review set out here.
- The North Wales Connection Wylfa to Pentir Route Options Report (Oct 2015) in respect of overall content and adequacy of approach to options appraisal. The technical content of the document is to be reviewed by IACC Officers.

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3 Consultation Strategy

National Grid has confirmed the difference between statutory and non-statutory consultation with reference to the Planning Act 2008. Consultation to date, including the current Stage Two consultation is non-statutory. IACC will seek to engage on the content of the Statement of Community Consultation (SoCC) in 2016 which will set the basis for statutory consultation to follow.

Whilst it is acknowledged that ‘Adequacy of Consultation’ under the Planning Act 2008 will be judged in reference to the SoCC, IACC are concerned that the current consultation strategy is overly complex and lacks coherence. IACC wish to raise a number of issues with the consultation undertaken to date, so that National Grid have an opportunity to ensure that these are addressed at subsequent consultation stages.

IACC’s concerns relate to project definition, clarity around consenting strategy, and ensuring that the on-going consultation strategy facilitates adequate community and wider stakeholder engagement on mitigation and control measures. These matters are addressed in further detail below.

3.1 Project Definition

In 2012 National Grid consulted on a scheme that included an overhead line between Wylfa and Pentir, including potential route corridors, options for crossing the Menai Strait and reinforcement works between Pentir and Trawsfynydd in Gwynedd. This was defined as the North Wales Connections Project. Widespread public consultation has not since been undertaken, although informal dialogue, including workshops with IACC has been on-going.

IACC raise the following concerns regarding the Stage Two Consultation:

- By excluding the crossing of the Menai Strait from this stage of consultation, an integral part of the overall project, of upmost concern to IACC, is absent. National Grid should set out clearly how this element of the project will be adequately consulted on with sufficient information on proposed construction / installation method, mitigation and safeguarding of nature conservation and landscape matters which are statutorily protected in this area.
- The Stage Two consultation material references the Wylfa Newydd Connection Project, without clear introduction or definition. The introduction of different project terminology and definition is confusing for those seeking to engage in the project.
- Works between Pentir and Trawsfynydd are necessary to facilitate the Wylfa to Pentir connection (as set out in Consultation Strategy Page 7). Best practice dictates that the project should be consulted on in it’s entirety, as was the approach in 2012.

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3.2 Consenting Strategy

The National Grid proposals will include works to be secured under the Development Consent Order (DCO) submission to the Planning Inspectorate (determined by Secretary of State) and those to be determined by IACC as Local Planning Authority under the provisions of the Town and Country Planning Act 1990. It is unclear at this stage what elements of the project will be subject to which consenting regimes nor how the timing of those applications is envisaged by National Grid. The Planning Inspectorate note that the procedures under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (the Infrastructure EIA Regulations) must be followed for any subsequent application (to an LPA or other body). For approval of matters in pursuance of a requirement that the approval must be obtained before **all or part of the development may be begun**¹.

The Department for Communities and Local Government (CLG) document: Planning Act 2008: Guidance on associated development applications for major infrastructure projects provides helpful information on the relationship between Associated Development and the DCO in Wales. IACC would encourage National Grid to set out the relationship of the project to associated development without delay.

3.3 Forthcoming Consultation Strategy

IACC will wish to ensure that they have sufficient opportunity to engage on mitigation and control measures to be secured via Planning Requirements / Conditions and Obligations. A single stage formal consultation period in late 2017 may not be sufficient to allow adequate opportunity to fully explore mitigation strategies, in the interest of all parties working towards Statements of Common Ground.

IACC wish to be consulted on a 'tiered' strategy of mitigation options, including embedded i.e. within design, primary, and secondary measures. These secondary measures may include proposals for compensatory arrangements for losses which cannot be mitigated effectively at source. It is considered that local land use impacts (farming impacts for example) may well be mitigated through appropriate construction programming. Such details should be consulted on, incorporated within the proposals or as necessary secured as a Requirement to the DCO.

A number of important documents would be expected as part of the DCO as mechanisms to reduce impacts. Examples from the Hinkley Point C Connections Project include:

- Outline Construction Programme – to provide a full appreciation of the phasing of construction sequences, tied back to proposed strategies for mitigation of impacts and to give additional context to Planning Requirements and Obligations;
- Construction Environmental Management Plan – to ensure that commitments made elsewhere within the application (for example within the Environmental Statement) are

¹ Planning Inspectorate (2014) Advice Note 15: Drafting Development Consent Orders
http://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2014/10/advice_note_15_version_1.pdf

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carried through to project execution by the contractor teams. This matter is particularly important given the physical extent of the proposed project and the anticipated number of contractors who may be called upon to execute its' delivery;

- Biodiversity Mitigation Plan – to ensure that provisions are made for the safeguarding and protection of biodiversity assets and also to link with wider commitments to enhancement. In this regard, mechanisms such as the Off Site Planting and Enhancement Scheme (OSPES) adopted for the Hinkley Connections Project should be set out in context for the North Wales Connection Project;
- Outline Waste Management Plan – to ensure that contractors appropriately control and manage waste production during the execution of the project and ensure environmental protection through compliance with appropriate regulatory standards and best practice throughout;
- Noise and Vibration Management Plan – it will be imperative that commitments to noise control set out within the DCO are adhered to and that there is a clear mechanism for affected communities to respond to National Grid and their contractor teams if noise or vibration becomes an issue. It is expected that this plan would also set out the means to monitor noise with clear links to the outline construction programme;
- Outline Written Scheme of Archaeological Investigation – it is anticipated that National Grid and contractors will reduce effects on heritage assets as far as practicable through sensitive design. In addition, National Grid should also provide a Written Scheme of Archaeological Investigation to demonstrate how appropriate investigative and construction techniques will be employed in areas of higher archaeological potential and the steps taken to preserve and protect archaeological assets which are identified;
- Traffic Management Plan – the Council has noted concerns regarding the potential effects associated with construction traffic. The local road network is less able to support a significant construction programme and there are concerns regarding traffic routeing, HGV component and proposed mechanisms of control. The Traffic Management Plan should address these matters to the satisfaction of the Council;
- Public Rights of Way Management Plan – it will be imperative that effects on the Public Rights of Way network are fully understood and set in the context of proposals to make alternative provision for any temporary or permanent proposals which might affect the Rights of Way network.

IACC would anticipate early sight of these documents with a view to providing a meaningful commentary on them.

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4 Route Map of issues from Strategic Options Stage to Project Level Engagement

National Grid ask as part of the Stage Two consultation for general feedback about the work conducted to date, including the Strategic Options Report (SOR) and selection of a preferred corridor. On behalf of IACC, Arup provided an independent review of the information presented in the SOR and have engaged with National Grid on matters requiring on-going resolution. IACC are in on-going dialogue with National Grid on these matters.

Members have previously made clear through consistent representations regarding their preference for a sub-sea Strategic Option. Member engagement by National Grid should seek to align the multi-stage options appraisal process, with the on-going stakeholder consultation strategy, ensuring that sufficient information regarding alternatives is provided for each stage of decision making, and it be revisited via back-checking throughout pre-application consultation. Figure 1 sets out the expectations from Members in respect of engagement.

Figure 1: Multi-stage project engagement – Member requirements

1. Decision on preferred Strategic Option - Back-checking of the preferred Strategic Option is essential, to address the elements of uncertainty that it is not possible to address at this stage - particularly around the cost model, including mitigation in comparison with costed alternatives.
2. Mitigation via undergrounding - Without prejudice to Members' position on issue (1), information is required to justify any decision making regarding the feasibility of a fully underground connection between Wylfa and Pentir.
3. A hybrid of mitigation options and connections technology - Without prejudice to Members' position on issues (1) and (2), alternatives for underground and other technologies to provide a mitigated scheme should be fully consulted on.

Key to linking the Strategic Options engagement with the project level engagement is the commitment to back-check the Strategic Options throughout the pre-application and application stages. This is consistent with National Grid approaches and the commitment to this approach is welcomed. It is important that this approach addresses the information gaps identified at Strategic

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Options stage, with a view to informing the preferred option and to provide an evidence base in support of the DCO application.

4.1 Feasibility of Strategic Option

National Grid must demonstrate that the primary preferred option is technically feasible, and is in fact capable of being delivered (including technical considerations under the Conservation of Habitats and Species Regulations 2010 (Habitats Regulations) in respect of the crossing of the Menai Strait. Should it be identified that the preferred Strategic Option is not feasible, there will be a requirement to re-visit the Strategic Options Report (SOR), and all route options development.

IACC notes that if an alternative Strategic Option were to be deemed appropriate, the Route Selection and Route Options Development Reports included in the Stage Two consultation material would become obsolete.

4.2 Cost Model

National Grid have legal obligations to provide an efficient, coordinated and economical system, and are regulated by Ofgem to protect the interests of consumers. Whilst IACC recognises that there is a significant cost differential between the preferred Strategic Option and other Strategic Options, this differential could become less marked when the cost of mitigation is taken into account and accepting a degree of cost uncertainty in developing the cost model.

The cost model presented by National Grid in the consultation material does not take into account mitigation. Mitigation in the form of underground under the Menai Strait is integral to the preferred Strategic Option, and its omission potentially a misleading representation of full project costs. It has not yet been demonstrated what construction method (trenching, tunnelling, horizontal direct drilling) would be employed, or mitigation to address any significant adverse environmental effects at the Menai Strait. Paragraph 18.15 of the SOR estimates the cost of mitigation for the Menai Strait at £35-50m (but does not include this in the cost model). With the technical complexity associated with a possible tunnel installation across and seismically active area, the outcome of further investigations is highly likely to affect the cost assumptions. It is understood that National Grid will seek to provide refined cost estimates as further project definition is developed. This will be consistent with the commitment to back-checking from National Grid. This must be represented adequately in the cost model used to compare strategic options in order to validate the decision making process.

Mitigation may also be provided in the form of undergrounding, alternative pylon design, off-site, and on-site mitigation and enhancement. IACC understands that this has not been accounted for in the cost model to date. National Grid demonstrated in the SOR that the costs of a fully underground version of the preferred Strategic Option between Wylfa and Pentir would be of similar magnitude to Strategic Option 6, the 'hybrid' option. Mitigation in the form of hybrid technology has significant potential to alter the cost differential between the preferred Strategic Option and alternatives. IACC are keen to explore mitigation options that incorporate a greater commitment to undergrounding, which should be reflected in the cost model when considering alternatives. National Grid will be aware of the significant cost differential between Strategic Options cost model analysis, and developed project costs for the Hinkley Point C Connections Project, which raise

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questions over the validity of the Strategic Options cost model. In this example, the Strategic Options cost model failed to take into consideration the proposed rationalisation of the existing 132kV network infrastructure, although this element of the work was integral to the overall scheme.

Back-checking of costs is essential, as the preferred option and associated mitigation is further defined. This process should include the costs of all embedded, primary and secondary mitigation, inclusive of costs for the crossing of the Menai.

4.3 Socio-Economic Impacts

The information provided in the SOR is lacking in a robust evidence base on which to draw Socio-Economic conclusions. IACC considers it imperative that the economic impact issues and opportunities are addressed through to the next project stage and a robust evidence-driven case developed to support the DCO application.

Further socio-economic assessment provided in the Stage Two consultation material is limited, as set out in Section 6 below.

4.4 Environmental Impacts

IACC have significant concerns about the potential landscape and amenity impacts of proposals for crossing the Menai Strait as well wider effects across the remainder of the Island. These matters have been raised by a range of stakeholders and acknowledged by National Grid in the consultation material. IACC are concerned that there are likely to be significant impacts associated with the Sealing End Compounds (SECs) and these have yet to be defined given the exclusion of the Menai from this round of consultation.

IACC have not yet been consulted by National Grid on the details of establishing an appropriate environmental baseline and assessment methodologies to support the DCO application. Formal EIA Scoping has yet to be undertaken for the project. Further engagement at a project level is required to ensure that the appropriate survey scope and methodologies are agreed for the purposes of EIA in a timely and appropriate manner during project development.

National Grid are urged to set out an evidence plan, in consultation with stakeholders including NRW, IACC and GC as to how robust evidence will be gathered in order for the project to be assessed in accordance with the Habitats Regulations (particularly the crossing of the Menai). This should be a key priority as it represents a significant risk to project delivery.

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5 High Level Commentary on Wylfa to Pentir Route Corridor Selection Report

5.1 Issues raised previously by IACC

There are a number of issues identified in Arup's review of Briefing Pack #3 on behalf of IACC, which do not appear to be addressed in the document. Mitigation options have been seemingly discounted at an early stage, without the provision of evidence to support the conclusions drawn. Further evidence is required to substantiate such decisions. IACC would expect to see evidence to assess the relative performance of the route options, considering appropriate environmental, social and economic parameters, in addition to demonstrating how the preferred route corridor is most likely to comply with Planning Policy, and environmental legislation, including the Habitat Regulations (2010) in consideration of alternatives. It is not clear what weight will be given to the various considerations required as part of the decision making process and this matter should be confirmed.

5.2 Scope of new information provided

Reference is made within the document to additional supporting activities and analysis such as review of compliance with socio-economic strategies and guidance, bird strike analysis, landscape and visual assessment with the use of ZTVs and photomontages, review of compliance with planning policies, and further technical investigation of the Menai Strait. This information has not been provided in full within the consultation material. There are instances where the conclusions refer to photomontages for supporting evidence. Without sight of this information, it is difficult for IACC to comment on the adequacy of the decision making process to date.

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6 High Level Commentary on Wylfa to Pentir Route Options Report

6.1 Issues raised previously by IACC

As identified previously in response to Briefing Pack#3, it is unclear how the boundaries of the orange route corridor have been determined. This continues to be the case. Section 8.1.6 of the Route Options Report clarifies that this boundary of the orange route corridor is not considered an absolute constraint, and that routes outside this could be considered. Likewise, the 100m corridors identified in the Route Options Report are not set boundaries, and do not account for the limits of deviation that may be specified within the DCO. Care should be taken to ensure that options outside corridors initially identified for consultation are fully consulted upon, and that potential constraints are adequately considered throughout the appraisal process. It also follows that adequate baseline characterisation should address reasonable anticipated departures from the orange route corridor to ensure that the Environmental Statement supporting the DCO submission is sufficiently robust.

As identified in Section 5.2 above, further baseline information should be provided in respect of the supporting activities referred to in Section 8.5 of the Route Options Report. In particular, IACC have previously identified concerns about the potential impacts of route alignment on the Anglesey Fens SAC and Anglesey and Llyn Fens Ramsar site, and expect to be consulted on the detailed baseline characterisation of this important site, including the potential for indirect hydrological impacts on habitats.

6.2 Route Options

Section 8.2 identifies the potential for the minimisation of landscape and visual effects by aligning proposed new grid infrastructure alongside the existing 400kV line. IACC consider that the following should also be considered;

- **Rationalisation of existing infrastructure** - The existing Menai overhead line crossing is not under consideration as part of the current proposals. However, if a cable tunnel was constructed under the Menai Strait it may be possible to accommodate the existing overhead line, which would lessen landscape and visual cumulative impacts and visual clutter. This would be in line with Paragraph 2.8.3 of EN-5 and also in accordance with the provisions of the Holford Rules:
*“Sometimes positive landscape and visual benefits can arise through the reconfiguration or rationalisation of existing electricity network infrastructure”*²
- **Cumulative effects of pylon design options** - The relationship between the existing line and design development of the preferred route that could include T Pylon technology and undergrounding sections (including jointing bays and sealing end compounds). In this

² DECC (2011), National Policy Statement for Electricity Networks Infrastructure EN-5.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/37050/1942-national-policy-statement-electricity-networks.pdf

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instance the cumulative effects of different technology types could be considerable. Such effects could be mitigated by works to alter the existing 400kV infrastructure.

- **Appraisal methodology** - The selection of 100m corridors for appraisal at this stage may restrict adequate consideration for avoidance of effects. The selection of this corridor may be premature in the absence of more detailed environmental baseline information. National Grid should demonstrate how these corridors will relate to the full baseline characterisation and study areas requiring consideration as part of the EIA. IACC will expect, in support of the DCO application, an evidence base to demonstrate the avoidance of adverse effects through route alignment and mitigation where this is necessary.
- **Interface with on-going studies at the Menai Strait** - It is expected that there will be some interface between the Sealing End Compound (SEC) Search Areas and the development of a technically feasible solution to crossing the Menai Strait. Studies into the viability and routes for various underground construction techniques to cross the Menai Strait and thus lessen effects on the AONB are on-going. It is therefore unclear how the outcome of these investigations will influence the selection of potential SEC locations, in consideration of feedback from consultation.

6.3 Scope of new information provided

The consultation has focussed on a number of key topic areas for the comparative assessment of the potential impacts of the route alignment options. These topic areas do not reflect those that would be considered as part of the Environmental Impact Assessment (EIA) in accordance with the National Policy Statements (NPS). National Grid have not yet formally undertaken a Scoping exercise, as a formal statutory requirement, scheduled for 2016. IACC will provide a formal Scoping response when invited to do so by PINs. This commitment does not obviate a need for continuing dialogue on EIA surveys and methodologies and IACC would seek agreement from National Grid on this matter.

The consultation acknowledges that, should consultation identify additional topic areas that require consideration, this will be reviewed as part of the back-checking process. Of the topics that have been considered by National Grid as part of the route appraisal process, the following should be appraised in further detail;

- **Transport** - It is not clear how potential transport effects have been identified and assessed. There is no information presented on potential access routes, their potential to affect local amenity, and cumulative impacts on local communities. IACC are particularly concerned that the local rural roads are highly constrained, and that minor disruptions can result in unacceptable delays and highway safety issues as local people seek alternative routes.
- **Hydrology** - Effects on water resource appear to have been considered in respect of direct effects on flood risk. Indirect effects should also be considered as a differentiator between route options, in particular where effects on the hydrological regime could affect designated habitats or sites.
- **Socio-Economic Effects** - The consideration of socio-economic effects within the route appraisal process is broadly welcomed. However, the assessment would benefit from a clear methodology, setting out types of receptor and potential impacts identified. The route options appraisal focusses on a narrow interpretation of socio-economic effects on the 'local

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economy', rather than a wider potential for socio-economic effects on local communities. Opportunities for strengthening the local economy should be explored including opportunities for employment/training/work experience possibly targeted at disadvantaged residents. It is particularly important that the cumulative effect on communities as a result of socio-economic impacts, combined with other potential environmental effects and traffic impacts be considered. Where it is not possible to fully mitigate effects through route alignment, IACC would expect a hierarchy of mitigation options to be developed in consultation with local stakeholders, including the potential for primary mitigation in the form of design details and finish, secondary mitigation including offsite mitigation, and off-site compensation and enhancement. In the case of the Hinkley Point C proposals, National Grid engaged with the host authorities regarding detailed proposals for:

- An Off Site Planting and Enhancement Scheme (OSPES);
- Public rights of way enhancement;
- Community contributions to mitigate the impacts on heritage assets;
- Biodiversity measures and ecological enhancement;
- Management of distinctive landscape elements; and
- Public rights of way contributions.

Of concern to IACC is the potential for unforeseen, cumulative effects on communities. There could arise from effects associated with individual and cumulative impacts where National Grid's proposed mitigation is inadequate; adverse impacts which are understated, unforeseen or poorly predicted; and residual unmitigated effects. As such a Community Impact Mitigation Fund, may provide the appropriate mechanism by which community impacts could be adequately mitigated. IACC seek early engagement with National Grid on this matter. This will take into consideration commitments made by Horizon associated with the Wylfa Newydd project, which can provide a template for implementation.

The following topic areas, discounted from appraisal in the Route Options Report, require further consideration at this stage;

- **Health Impacts** - National Grid have not assessed health impacts, on the basis that this would be in the context of Electric and Magnetic Fields (EMF), to be addressed by compliance with ICNRIP exposure thresholds. It is not known if National Grid will provide a Health Impact Assessment in support of the DCO application. Public Health England advise in the Scoping Response to the North Wales Wind Farms Connections project that a separate stand-alone impact assessment on health should be provided, in order to comply with the EIA Directive to assess likely significant effects on population.³ The Future Generations Bill sets obligations for the consideration for impacts of public health. IACC would expect a Health Impact Assessment to be provided by National Grid, and to be engaged in pre-application dialogue as to its scope, structure and content.

³ Public Health England (2014), Re; North Wales Wind Farm Connections – Scoping Consultation, Page 77 of Scoping Opinion, <http://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN020014/2.%20Post-Submission/Application%20Documents/Environmental%20Statement/6.29%20ES%20Scoping%20Opinion.pdf>

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- **Noise and Vibration** - Noise and Vibration is identified as a topic for consideration in EN-5, but not assessed by National Grid at this stage. Noise and vibration should be carefully considered in the siting of Sealing End Compounds, and in respect of transport, access and amenity, including cumulative effects.
- **Geology** - The effects on geology have not been considered as part of the route options appraisal on the basis that effects on soil and geology are considered to be localised and could be mitigated through route design (Page 46). Geological Conservation is a topic identified for consideration in EN-5. Given the designation of Anglesey as a Geopark, and the complex geological conditions around the Menai Strait, combined with the comparatively narrow 100m corridors identified for route appraisal, it is considered that the geological conditions require further consideration and that baseline information should be provided by National Grid to support the presumption that impacts would be similar across the route options.

High level cost commentary is provided in the report, but detailed costs information not provided. In alignment with the back-checking process outlined in Section 3, further development and disclosure of a robust and up-to-date cost model is required as part of the overall project strategy.

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7 Summary and Conclusions

The consultation material provided by National Grid for Consultation Stage Two provides content on the consultation strategy to be deployed, the selection of the proposed route corridor, and the route options within the proposed corridor.

IACC are concerned that the current consultation strategy is overly complex and lacks coherence. IACC wish to raise a number of issues with the consultation undertaken to date, so that National Grid have an opportunity to ensure that these are addressed at subsequent consultation stages. These issues relate to project definition, consenting strategy, and ensuring the on-going consultation strategy facilitates adequate engagement on mitigation and control measures.

National Grid will need to engage with IACC in pre-application discussions in respect of Town and Country Planning applications supporting associated development. A clear consenting strategy for all elements of the project, including associated development should be provided to IACC.

Sufficient opportunity for consultation on detailed project impact assessment and mitigation should be provided, and will support alignment in the interest of the Statements of Common Ground. IACC wish to be engaged on a clear tiered strategy of mitigation options, including embedded, primary, and secondary measures. It is considered that local land use impacts (farming impacts for example) could be largely mitigated through appropriate construction programming. Such details should be consulted on and secured as necessary through a Requirement to the DCO.

Key to linking the Strategic Options engagement with the project level engagement is the commitment to back-check the Strategic Options throughout the pre-application and application stages. This should seek to address the information gaps identified at Strategic Options stage and to provide an evidence base for the preferred option selected for the DCO application. This is particularly relevant in reviewing mitigation costs, for example associated with the crossing of the Menai Strait. Members require further information and engagement at each stage of the options appraisal process, which incorporates information on alternatives and back-checking to reflect the hierarchy of local needs in reference to sub-sea options, undergrounding the route from Wylfa to Pentir, and hybrid alternatives that explore a mixture of undergrounding and overhead line or alternative technology options.

IACC are concerned about the potential cumulative effects. Visual clutter can be minimised by the rationalisation of existing infrastructure. This is particularly paramount in the vicinity of the Menai Strait and IACC would encourage National Grid to consider measures such as undergrounding in areas where effects are likely to be pronounced. It is particularly important that the cumulative effect on communities as a result of socio-economic impacts, combined with other potential environmental effects and traffic impacts be considered. Where it is not possible to fully mitigate effects through route alignment, IACC would expect a hierarchy of mitigation options to be developed in consultation with local stakeholders, including the potential for primary mitigation in the form of design details and finish, secondary mitigation including offsite mitigation, and off-site compensation and enhancement.

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The Hinkley Point C Connections Project introduced a number of mechanisms for mitigating effects, which IACC would like to see developed in consultation with local stakeholders for the North Wales Connections Project. IACC are concerned about the potential for unforeseen, cumulative effects on communities. A Community Impact Mitigation Fund, may provide the appropriate mechanism by which community impacts could be adequately mitigated. This proposal was discussed through Examination of the Hinkley Point C Connections Project and an appropriate framework has been provided under written representations to that project.

The Route Options Report focussed on key topic areas when discussing the relative impacts of the route alignment options. IACC consider it necessary that further consideration be given to indirect effects on hydrology, noise and vibration, waste, and the potential for transport and socio-economic impacts on local communities. It is expected that National Grid will provide a Health Impact Assessment, the scope of which should be agreed with IACC prior to its' development.

This review has highlighted areas in the Stage Two consultation material which require further consideration by National Grid. Further consideration will enable the development of an informed discussion between Members and National Grid, prior to the DCO application.

DOCUMENT CHECKING (not mandatory for File Note)

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Ein Cyf - Our Ref. WGJ/JW
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Dear Matt Durham

ISLE OF ANGLESEY COUNTY COUNCIL RESPONSE TO THE NATIONAL GRID ON THE NORTH WALES CONNECTION PROJECT NON-STATUTORY STAGE 2 CONSULTATION ON PREFERRED ROUTE OPTIONS

INTRODUCTION & BACKGROUND

As host Authority, along with Gwynedd Council, for the proposed North Wales Connection Project by National Grid, the Isle of Anglesey County Council (the Council) takes the opportunity to provide detailed comments on the non-statutory consultation currently underway. The Council has treated this non-statutory consultation as that of a statutory nature and has undertaken a high level commitment to respond to National Grid. However, nature and extent of the present consultation is limited by previous decisions that have been taken on strategic options relating to the connection project, in particular your decision to promote an overhead line connection from Wylfa to Pentir. In the Councils view this limits the effectiveness of the consultation.

The starting point for the Council remains your first stage of consultation in 2012. The response of the Council at that time was unequivocal in its preference for a HVDC sub-sea solution which would ensure no pylons would be erected on the Island. It was clear at all times that the Council was keen to limit the environmental impact of the scheme and that was the basis of its response. At the same time the Council expressed its concern over the perceived bias on the part of National Grid in signalling their preference for an overhead line solution.

There was a delay in further public engagement due to changes in Connection Contracts and the need for 'back-checking'. Subsequently, National Grid sought stakeholder feedback on its preferred technology and route corridor options. The stance of the Council was the same, and driven by the same environmental objective, i.e. a preference for a HVDC sub-sea solution, which has continued to be the case in the later announcement by National Grid on the preferred Route Corridor.

The Council's response to the present consultation comprises two strands; its overarching comments on the strategic option that has been chosen for the connection project, and its high level comments on the specific route proposal currently being consulted on.

STRATEGIC POSITION

As a precursor to your latest consultation the Council approached Horizon Nuclear Power, the developer of Wylfa Newydd, requesting their views on the viability of a HVDC sub-sea connection of their new nuclear power station to the National Grid mainland network. Their response was that such technology could give rise to fundamental uncertainty in respect of technical and commercial viability and risk issues. These concerns have been validated by Arup, as independent specialist consultants, through the Planning Performance Agreement (PPA) between the Council and National Grid.

As a consequence the Council accepts that a HVDC sub-sea solution (Strategic Option 1) is not a viable option. However, the Council understands that National Grid has committed to underground the Menai Straits section of the connection and expects that further information on this proposal will be provided before any final decision is taken.

Taking a logical and 'step by step' approach the Council next considered the Hybrid option (Strategic Option 6). This option had certain merits e.g. avoiding the crossing of the Menai Straits. Although it resulted in new pylons this was utilising an existing 132kv route, and it obviated the need to connect to the Pentir substation as this connection did not require a crossing of the Menai Straits. However, the Council is of the view that these are out-weighed by the need for a new much larger replacement overhead line from Wylfa to Valley, and the additional cost of undergrounding cables from the mainland landing point to the substation at Bryncir which the Council envisages would be a legitimate requirement of Gwynedd Council.

This iterative and pragmatic approach has brought into focus the option of a fully undergrounded connection between Wylfa and Pentir (referred to by National Grid as Strategic Option 3 – SO3 AC Cable) this had not been previously considered in detail by the Council. This has a similar cost to the Hybrid Option but brings the substantial advantage of no long term visual intrusion. In terms of technical viability the early indicators from experts in this field are that undergrounding along the whole length of the Orange Corridor route is likely to be technically feasible. Therefore the current position of the Council is that this option needs to be considered in further detail. The potential route alignment options for an underground solution, in consideration of environmental and socio-economic effects are yet to be fully explored. This would require specialist input through the PPA.

You are therefore formally requested by the Council to commit to the further investigation of this Option. In the event that you are unwilling to make such a commitment the Council expects that you will provide full reasons for not doing so having regard to all relevant parameters, environmental and economic.

SPECIFIC COMMENTS ON CURRENT CONSULTATION

I first highlight a fundamental concern of the Council regarding National Grid's latest consultation. It is the considered view of the Council that this consultation is materially defective and premature. This is not just because the Option of a fully underground solution requires further work and so cannot effectively be consulted upon, but on account of the lack of detail on the proposals for the undergrounding of the Menai Straits section. This information is seen as essential for meaningful consideration of the Orange Corridor route options. This is especially the case for the location of the Sealing End Compounds which will be determined by the means and routing of the underground cabling. Furthermore, the recent announcement by the Welsh Government regarding a third Menai Straits Crossing will need to be taken into consideration by National Grid.

The following 'High Level' comments on the consultation are therefore made against the backdrop of this serious concern regarding its deficient nature and prematurity. These comments have been derived from a detailed review of the consultation documentation by Officers from across the Council, as per the approach taken on the Horizon PAC1. Each comment has been given a RAG (Red, Amber, Green) 'traffic light' status with Red highlighting proposals which are contrary to not only established policies but also the resolved position of the Council, Amber signalling where additional information or further work is required, and Green where the Council is in agreement. Given these comprehensive comments the Council has not separately responded to the questions set out in your Consultation Feedback Form as they are addressed within our wider comments.

This detailed commentary and RAG status is set out in the Papers considered by the Full Council at its Special Meeting on 9th December 2015, of which this letter formed part, and is publicly available at <http://democracy.anglesey.gov.uk>

The Council (with Horizon Nuclear Power) has developed a Master Issues Tracking System which records changes in status on comments / issues agreed between the Applicant and the Council. It is the intention of the Council to replicate this system and utilise it for the eventual DCO Application to be submitted by National Grid. The Council do not yet have information (including programme) from National Grid setting out a clear consenting strategy that will enable planning for, and consideration of applications made under the Town and Country Planning Act 1990, for Associated Development or other infrastructure that may be required to support the project.

HIGH LEVEL COMMENTS ON CONSULTATION

PREMATURITY and DEFICIENCIES

The prematurity of this consultation and its deficiencies including the lack of information on the proposals for undergrounding the Menai Straits have already been highlighted. This makes for a ‘fractured’ and unsatisfactory consultation and begs the question as to the need for feedback to be issued to the public prior to undertaking future consultation on the Menai Straits proposals in order for the public and key stakeholders to make meaningful comments on the overall proposals. You will be aware that it is important to avoid “consultation fatigue” arising from repeated consultations.

SOCIO-ECONOMIC

The potential socio-economic implications of the proposed overhead line are seen by the Council as very substantial. Tourism is the largest sector of the Anglesey economy (generating over £260M annually) so the potential effects must be assessed against a robust baseline of local data and projected over a timeframe to be agreed with the Council. To this end the Council expects National Grid to undertake a detailed Tourism Impact Assessment which should include a visitor perception survey and the views of the tourism / accommodation providers. The potential impacts on communities affected by the project also need to be addressed utilising best practice techniques in community engagement. The Council would expect the Community Voice model to be adopted which has been successfully developed through a pilot in the Seiriol ward of Beaumaris, and is being rolled out in other communities on Anglesey. The Council would also expect further dialogue with National Grid on the scope of any studies and meaningful community engagement as soon as possible. In the event that National Grid is either unwilling or unable to proceed in this way the Council will expect to see full reasons provided in order to judge the reasonableness of the approach taken.

JOBS & SUPPLY CHAIN OPPORTUNITIES

The construction works for undergrounding the Menai Straits section and the proposed new line present opportunities for local employment and local sourcing. The Council calls for an undertaking by National Grid to maximise these opportunities for local people and businesses and to provide support through education and skills training and supply chain development. Such commitment would be consistent with agreements made by National Grid for the Hinkley Point C Connections Project.

WELSH LANGUAGE

Welsh Language and culture needs to be viewed by National Grid as a ‘golden thread’ running through all of their proposals, including the potential impacts and any mitigation. Accordingly the Council impresses upon National Grid the need for the Welsh Language to be central to its community engagement and therefore expects a Welsh Language Impact Assessment to be undertaken and cross referenced with the Environmental and Health Impact Assessments.

HEALTH IMPACT ASSESSMENT

The Council envisages that National Grid provide a Health Impact Assessment irrespective of whether or not this is regarded as a statutory requirement. This is seen as essential to allay legitimate concerns from the general public, and to be very much in the spirit of the new Well-being of Future Generations (Wales) Act 2015.

CUMMULATIVE IMPACTS

The implications of a new overhead line alongside an existing line must be considered, as should the potential impacts of other developments nearby both existing and planned. The cumulative impacts and potential for unforeseen effects to impact on communities is of particular concern to the Council, highlighting the need for early engagement with National Grid on a 'tiered strategy' for the mitigation and control of potential effects. This should be undertaken alongside a commitment to a scheme of Community Impact Mitigation, taking into consideration best practice from other Nationally Significant Infrastructure Projects. The Council would also expect National Grid to examine all opportunities to reduce cumulative effects through incorporating existing infrastructure into proposed mitigation strategies (eg undergrounding the existing line at the Menai Straits should be included in current proposals for undergrounding at the Menai Straits).

MITIGATION

Much greater detail will be required on how National Grid intend to deal with adverse impacts of the development proposals. Wherever possible, the Council will be looking for adverse impacts to be avoided as an integral aspect of the design. Failing this, appropriate mitigation and control measures will need to be devised drawing on the feedback from an effective community engagement referred to above. Where it is not possible to fully mitigate effects, enhancement or compensation should be provided. It is of critical importance that sufficient and early engagement be undertaken with the Council to establish common ground on detailed proposals for control and mitigation of effects. The Hinkley Point C Connections Project establishes a framework of control documents, requirements and obligations as a reference point for potential solutions. This should be a starting point for discussion with the Council.

COSTS

Estimated costs have been included in the consultation documentation. In order to give proper consideration to all of the remaining options, the Council sees it as a requirement that National Grid update these figures in the light of new and more detailed information. The Council considers this to be consistent with National Grid's commitment to 'back-checking'. Also, National Grid should provide total costings, which include mitigation costs for each option, and 'life cycle' costs. These should be presented in a clear and transparent manner that breaks down the various cost elements. This is seen as essential in order to make proper and up to date comparisons between the different options.

CONCLUSIONS

This letter provides an overview of the Council's views on the proposed North Wales Connection Project. It summarises and complements the detailed review of the present consultation carried out by the Council. In carrying out that review the Council has sought to be logical, iterative and transparent.

Hence, the Council is calling for National Grid's further consideration of a fully undergrounded connection between Wylfa and Pentir. This needs to be complemented by regular updating of its' cost in comparison with the total cost of other options, including the National Grid preferred option which is not finalised at this stage.

I trust that you find these comments constructive and helpful. If you are in any doubt as to what the Council intends then you should as soon as possible seek clarification. I would be more than willing to meet with you to discuss matters further.

Yours sincerely

Gwynne Jones
Chief Executive