



**NORTH WEST COAST CONNECTIONS  
CONSULTATION RESPONSE EXECUTIVE  
SUMMARY**

Prepared on behalf of the PPA Group Authorities

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**Document control**

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## 1.0 Introduction

- 1.1.1 This document has been prepared in response to National Grid's consultation on the North West Coast Connections (NWCC) project, being carried out between 28<sup>th</sup> October 2016 and 6<sup>th</sup> January 2017.
- 1.1.2 The NWCC project, whilst delivering substantial investment to the UK's electrical transmission system and supporting national energy security, will also have a significant impact on the local environment and communities of Cumbria and north Lancashire. This response has been prepared by WYG on behalf of, and agreed by, all the local authorities (Allerdale Borough Council, Barrow Borough Council, Carlisle City Council, Copeland Borough Council, Cumbria County Council, Lake District National Park Authority, Lancashire County Council, Lancaster City Council and South Lakeland District Council) that will be impacted by the NWCC project. The local authorities work together through a Planning Performance Agreement with National Grid and are collectively referred to as the PPA Group.
- 1.1.3 Whilst the PPA Group recognises the national benefits, it is important to ensure there is appropriate mitigation to address the local impacts. The local environmental, physical and human effects during construction and operation need to be carefully considered. The route passes through and impacts on areas that are important to communities and are areas of national, and international, landscape and ecological significance. Infrastructure improvements will be required to enable delivery of the NWCC project as well as enabling local workers and businesses to support and benefit from this development.
- 1.1.4 Investment in the local infrastructure is vital to ensure there is no detrimental impact to the social and environmental fabric of the host communities and the infrastructure should be strengthened for current and future generations. In this way, the PPA Group expects that where mitigation is provided it can be planned in order to also deliver longer term legacy benefits for the local communities in recognition of having to accommodate a substantial piece of infrastructure in the national interest.
- 1.1.5 The PPA Group welcomes National Grid's commitment to meaningful engagement on project design including technology choices and the significant mitigation that is required. The Group is pleased the informal engagement undertaken thus far has resulted in substantial and much needed mitigation, particularly in respect of under-grounding through the Lake District National Park (LDNP).



- 1.1.6 Continued engagement with National Grid is required on the issues raised in the PPA Group's response to ensure the risks to the project are minimised through the Development Consent Order (DCO) process. The Group wants to continue to engage in positive dialogue to enable delivery of the NWCC project in a way that meets both national and local needs, and is consistent with legislation and government policy.
- 1.1.7 This document establishes the key concerns from the review of the proposed design and the detail contained within the Preliminary Environmental Information (PEI) Report and consultation material. The PPA Group expects these issues to be addressed before the submission of the DCO application. This Executive Summary should be read in conjunction with the full technical response prepared following detailed review of the consultation materials.



## **2.0 Cross cutting issues**

2.1.1 There are a number of issues identified by the PPA Group that are project-wide, relating to the consultation process, the lack of information on substantive topics and approach to mitigation assessment. These cross cutting issues are highlighted below and subsequent sections of this Executive Summary relate to the different topic areas.

### **2.1 Consultation**

2.1.1 Significant concern is expressed by the PPA Group that there has not been sufficient time for stakeholders and communities to respond appropriately to the consultation given the complexity and extent of the consultation documentation and the timing of the consultation over a recognised holiday period. The time available has compromised the ability of the PPA Group to make a fully informed and considered response. Additionally, the PPA Group is concerned that these issues have also affected the involvement of other stakeholders and members of the community.

2.1.2 National Grid is only consulting on its preferred route and has failed to adequately consult on other route and technology options. In particular, there are alternative route options around the head of the Duddon Estuary that could have been consulted upon. There has also been significant community interest in the alternative options for the Duddon area and therefore the PPA Group is disappointed that the options have not received more prominence in consultation materials and a consolidated consideration in the PEI Report.

2.1.3 The PPA Group has not been able to complete its full response within the consultation period and has informed National Grid that this will be submitted on 27<sup>th</sup> January 2017.

### **2.2 Lack of information, premature assessment and mitigation**

2.2.1 A common theme running through all of the PEI Report is that there has been a lack of sufficient detail to assess the potential effects and evaluate the proposed mitigation. At this stage, the PPA Group does not consider this acceptable. Furthermore, there is significant concern that in a number of topics such as ecology, it appears that existing incomplete information has been used to scope in or out various designated sites, habitats and species.

2.2.2 There are significant gaps as well as assumptions that have been made across a number of topic study areas. If this approach were to be carried through to the final Environmental Statement submitted with the DCO, it could be a serious risk to the project and lead to incorrect

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assessments and the wrong conclusions on the likely effects of the development upon the local area. This is a major concern.

- 2.2.3 Furthermore, significant gaps in the PEI assessment and lack of detail of the impacts of the proposals has in many cases led to a failure to provide explanation of mitigation measures. This is a major cross cutting issue across the consultation topics, in particular transport, ecology, historic environment, landscape and related to the tunnel heads. The gaps in information and lack of consultation on mitigation proposals is not consistent with national guidance.
- 2.2.4 The definition of 'Preliminary Environmental Information' in the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 is the information "*which ... is reasonably required to assess the environmental effects of the development (and of any associated development)*". Part 1 of Schedule 4 expressly requires "*a description of the aspects of the environment likely to be significantly affected by the development*", and "*a description of the measures envisaged to prevent reduce and where possible offset any significant adverse effects on the environment*". Furthermore, the Planning Inspectorate's advice note 7, suggests that the PEI document should enable "*consultees (both specialist and non-specialist) to understand the likely environmental effects of the proposed development and [help] to inform their consultation responses on the proposed development.*"
- 2.2.5 In light of this guidance, the PPA Group believes there is insufficient information being provided regarding both certain impacts and mitigation measures in the PEI. Together with the absence of the relevant schedules to the draft DCO this means that the PPA Group is not able at this stage to properly understand the likely impacts of the proposed scheme or how those impacts can be mitigated.
- 2.2.6 There are some key assessments that are required by legislation or should have been undertaken to inform the NWCC project proposals which are absent from the consultation material, including:
- Habitats Regulation Assessment;
  - Historic Impact Assessment;
  - Health Impact Assessment; and
  - Transport Assessment.
- 2.2.7 The PPA Group considers that while the process of consultation might be appropriate, there are major concerns about the substance, evidence and level of detail provided. The Group suggest that as a result, communities and other stakeholders have not had a genuinely informed



opportunity to comment on and help shape key aspects of the proposals, including mitigation measures prior to the submission of the DCO. As such, it is strongly suggested that National Grid should undertake a further consultation exercise so that the concerns expressed in the PPA Group consultation response can be adequately addressed.

### **2.3 Cumulative Impact**

- 2.3.1 Although the PEI includes a chapter setting out the framework for the consideration of cumulative impact, the PPA Group is very concerned that there is consistently a lack of detail and cumulative assessment in each of the topic areas. It is noted that at this stage a full Cumulative Effects Assessment has not been undertaken. The PPA Group is greatly concerned regarding the lack of detail on the assessment at this stage as this assessment is vital to designing the NWCC project and providing appropriate mitigation.
- 2.3.2 The cumulative effects are crucial to understanding the overall impacts of the project especially when considering the NWCC project alongside a number of other major projects that are proposed in Cumbria and north Lancashire. This is compounded by the already constrained transport infrastructure and significant areas of national, and international, landscape and ecological significance. In particular, the PPA Group is greatly concerned that consideration of the cumulative impacts of the NWCC project together with the proposed Moorside project have not been adequately progressed, especially in relation to landscape and transport impacts. The PPA Group suggests that further consultation is required to adequately address this significant concern.

### **2.4 Optioneering Methodology**

- 2.4.1 The PPA Group has previously raised concerns in relation to the Options Appraisal of Alternative Technologies (OAAT) methodology. The PPA Group maintains its position that the threshold of 'particularly significant' in National Grid's OAAT methodology has set an artificially high bar for the establishment of 'Focus Areas' for mitigation. It is only these 'Focus Areas' that are assessed for mitigation and areas where 'significant' impacts are measured, the does not allow for assessment of mitigation options. This is not consistent with the universally applied EIA Regulations approach of implementing mitigation for 'significant' impacts.
- 2.4.2 This methodology is not in accordance with current guidance set by the GLVIA3, and there is concern that whilst 'significant' effects would be measured in the Environmental Statement, it is not clear as to why areas within the Draft Order Limits and beyond have not been considered

for appropriate mitigation where there are significant effects. The approach is not robust and accountable. In light of the outstanding uncertainties within the methodology, which have the potential to introduce inaccuracies within the process, the PPA Group feels this methodology in its current form is flawed and requires revision to ensure mitigation in areas of 'significant' effect is adequately assessed.

- 2.4.3 In determining preferred options, cost appears to have been a key factor in National Grid's decision making on many of the options and designs that are proposed for consultation. However, decisions on the requirement for measures such as alternative options or technologies should be determined by policy rather than cost, and this principle should be applied to the NWCC project. The PPA Group is concerned about the basis for estimating costs of complex works, especially given the early stage of certain options, the absence of detail on environmental conditions and constraints, and how this has influenced the optioneering methodology and assessment process. Where cost is specified in the option reports, the explanation is limited and not transparent. This largely invalidates the comparison and evaluation of options and is not a valid factor in determining the most appropriate form of mitigation.
- 2.4.4 Furthermore, the PPA Group suggests the NWCC project will help deliver a significant proportion of national energy requirements, and therefore is a significant benefit to the UK. However, the benefit comes at a significant 'cost' for local communities in terms of significant impacts of NWCC in Cumbria and North Lancashire. This must be considered when developing an appropriate final design for NWCC.

## 2.5 Duddon Estuary

- 2.5.1 The PPA Group has previously recommended that a tunnel beneath the Duddon Estuary is the only acceptable route in order to avoid major adverse impacts, particularly at the Foxfield Ridge, the Duddon Mosses SAC, plus the wider landscape setting of the Lake District National Park.
- 2.5.2 This would also avoid significant visual, landscape and community impacts of the proposals in the vicinity of The Green, Kirkby in Furness and Beckside and further south.
- 2.5.3 The PPA Group maintains that National Grid's proposed over-head route is unacceptable given the major (and unmitigated) adverse impacts. After considering the proposed route and information presented by National Grid in the PEI Report, the PPA Group strongly recommends that an alternative option that avoids going round the Duddon Estuary is essential.
- 2.5.4 The PPA Group welcomes continued engagement by National Grid and the opportunity for collaboration. If another option can be developed that demonstrates that technological and



environmental challenges can be addressed, the PPA Group recommends that this should be appropriately considered by National Grid, in consultation with all stakeholders.

- 2.5.5 Whilst we acknowledge that designing a route crossing the Duddon Estuary is challenging and costly, it is vital that the appropriate design and mitigation is provided. This will help to ensure that the significant impacts of the proposed NWCC project are properly addressed, thereby helping to de-risk the project through the DCO process and increase delivery certainty.'

### **2.6 Electricity North West infrastructure and energy security**

- 2.6.1 The PPA Group is concerned that the current proposals for the new 400kV network and the associated changes to local Electricity North West (ENW) infrastructure do not adequately address issues of security of supply for specific communities and the provision of additional capacity to meet the needs of new users and producers. This is a significant issue in many areas along the route and especially around Millom and Bootle. The situation has been further exacerbated by the recent decision by the developers of Haverigg Wind Farm to withdraw from their connection agreement with ENW, which removes the need for a substation in the area and the need for the NWCC 132kV trident wood pole overhead line.
- 2.6.2 Further opportunities for rationalisation of existing wirescapes need to be considered especially where there is significant cumulative impact of proposed and existing pylons.



## 3.0 Landscape and visual impact

3.1.1 The PPA Group supports the proposed under-grounding through the LDNP in order to mitigate the potential for significant landscape impacts of a national asset. However, the PPA Group challenges the decision by National Grid to not mitigate landscape and visual impacts affecting specific sections of the proposed project through changes to the NWCC proposed route, design and technology choice. There is a lack of mitigation of landscape and visual impacts affecting protected landscapes, particularly the setting of the LDNP and Solway Coast Area of Outstanding Natural Beauty (AONB).

### 3.1 Mitigation Methodology

3.1.1 As highlighted in Section 2.4, the approach taken by National Grid fails to consider appropriate mitigation measures as part of the design process.

3.1.2 The approach taken relates to the OAAT which has been used to determine when significant impacts require consideration of mitigation. Despite prolonged discussion with the PPA Group in earlier stages of the project design over the flaws in this methodology National Grid has used this within the PEI. Previous serious concerns appear not to have been addressed, nor have they informed the design and mitigation process. This has resulted in flawed selection of Areas of Likely Significant Effect and 'Focus Areas' for mitigation within the PEI.

3.1.3 It is considered that the basis for impact appraisal in the OAAT methodology falsely raises the bar for determining implementation of mitigation measures. As a result National Grid's proposals only implement mitigation measures when impacts are considered to be 'particularly significant'. The use of 'particularly significant' as a trigger for mitigation is inappropriate and the PPA Group considers that it is essential that National Grid implement mitigation to reduce other significant impacts that are likely to result from the proposals.

### 3.2 Landscape Setting

3.2.1 National Grid has failed to conserve and enhance the special qualities of the LDNP and Solway Coast AONB in relation to their settings. There is particular concern with the approach taken in relation to:

- Aspatria to Wigton (Subsection C1);
- Wigton to Harker (Subsection C2);

- Seascale to Drigg across Wasdale to the High Fells (Subsection D1 - D1 Moorside to Waberthwaite);
- The Whicham Valley (Subsection E1 - Silecroft to Arnaby); and
- The Duddon estuary and mosses and Foxfield Ridge (Subsection E2 - Arnaby to Lindal in Furness)

3.2.2 The PPA Group considers the assessment of impacts on receptors ('people') experiencing the National Park from within its setting to be flawed. The following statement in the PEI, Vol 2.8 Chapter 8 page 513, fails to recognise that visitors' understanding and enjoyment of the National Park includes their appreciation of its special qualities from within the setting;

*'This section provides a description of the landscape receptors that are consistent with the purposes of designation of the LDNP. **Receptors outside the LDNP are not considered by the appraisal, as effects upon these receptors would not affect the natural beauty, wildlife and cultural heritage of these areas or affect the understanding and enjoyment of the special qualities of those areas by the public (our emphasis)'***

3.2.3 This assumption is based on flawed interpretation of national policy and guidance for designated landscapes. It is not consistent with the extensive precedent of previous planning cases or the approach to designated landscape protection taken by local planning authorities, National Grid and others, both along the project route and elsewhere in the UK.

3.2.4 National Grid has taken a selective approach to EN1 and the need to consider the landscape setting of protected areas. National Grid has interpreted impacts on the setting of the protected areas where it only affect receptors within the areas looking out beyond its boundary, and not impacts on receptors beyond the boundary looking into the protected areas. Additionally, the impacts on approaches to gateways to the protected areas that are outside the setting, but with important views into the protected area should also be considered. These should be assessed in relation to the full range of special qualities of the LDNP and Solway Coast AONB.

3.2.5 Many examples are available both within Cumbria and elsewhere in the UK where impacts on the setting to protected areas are normally considered for landscape and visual receptors both within the setting, as well as within the protected area.

3.2.6 National Grid's lack of regard to impacts on the setting of the designated landscapes and effective consideration of mitigation of these could put them at risk of failing to undertake their duties under Section 62 of the Environment Act 1995.

### 3.3 Cumulative Impact

3.3.1 The National Grid proposals fail to mitigate substantial cumulative landscape and visual impacts arising from the use of pylon and overhead cables, cable sealing end compounds, other associated structures and the 132kV trident pole line. The PPA Group is particularly concerned about this approach in relation to areas in sub-sections:

- Whicham Valley (Subsection - E1 Silecroft to Arnaby); and
- Duddon Estuary and Kirkby in Furness (Substation E2 - Arnaby to Lindal in Furness).

3.3.2 In addition, there is a lack of mitigation of cumulative impacts arising from adjacent existing 132kV lines, particularly:

- Near Carlisle, particularly Rockcliff;
- East of Whitehaven;
- East of Workington;
- Beckermest; and
- The Furness Peninsular, particularly Ireleth and Dalton-in-Furness.

3.3.3 The cumulative impacts of the NWCC project at Moorside have not been adequately addressed and there is given the substantial earthworks to be undertaken for the new nuclear power station for undergrounding to be considered in order to mitigate the cumulative impact, particularly for the adjacent villages.

3.3.4 National Grid has failed to carry out a preliminary cumulative impact assessment and has not used the recently revised Cumulative Impact of Vertical Infrastructure (CIVI) tool. A failure to consider the cumulative impacts of a development at this stage could have resulted in the omission of significant impacts identified arising from the proposal and the need to consider alternative technology as mitigation. The PPA Group therefore considers the assessment of cumulative impacts to be inadequate.

### 3.4 Landscape Assessment

3.4.1 The PEI does not adequately address all anticipated landscape and visual effects of the proposed development. The assessment is inconsistent and incomplete. There is a significant



lack of information, visualisations (and lack of narrative around judgments).

- 3.4.2 The landscape assessment is not consistent with national guidance (GLVIA3) and fails to fully consider the Lake District and Cumbria landscape character assessments in a consistent way. It fails to consider the flow of landscape character and relationship between each assessment throughout the route.
- 3.4.3 The PPA Group is concerned that the impacts of the proposal have been prejudged, and that the conclusions reached in the assessment are not based on a thorough understanding of the issues affecting the route. There is a distinct lack of the use of materials that would normally be used to understand the full range of impacts of all elements of the proposal. These include the limited number of viewpoints being assessed, insufficient photomontage and a lack of wireframes. The PPA Group considers that National Grid has failed to consider the full extent of the individual and sequential impacts on visual receptors (residents and visitors) travelling through the landscape and experiencing the linear development.



## 4.0 Socio Economic

4.1.1 As a nationally significant infrastructure project, NWCC will bring significant benefits to the UK, while also resulting in significant impacts on the local communities. The PPA Group considers that there is an in-balance between the benefits to the national and the benefits to local communities, and currently there are very few obvious benefits to local communities. There will inevitably be impacts on the local economy and on local communities, both negative and positive, and National Grid has a duty to ensure the adverse impacts are appropriately mitigated and where possible to do so in a way that delivers a lasting legacy benefit.

### 4.1 Skills and supply chain

4.1.1 The PPA Group is broadly supportive of the initial Employment and Skills Framework that has been included within the consultation material. However, the lack of detail around skills and supply chain initiatives and the specific interventions that will be delivered to meet the objectives in the initial Employment and Skills Framework means that PPA Group is not satisfied that the impacts will be appropriately mitigated.

4.1.2 The PPA Group consider that it is in the interests of National Grid and the local economy for the skills to be locally available and for the businesses to be equipped to become part of the supply chain. National Grid's commitment to secure 20% as a minimum of the workforce from the local labour is welcomed and there are aspirations for this to be higher. In achieving this target, it will be important that National Grid does not cause disruption to local economic activity through displacement of employment and ensures that existing businesses are not put at a disadvantage in terms of recruiting and retaining staff.

4.1.3 To address the potential negative effects of displacement, there will need to be commitment from National Grid to invest in local skills development and supply chain capability development. Additionally, as part of the package of measures National Grid and their contractors should commit to target economically inactive people in the area and the recruitment of apprentices to support local skills training and development in order to increase the size of the available labour force. These measures will help mitigate displacement impacts; however, they will require a funded programme of intervention and support and a commitment from National Grid (and their contractors) to recruit from the pool of people that are supported.

4.1.4 The PPA Group is concerned that there is very limited detail on mitigation measures that will be



required to address the impacts of the NWCC project, and therefore, few details of how the mitigation will be secured and monitored. It is important that National Grid make early intervention and investment in advance of the construction, commencing with the provision of;

- clear and early commitments to providing funding to support supply chain capability development programmes to enable local businesses to access procurement opportunities, working with the Local Enterprise Partnerships and other local partners, through the development and implementation of a supply chain strategy;
- a detailed skills action plan to ensure that there is investment in skills development in advance of construction in order to facilitate employment and training of local people;
- training programmes/facilities targeted at those that are currently locally unemployed or economically inactive;
- early commitments to capital investment in training facilities; and
- a clear procurement strategy with specific, measurable and enforceable targets that capture the local benefit for Cumbrian businesses.

### **4.2 Visitor economy**

- 4.2.1 The PPA Group challenges National Grid's baseline assessment that impacts of the proposals on the visitor economy of Cumbria will not be significant. Cumbria is the most popular destination for outdoor and rural visits in the UK, for both UK and foreign visitors. The Cumbria Tourism visitor survey 2015 identified that the physical scenery and landscape of the county is the key reason for UK and overseas visitors visiting the Lake District and Cumbria; the second key motivation to visit was the atmospheric characteristics of the area.
- 4.2.2 The project poses a significant risk for this economic sector, the largest in Cumbria's economy. The 42.9m visitors, that come to Cumbria each year, generate £2.6bn of visitor and tourism spend, which provides 35,000 jobs (2015). In North Lancashire (Lancaster City Council area) the tourism economy is worth £416m alone (2014).
- 4.2.3 The PPA Group is concerned that the image/brand of Cumbria's landscape-based tourism offer may be damaged by the project, both during the substantial construction period and once completed. Therefore, the Group challenges the PEI conclusion that this risk is not significant. The lack of project-specific evidence to support this and the reliance on evidence from other projects and areas of the UK is also considered to be flawed. The PEI only considers physical impacts during construction and dismisses the long-term impact on visitors and the visitor economy once the project is in operation. This is a serious omission.

- 4.2.4 The impact of the closure of the Grasmere/Keswick A591 road in the Lake District following the December 2015 floods provides a stark demonstration of how a geographically specific impact can affect the whole of Cumbria's visitor image and visitor economy. The impacts were experienced across the county and were not restricted to businesses near to the closed road. The experience of the 2015 floods demonstrated that it was perceptions of Cumbria being closed for business that had the greatest impact. The potential impact of the NWCC project on perceptions of Cumbria being a construction site should not therefore be under-estimated. The potential for adverse effects arising from the NWCC impact on the local visitor economy will therefore have to be managed and mitigated.
- 4.2.5 Furthermore, the PPA group are concerned that National Grid's initial conclusions on the significance of the effect on visitor accommodation supply from the workforce. The Group suggest that these are not valid as there is a failure to consider the full range of impacts NWCC could place on the future potential of the visitor economy, particularly in key areas identified as drivers of tourism growth where there will likely be concentrations of worker, e.g. undergrounding in the LDNP.
- 4.2.6 The sector is currently the fastest growing sector in the county, with annual growth in 2015 of 7.1%. The continued attraction of the Frontiers of the Roman Empire World Heritage Site (WHS), the candidate English Lake District WHS and planned England Coast Path project are likely to increase visitor numbers, for whom the culture, landscape and access within it are key drivers for choosing Cumbria. The government's nomination for WHS status (candidate English Lake District) is currently being assessed by UNESCO, who have expressed concern at the proposals and raised it as a significant risk to progressing the WHS proposals. The PPA Group considers it imperative to avoid landscape impacts that may jeopardise a favourable outcome.
- 4.2.7 Physical scenery and landscape of the area is the key reason for visiting both Cumbria and North Lancashire and more specifically the Lake District and Morecambe Bay area. Access to the countryside through varying modes is therefore key to people's enjoyment of these landscapes.
- 4.2.8 Transport provision within Cumbria is regularly raised as a key issue by visitor and tourism businesses. Congestion and connectivity between key visitor locations is cited as having a negative impact on visitor experience and businesses. The sector is reliant on an already stretched road and rail network in the county, with the key visitor access roads to the west coast being particularly constrained.
- 4.2.9 A recent survey identified traffic congestion as a concern for 1 in 5 tourism businesses. This is a key concern as road congestion, closures, and disruption to rail and the Public Rights of Way

(PRoW) network during construction has the potential to cause reputational damage. The PPA Group considers there is a significant risk that transport disruption (or the perception of) deters visitors during the construction period for the NWCC project. These impacts may be greatest within the LDNP, which combines the highest visitor numbers with constrained transport networks and NWCC proposals for cable undergrounding operations.

- 4.2.10 The PPA Group considers that the multi-modal transport strategy would reduce the potential congestion and disturbance impacts on visitors using the transport networks and PRoWs, including cycle ways, compared to the road-based strategy. As a consequence this would reduce impacts on the visitor economy from direct impacts, although not impacts on the visitor image/brand of the county.
- 4.2.11 The transport and visitor economy impact assessments within the PEI do not identify these impacts from the transport strategy, or consider the differing level of impact on the visitor economy when selecting the transport strategy. The assessment in the Environmental Statement must address such impacts.
- 4.2.12 It is also considered that the PEI fails to adequately assess the negative sequential and cumulative visual impacts on visitors travelling along the road network close to the NWCC proposals viewing the proposed pylons and infrastructure. This is of particular concern within the southern onshore route section which includes the National Park and Duddon Estuary.
- 4.2.13 The PEI fails to adequately consider and assess the risks and impacts to visitors' experiences and enjoyment of the varied landscapes of Cumbria from use of the PRoW network. In addition, the statutory purpose for National Parks, set out in the Environment Act 1995, includes promoting opportunities for the understanding and enjoyment of the special qualities of national parks by the public.
- 4.2.14 The focus of the PEI assessment has been on physical impacts from the construction stage of the NWCC project on the PRoW network. While this is welcomed, it fails to consider the long-term visitor experience impacts and the knock-on effects this may have on the visitor economy. In particular, the impact of during the construction stage of the underground technology within the National Park and the longer term impacts of pylon technology within its setting.
- 4.2.15 Full and effective reinstatement is essential and should be central to the proposed Access Management Plans. Restoration should seek to both restore and where possible improve access provision, with enhancement being part of the legacy of the project. Opportunities to achieve this should be considered as part of the Access Management Plan, for example, consideration

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of re-use of haul road material for access improvement as part of post construction reinstatement works.

4.2.16 Due to the lack of assessment outlined above there is a lack of appropriate mitigation for impacts to the visitor economy, particularly mitigation of;

- impacts on Cumbria's visitor image/brand;
- possible adverse impacts on the accommodation resulting from the concentration of construction workers;
- disruption to road and rail transport networks; and
- disruption to public access.

4.2.17 The PPA Group considers that appropriate mitigation, such as support for small and medium sized businesses in the visitor economy and marketing and promotional activities are required to counter the disruption caused during the construction period and the negative perception driven by the adverse impact of NWCC on the landscape which attracts visitors.

4.2.18 Mitigation should also address impacts affecting visitors' experience and access in North Lancashire and Cumbria's landscapes, such as the safe management of traffic on minor roads, and the impact of worker accommodation demand on holiday accommodation supply.

### **4.3 Employment land and Local Plan allocations**

4.3.1 The proposals so far fail to support the development potential of a number of key strategic employment sites along the route including;

- Kingmoor Business Park (LEP Enterprise Zone);
- Lillyhall Industrial Estate;
- Port of Workington;
- West Lakes Science Park; and
- Port of Barrow-in-Furness.

4.3.2 The PPA Group need more detail to understand the programmes for construction, to be able to assess the impacts on the sites, but there are opportunities for National Grid to use these strategic sites for consolidation hubs to support the logistics of delivering the NWCC project.

4.3.3 More detail is required regarding sites to be used during the construction process for compounds and helicopter landing sites to ensure a full understanding of the short and long term impacts on local economic activity and transport infrastructure is acceptable and that sites allocated for



future development are protected. Where sites are in or adjoining, proposed and existing employment areas the PPA Group expect National Grid to justify the impacts of the land take and the acceptability of the development to the local plans and strategies for economic development, such as the construction compound proposed at Kingmoor Park.

4.3.4 National Grid needs to take account of allocations in Local Plans and it is clear that based on the current proposals line/pylon realignments will be required. The following allocations/development proposals will require further consideration:

- Mirehouse and West Lakes Science Park;
- Burlington Close/Burlington School, Kirkby in Furness; and
- Land allocations around the Port of Barrow-in-Furness.

4.3.5 The LEP's Cumbria Infrastructure Plan has identified the need for new highway infrastructure to the east of Whitehaven in order to provide an alternative route to the A595 and thereby relieve congestion in Whitehaven. The proposed route is to be safeguarded and the NWCC project should not inhibit future delivery of the Whitehaven Eastern Relief Road.



### **5.0 Tunnel head impacts at Roosecote and Middleton**

- 5.1.1 The proposed tunnel across Morecambe Bay represents a significant project in its own right, with a build programme of six years, 1.2m tonnes of spoil generated and requiring over 750 workers. Although the proposals for the tunnel heads at Roosecote (Barrow) and Middleton (Heysham) are likely to result in a number of significant impacts across a number of topic areas, the PPA Group is significantly concerned that there are very limited meaningful detail available. The consultation material in relation to the tunnel is considered to be inadequate by the PPA Group as it has been unable to fully appreciate the impacts of the tunnel heads on the local environment and communities.
- 5.1.2 Insufficient attention has been given to construction and operational design at the tunnel heads to ensure impacts can be sufficiently mitigated particularly given that construction work may last up to six years. No meaningful mitigation is proposed to address noise, vibration, air quality, light, ecology or residential amenity impacts. The PEI does not provide the reassurance that the development can be constructed and operate without a significant impact on nearby receptors, including a number of residential receptors close to the Roosecote and Middleton substation. Further information must be provided to properly consider the impact of the proposed development and provide suitable opinion on the acceptability of the proposal.
- 5.1.3 Furthermore, the PPA Group challenges the methodology for classifying residential receptors (such as the residents living in houses at Mossgate, close to Middleton tunnel-head) as being of 'medium' sensitivity. Recommendations have previously been provided by the PPA Group stating that residential/school receptors should be classed as 'high' sensitivity for a range of impacts. This has not been accepted in the submitted assessments and impacts on all the predictions and outcomes. The outcome of the assessments therefore under-estimate the impacts and fail to apply mitigation which would otherwise be required.
- 5.1.4 The PPA Group is concerned that currently there is incomplete workforce planning and accommodation proposals at the tunnel-heads. During the construction of the project there is likely to be a concentration of workers at each of the tunnel heads sites in Barrow and Heysham. This is also a key concern in other areas where there will be a concentration of workers, such as the undergrounding in the LDNP. Given the number of directly employed workers required for the construction of the tunnel, and the other major projects in local areas, accommodation for workers is a significant concern.
- 5.1.5 The PPA Group note that the impact in the Barrow area is acknowledged and National Grid has committed to working with stakeholders to produce an Accommodation Plan to be submitted



with the Environmental Statement. However, there are currently no details on the content of the Plan and the PEI Report does not indicate any collaboration with accommodation providers to overcome existing shortfalls and/or raise standards of suitable worker accommodation.

- 5.1.6 Additionally, the PEI concludes that there is limited effect in the Heysham area given access to transport links and the wider catchment of workers. However, the PPA Group challenges this conclusion and consider that a workforce strategy is nevertheless required that will include commitments from National Grid to support delivery of worker accommodation (including refurbishment of existing housing stock) so as to avoid adverse impacts on the existing housing market and visitor accommodation. It is also considered that this Accommodation Plan will need to cover the area of undergrounding in the LDNP.
- 5.1.7 The level of construction materials and tunnel spoil generated will place extensive pressure on existing transport infrastructure. National Grid's conclusion that there are no traffic reasons to favour a multi-modal option for moving materials and workers to the construction sites is not acceptable. The PPA Group is greatly concerned about the impacts of NWCC on the infrastructure leading to the tunnel head, especially when these are considered in relation to other developments in the areas. Therefore it is strongly suggested that a multi-modal option is the only acceptable solution for the tunnel head locations and following this, National Grid should provide investment to mitigate any rail and road capacity issues, in order to avoid cumulative impacts, keep traffic off the highway and also provide a legacy benefit.
- 5.1.8 The PEI also has inadequate information provided on the storage, movement and final destination of tunnel spoil, and therefore no mitigation is proposed to address the substantial impact of the construction.



## 6.0 Transport and connectivity

6.1.1 The PPA Group is very concerned that the PEI assessment has not identified detailed transport impacts and consequentially there is a failure to identify mitigation measures. The consultation material is considered to be inadequate given the importance of transport and infrastructure to facilitating delivery of this project. This is a consequence of National Grid's failure to have developed a single coherent transport strategy and to have identified the associated traffic and transport impacts on the environment. The lack of a draft Transport Assessment is a serious omission in the consultation material.

### 6.1 Transport Strategy

6.1.1 The PPA Group is concerned that at this key consultation stage National Grid is not consulting on a single and coherent strategy. The provision of two options, 'multi-modal' and 'road based' for consideration does not give sufficient comfort that the significant transport and connectivity issues have been properly considered as a basis for the development of the project.

6.1.2 The PPA Group strongly disagrees with National Grid's assumptions of the impacts relating to the 'road based' and 'multi-modal' options and assertions for not favouring the multi-modal. It is acknowledged that the 'multi-modal' option will require investment, but this should not be used as the main reason to dismiss the option, particularly as the cost of mitigating a road-based strategy has not yet been determined. The assessments have not been done and the mitigation is unknown, but it is the view of the PPA Group that there will inevitably be a requirement for highway mitigation to be provided for such a complex project that will generate substantial HGV movements.

6.1.3 Subject to a full assessment of the impacts, the PPA Group strongly advocates the 'multi modal' option as compared to be road based option as it is considered to:

- reduce additional traffic on the road (notably HGVs);
- reduce potential congestion, disruption, amenity and severance impacts upon local communities;
- reduce damage to highways, particularly local roads which are not designed to carry HGVs;
- minimise economic disruption associated with congestion and delays (especially to visitor economy);
- reduce accident risk and minimises safety concerns;
- reduce potential adverse impacts upon pedestrians, cyclists and PRoW;





- minimise pollution (noise, air, dust);
- be more sustainable (lower energy use, reduced carbon emissions); and
- deliver greater legacy benefit (e.g, improved facilities and capacity of rail and port).

### 6.2 Impact mitigation

- 6.2.1 Whilst it is acknowledged that National Grid has not completed a full technical assessment on both options, the information provided does identify that there is a significant impact on the highway network with major impact identified. There are known capacity constraints and safety issues along the A590, on the A5092 and the A595. This is confirmed in the Cumbria LEP's West of M6 Strategic Study and the view of Highways England. This is particularly true for Ulverston where the road is already at capacity. A strategy for mitigating impacts at key 'pinch points' along the route needs to be undertaken and assessed working with the PPA Group. The results of this will require further consultation in advance of the DCO submission.
- 6.2.2 Infrastructure and capacity constraints are already a key barrier for economic growth within the county, affecting the manufacturing sector as well as the visitor economy. The local economy across Cumbria is constrained by an already stretched local and strategic road and rail network, as highlighted in the LEP's Cumbria Infrastructure Plan, and evidenced by the impacts of the December 2015 flood event.
- 6.2.3 The additional volumes of traffic will cause an impact on local and strategic roads which will require mitigation. Unfortunately, given the lack of appropriate assessment by National Grid the full extent of mitigation is not known. This is unacceptable at this stage of consultation, because consultees need to be able to understand and to comment upon any mitigation proposals.
- 6.2.4 The PPA Group strongly advocates the use of the railway and ports to mitigate the impact on the highway network from the additional traffic created by the project (and acknowledges that a more detailed analysis is required including consideration of the necessary improvements to the Cumbrian Coast Line railway). The PPA Group welcomes National Grid's engagement in the recently established Coastal Railway Programme Board. This Programme Board is seeking to find a collective solution to mitigate the cumulative impact of several major developments in Cumbria through utilisation of the railway as the most sustainable mode for logistics traffic. However, it is also noted that there will still be a need for additional highway improvements to mitigate the impact of the residual traffic movement from railway and ports to the construction sites.
- 6.2.5 There is extensive public access and cycle ways along the route of the project which are of

national significance. A large proportion of visitors and residents are drawn to these areas to enjoy recreational activities. They are a key element of Cumbria's visitor offer. The alignment of the proposals suggest that there is likely to be extensive disruption to cycle paths and PRoW, particularly during the construction period. These impacts need to be appropriately addressed and appropriate mitigation put in place to avoid the disruption and severance of key routes to allow their continued use during construction and operation of the project. This is particularly important to limit any adverse impact on the visitor economy.

- 6.2.6 The PPA Group has a number of detailed observations regarding individual access routes and site accesses which need to be addressed. These are shown in the full response and are related to numerous locations where there are concerns related to; inadequate visibility, blind spots, road crests and grounding, narrow carriageways and impacts on pedestrians and cyclists.

### **6.3 Transport Assessment**

- 6.3.1 The traffic movement for the importing (and decommissioning) of materials for access and haul roads, construction materials, cables and waste needs to be properly modelled together with a cumulative assessment including the impact of other major development proposals including Moorside, ongoing Sellafield activities, West Cumbria Mining's proposals at Whitehaven, BAE at Barrow and the United Utilities project in an already constrained infrastructure and similar implementation periods. More detailed assessments of the impacts should be carried out using the available SATURN models for Barrow, West Cumbria and Heysham.
- 6.3.2 In addition the impacts of traffic generated by the project should not be confined solely to capacity assessments. It is important to consider alongside the impacts on pedestrian and cycle movement, severance, safety and accidents, pollution, residential amenity, economic impact, etc. All these aspects impact adversely on host communities and should be minimised if possible.
- 6.3.3 There will be a significant number of construction workers. The analysis of construction workers trips assumes that they will be located in local accommodation, which is not supported by clear evidence. However, a more detailed analysis is required to fully understand the impacts of the movement of construction worker trips on local centres and the highway network and their accommodation needs.
- 6.3.4 National Grid must consider the modelled impact of the project and necessary mitigation required to provide an informed transport assessment of the project. This should include appropriate travel plans to identify how construction workers will travel to construction sites.



- 6.3.5 There are significant elements of work in assessing the transport and connectivity impact of the proposal that have yet to be carried out and agreed with the local authorities. Key gaps include; the provision of a Traffic Assessment, Travel Plans, a PRow Management Plan, an Abnormal Load Route Strategy and a Construction Transport Management Plan. Additionally, National Grid need to work with the PPA Group and agree and produce transport capacity assessments and modelling assessments, including cumulative.
- 6.3.6 Consultation must take place on the mitigation proposals prior to the production of the Environmental Statement and DCO application.



## 7.0 Environment

### 7.1 Ecology

- 7.1.1 The PPA Group is concerned that there is a failure to provide a framework for assessing impacts on internationally important wildlife sites and species. There has been a lack of progress of the emerging framework for the statutory Habitat Regulation Assessment which is a key risk that could lead to significant delays to the acceptance of the DCO if not addressed.
- 7.1.2 Review of the PEI suggests that there is unreliable assessment of ecological impacts due to incomplete surveys and dubious methodology. Many of the ecology assessments have been based on incomplete survey data which will need updating when surveys have been finalised. This is a major issue as conclusions have been drawn prematurely in the absence of full information.
- 7.1.3 Furthermore, the PPA Group are concerned that there is unreliable scoping in/out of ecological impacts based on incomplete surveys and data. It appears that existing incomplete information has been used to scope in or out various designated sites, habitats and species. The PPA Group does not feel that this can provide a robust assessment until all the information has been considered and by scoping out features prior to obtaining all the data may result in these features being ignored prior to the final Environmental Statement.
- 7.1.4 There is inadequate evidence for assessment of protected species impacts in the PEI. The PPA Group is concerned that a clear rationale behind the selection of specific study areas for additional protected species survey and more detailed habitat (and National Vegetation Classification) survey is not provided other than an overview of methodology used.
- 7.1.5 The importance and lack of complete existing survey data on non-designated priority habitats is an issue that has been consistently raised over a long period by the PPA Group. It is considered that non-designated, wider countryside priority habitats have not been effectively assessed and protected. In developing the final NWCC design the principle should be to avoid priority habitats through design mitigation.
- 7.1.6 Overall there is a failure to consider effective mitigation for biodiversity (habitat and species) by –
- a. Avoidance through design mitigation – including options to avoid the head of the Duddon
  - b. Construction design

c. Compensation for loss and disturbance

7.1.7 The current proposals have an inadequate assessment and management of risk on biodiversity from Invasive Non Native Species. In view of the large geographic extent of the linear project it is vital that non-native invasive species are dealt with extreme care due to the risk of spread over a wide area posing potential significant risks to biodiversity.

### 7.2 World Heritage Sites

7.2.1 The PPA Group is very concerned that key risks and impacts to WHS's are not adequately addressed. The NWCC project has the potential to have a substantial adverse impact on the Frontiers of the Roman Empire WHS and the candidate English Lake District WHS.

7.2.2 In particular, only one of the three themes of the Outstanding Universal Value of the candidate English Lake District WHS have been considered. Where nominated for WHS listing Government policy states that it must be treated as if that designation is in place, therefore the elements for which it is being nominated should be considered to be of international importance. The PPA Group considers that a comprehensive Heritage Impact Assessment is required, using the ICOMOS guidance previously provided to National Grid. Without a demonstrably comprehensive Heritage Impact Assessment it is difficult at this stage to accept the conclusion that NWCC would have "slight beneficial significance" on the WHS.

7.2.3 The PEI has a lack of recognition of the added value to designated and non-designated heritage assets and historic landscape character areas where they contribute to the Outstanding Universal Value of WHS which should be an added value of significance. This should be addressed in the development of the Environmental Statement. Furthermore there is an absence of assessment of non-designated assets within and just outside the proposed alignment which may be impacted on by the development. Given the extent of the route this is a significant concern.

### 7.3 Archaeology

7.3.1 The consideration of non-designated archaeological assets in the PEI Report is currently flawed. Significant sources have not been consulted. There is an absence of both; the assessment of the physical impact of the development on all the non-designated archaeological assets that lie partially or wholly within the draft order limit boundary and the assessment of non-designated archaeological assets that are recorded as being located just outside of the boundary of the

draft order limit but may, in reality, be situated located within the boundary. Additionally, the significance of the numerous prehistoric flint finds along the route is undervalued as the assessment fails to take in to account the potential of the finds to reflect buried prehistoric archaeological assets that are currently of unknown significance.

### **7.4 Heritage assets and cultural landscape**

- 7.4.1 There is generally a lack of data and articulation of effects on heritage assets provided within the PEI. The PPA Group also conclude that there is inadequate evidence and assessment of impacts to the historic environment and archaeology related to underground construction methods for cabling in the LDNP. It is very important that the final application identifies the full range of archaeological features, assesses likely impacts and proposes adequate mitigation – including avoidance through detailed route alignment, effective find recording and where appropriate an archaeological fund for educational activities.
- 7.4.2 The PPA Group are also concerned that there is a lack of Statements of Significance and clear assessments of the value of heritage assets. Statements of Significance need to be proportionate to both the level of significance and the degree of effect that will result from the development. This particularly applies to listed buildings/monuments.
- 7.4.3 As with the landscape chapter the PPA Group are also significantly concerned about the lack of visualisations for heritage assets and a lack of cross references to the landscape and visual chapters. The PEI notes the value of these materials but fails to include any sort of accompanying view analysis or supporting graphical/photomontage with regard to any of the designated heritage assets identified. There is no indication of whether these will be provided in the Environmental Statement, therefore, the PPA Group have significant concerns regarding the potential impact of the proposals on heritage assets. This a significant omission from the PEI.



### **8.0 Consultation conclusions and next steps**

- 8.1.1 Whilst there is broad support for the objectives of the NWCC project, the PPA Group has significant concerns that will need to be adequately addressed in order for it to be able to support the proposed development at DCO Examination.
- 8.1.2 This document provides an overview of the key concerns of the PPA Group related to the review of design and detail within the consultation. The PPA Group expect these issues to be addressed before the submission of the DCO application.
- 8.1.3 Fundamentally, the PEI is lacking evidence and information which limits the ability of stakeholders to assess potential impacts. This concern relates to a number of topics and locations set out in this summary and the PPA Group's detailed response. Furthermore, the significant gaps in the PEI and lack of detailed consideration of the impacts results in a failure to provide explanation of mitigations measures. This is a major cross cutting issue across the consultation topics that is most concerning in transport, ecology, historic environment, landscape and related to the tunnel heads.
- 8.1.4 The lack of information especially related to mitigation measures is such that the PPA Group challenge the level of consultation based on the substance, evidence and level of detail provided. The Group suggest that as a result, it is strongly argued that National Grid should undertake a further consultation exercise so that the significant issues can be adequately addressed.