



<b>PROJECT</b>	HIRWAUN POWER PROJECT
<b>EXAMINING AUTHORITY REFERENCE</b>	EN010059
<b>UNIQUE REFERENCE NUMBER</b>	10027307
<b>ORGANISATION</b>	BRECON BEACONS NATIONAL PARK AUTHORITY (the BBNPA)

### **LOCAL IMPACT REPORT**

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## **1.0 INTRODUCTION AND SCOPE**

- 1.1 This document sets out the Brecon Beacons National Park Authority's (BBNPA) Local Impact Report (LIR) regarding the proposed development of a Gas Fired Power Station at Hirwaun Industrial Estate, near Aberdare and its impact on the BBNPA.
- 1.2 This LIR has been completed in accordance with requirements of the Planning Act 2008, as amended by the Localism Act 2011. It is considered that the BBNPA is a Relevant Authority in accordance with Section 102(5) of the Planning Act 2008 as the boundary of the National Park adjoins the administrative boundary of Rhondda Cynnon Taf County Borough Council within which the development is located.
- 1.3 This document supplements the relevant representations (RRs) submitted by the BBNPA to the Examining Authority in May 2014 at which stage the BBNPA was registered as an Interested Party and given the unique reference number of EN10027307.
- 1.4 Whilst not within the administrative boundary of the BBNPA the development, by virtue of its nature, scale, and location, at its nearest 250m south of the southern boundary of the National Park, has the potential to have significant impacts on the special qualities of the National Park.
- 1.5 In particular, and as referred to in the submitted RRs, the BBNPA raises concern that the proposal would have a negative impact on the Parks' landscape and both statutory and non-statutory ecological areas thus undermining the Park's key special qualities, which comprise some of the very reasons which make this area worthy of statutory protection.
- 1.6 Whilst it is accepted that the development will not have a direct impact on the National Park given its location outside the boundary, the LIR seeks to identify the degree of indirect impact that the development would have on the National Park, particularly in relation to landscape, cultural heritage and

ecological impacts. In accordance with guidance set out by the Planning Inspectorate, the impacts have been expressed in terms of whether they are positive, neutral or negative with the degree of impact, where relevant being expressed as major, moderate, minor or negligible.

- 1.7 This LIR is informed by a consultant report, instructed by the BBNPA, which has reviewed the submitted application's supporting documentation to ascertain whether the assessment carried out by the applicant in relation to Landscape and Visual impact is sufficiently robust and accurate.
- 1.8 In relation to other matters, it is confirmed that initial discussions with the applicant are currently underway for the agreement of a Statement of Common Ground (SOCG). However, at the time of writing no formal agreement has been reached and discussions/negotiations are ongoing.

## **2.0 SITE LOCATION AND PROPOSED DEVELOPMENT**

- 2.1 The proposal seeks a Development Consent Order for the construction of a new thermal generating station, comprising a Simple Cycle Gas Turbine (DCGT) peaking plant designed to provide an electrical output of up to 299 (MWe). The plant would be fuelled by natural gas, supplied to the plant by a new gas pipeline connecting to the existing National Gas Transmission system with an underground electrical connection to export the electricity from the plant to the National Grid via the Rhigos Substation.
- 2.2 The application site comprises an area which currently accommodates industrial buildings within the established Hirwaun Industrial Estate. Whilst entirely located within the administrative area of RCTCBC, the application site is located, at its nearest, 250m south of the southern boundary of the BBNPA.
- 2.3 The submitted application documentation describes the development in detail and confirms that the definitive infrastructure will not be finalised until the detailed design stage. As such, it is recognised that the development

described and thus assessed in accordance with the principle of the 'Rochdale Envelope' includes the maximum dimensions of infrastructure whereas the completed development may not necessarily reflect those maximum parameters.

- 2.4 Given that the submitted documentation describes the development and its location in full, it is not considered necessary to re-iterate this within the LIR.

### **3.0 RELEVANT LEGISLATIVE AND POLICY FRAMEWORK RELATING TO NATIONAL PARKS**

- 3.1 In order to set this report in context it is considered necessary to outline the key legislative and policy framework that underpins the designation of National Parks and the duties placed on determining/consenting Authorities, including the ExA, in determining development which may have an effect on the National Park.

- 3.2 National Parks were originally designated under the National Parks and Access to the Countryside Act 1949, which has since been superseded by the **Environment Act 1995**. Section 61 of the Environment Act 1995 is key and sets out the Park's two statutory purposes as follows:

- a) *To conserve and enhance the natural beauty<sup>1</sup>, wildlife and cultural heritage of the National Park; and*
- b) *To promote opportunities for the public understanding and enjoyment of the special qualities of the Parks.*

- 3.3 Of particular relevance to the proposal is Section 62(2) of the Environment Act 1995 which places an obligation on any relevant authority (including the Examining Authority), in exercising or performing any functions in relation to, or so as to affect, land in a National Park to have regard to the statutory

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<sup>1</sup> Definition of natural beauty contained within Annex 6 of the Brecon Beacons National Park Management Plan 2010 – 2015, see **Appendix 3**

purposes and, if it appears that there is a conflict between those purposes, to attach greater weight to the purpose of conserving and enhancing the natural beauty, wildlife and cultural heritage of the area comprised in the National Park.

- 3.4 The primacy of the first purpose over the second in cases of irreconcilable conflict stated within Section 62(2) is also commonly referred to as the **Sandford Principle**.
- 3.5 Section 62 of the Environment Act 1995 further stipulates that in pursuit of the two statutory purposes, National Parks have a duty to “... *seek to foster the economic and social well-being of local communities...*”.
- 3.6 Under the **Silkin Test**, National Parks are protected from the detrimental impacts that may result from major developments and stipulates that any development must be in the national interest and that major developments should not take place in these designated areas except in exceptional circumstances, and by inference should not unacceptably impact upon them.
- 3.7 To confirm this view, **National Policy Statement for Energy (NPS EN-1) (July 2011)**, which is relevant to the proposal, reasserts this duty within paragraphs 5.9.9 – 5.9.13 (inclusive), and of particular relevance to this proposal states, “*the duty to have regard to the purposes of nationally designated areas also applies when considering applications for projects outside the boundaries of these areas which may have impacts within them. The aim should be to avoid compromising the purposes of designation and such projects should be designed sensitively given the various siting, operational, and other relevant constraints*”.
- 3.8 Furthermore, National Policy Statement for Fossil Fuel Electricity (NPS EN-2) July 2011, specifically requires developers to have regard to the landscape impacts of such developments on National Parks given the required infrastructure (paragraphs 2.6.1-2.6.2).

- 3.9 **Planning Policy Wales 7th edition 2014 (PPW)** also recognises that National Parks must be afforded the highest status of protection from inappropriate developments and that decisions should give great weight to conserving and enhancing the natural beauty, wildlife and cultural heritage of these areas whether those decisions refer to developments that lie within or outside the designated areas.
- 3.10 The guidance set out in legislation and PPW underpins the guidance set out in the **Brecon Beacons National Park Management Plan 2010 – 2015**, the **Brecon Beacons National Park Local Development Plan (Approved December 2013) (the LDP)**. Whilst it is acknowledged that in determining the application, the ExA does not necessarily have to have regard to the Development Plan as is normally the case under the Town and Country Planning Act 1990 (As Amended), it is considered that these documents are material considerations that warrant significant weight to be attached to their content.
- 3.11 The **Brecon Beacons National Park Management Plan 2010 – 2015** was published in July 2010 and is the single most important policy document of the National Park area. The plan coordinates and integrates other plans, strategies and actions in the National Park that affect the two Park purposes and its duty.
- 3.12 The document sets out in paragraph 1.1 that “*no major decision should be taken affecting the future of the Park without reference to the Management Plan*”. Of particular importance, the Management Plan identifies the special qualities of the Brecon Beacons National Park, which are summarised as follows:
- Peace and tranquillity - opportunities for quiet enjoyment, inspiration, relaxation and spiritual renewal.
  - Vitality and healthfulness - enjoying the Park’s fresh air, clean water, rural setting, open land and locally produced foods.

- Sense of place and cultural identity – “Welshness”
- Sense of discovery
- Sweeping grandeur and outstanding natural beauty
- Contrasting patterns, colours, and textures
- Diversity of wildlife and richness of semi-natural habitats
- Rugged, remote and challenging landscapes.
- Enjoyable and accessible countryside
- Intimate sense of community

3.13 These special qualities comprise the very reason why the area is designated as a National Park and thus any impact on any of these special qualities either individually or collectively has the potential to negatively impact upon the whole purpose of designating the area as a National Park. It is therefore essential that in determining the Development Consent Order (DCO) that the ExA gives due consideration, as set out in Sections 61 and 62(2) of the Environment Act 1995, to the impact of the proposal on the special qualities of the National Park, one of “Britain’s Breathing Spaces”.

3.14 In terms of the Development Plan, the **Brecon Beacons National Park Local Development Plan (the LDP)** was adopted in December 2013 and sets out the policy basis for all planning applications within the National Park.

3.15 In addition, the National Park was designated as an International Dark Sky Reserve in 2013 by the International Dark Sky Association (IDA). Its mission is "*to preserve and protect the night-time environment and our heritage of dark skies through quality outdoor lighting.*" As a consequence the Authority is encouraging all residents and developers both within and on the outskirts of the National Park to have due regard to their lighting implications. The Authority has produced a **Lighting Management Plan** which sets out the considerations that need to be taken into account and gives guidance on the types of lighting that may be considered appropriate. Whilst this has not been

formally adopted as Supplementary Planning Guidance, the Authority is currently working towards an Obtrusive Light SPG which is due to be published for consultation in Autumn 2014.

- 3.16 In summary therefore, there is a statutory requirement placed upon the ExA to have due regard to the impact of the proposal on the National Park irrespective of the fact that the development is not included within the Park itself.

#### **4.0 RELEVANT PLANNING HISTORY**

- 4.1 Whilst the planning history relating to the application site is a matter for RCTCBC, it is considered appropriate to outline the relevant planning history of developments within the National Park which, in combination, could have an impact on the Park.
- 4.2 In this regard, it is considered that the only relevant planning permission within the National Park area relates to an application for a Sustainable Waste Resource Recovery and Energy Production Park, known as Enviroparks, approximately 100m to the north of the application site at Fifth Avenue, Hirwaun Industrial Estate which straddles both the National Park and RCTCBC administrative areas.
- 4.3 Planning permission was granted by the BBNPA on 21 December 2010 for:

*Development of a sustainable waste resource recovery and energy production park comprising 26,476 m<sup>2</sup> of buildings and structures, including a 10,240m<sup>2</sup> building for use class B1/B2 use; process buildings; a gatehouse and weighbridge; a visitor centre and administration building; a 20MW net capacity combined heat and power plant; with a 40m ventilation stack; external anaerobic digestion, liquid and gas holding tanks; 30,352m<sup>2</sup> of internal roads and hardstandings; vehicular parking; external security lighting; 17,497m<sup>2</sup> of landscaping; vehicular ingress and egress from Fifth and Ninth Avenues, and associated utilities infrastructure.*

- 4.4 The permission is subject to the standard five year time limit condition and was granted subject to conditions and a Section 106 Legal Agreement. Therefore, whilst development has not commenced as yet, the permission remains extant until such time it expires on 21 December 2015. In this regard therefore it is considered necessary that the impacts of the proposed DCO development are considered in combination with this extant permission.
- 4.5 It is noted that consideration has been given to the cumulative impact of the proposal with other consented and under construction schemes. However, the BBNPA raise concern over the extent of the cumulative assessments undertaken, especially in relation to landscape and visual impacts as set out below.

## **5.0 LOCAL IMPACTS**

- 5.1 This LIR considers the development's principal indirect impacts on the National Park which have been deemed as:
- Landscape and Visual Impacts
  - Cultural Heritage Impacts; and
  - Ecological Impacts
- 5.2 Nevertheless, in addition to the above, consideration is also given to other indirect impacts such as Traffic and Transport, Noise and Vibration and Socio-Economic Impacts.
- 5.3 In addressing the above impacts, the LIR also considers the draft DCO requirements put forward by the applicants.

### ***Landscape and Visual Impact***

- 5.4 Whilst the proposal is located at its nearest 250m to the south of the southern boundary of the National Park, due to its nature, scale and design it is

considered that the current proposal would have, in general, a **negative moderate landscape and visual impact on the National Park** to the detriment of its natural beauty and special qualities.

- 5.5 This report is informed by a review of the application submission, in particular the Landscape and Visual Impact Assessment set out in Chapter 11 of the submitted Environmental Statement, undertaken by independent consultants, Anthony Jellard Associates, instructed by the BBNPA. The full report is included at Appendix 1 to this LIR and summarised below.
- 5.6 In general, the scheme has evolved in a manner that seeks to reduce its landscape and visual impact by virtue of the proposed stack heights being a maximum of 35m rather than the 90m stack option and confirmation that the electricity connection is to be underground rather than the use of overhead lines. Therefore, given the site's location within an existing industrial area, the principal concern of the BBNPA is the visual impact of the proposed stacks on the special qualities of the National Park.
- 5.7 It has been concluded that whilst the description of the landscape baseline follows a logical progression from national through to local landscape designations, the assessment is not entirely clear in relation to LANDMAP Aspect Areas which does not aid interpretation. In relation to the visual baseline, visual receptors from within the National Park appear to have been equally assessed with those outside of the National Park, in particular specific emphasis has been given to users of nearby roads. This raises concerns that the sensitivity of visual receptors of the protected landscape of the National Park has not been appropriately assessed.
- 5.8 The BBNPA previously advised that the initial viewpoints set out in the PEIR were generally considered acceptable but also suggested a number of other viewpoints to be considered. No further discussions were held with the applicant following the PEIR submission to seek formal agreement of the viewpoints chosen. It is therefore unclear whether the suggested viewpoints

set out in BBNPA's response to the PEIR were taken into consideration and the reason for them to be discounted. In this respect, the Landscape Review report raises concerns over the viewpoints assessed as follows:

- The recommended Coed Morgannwg Way long distance footpath viewpoint would have offered an unobscured view into the site whereas the assessed viewpoint in this area (VP22) is partially obscured;
- The assessment has failed to take into account users of the promoted National Cycle route 478 which would have been assessed had the other suggested viewpoints been included; and
- VP7, as indicated on Figure 11.4, appears to have been included in preference to a viewpoint located on the footpath to the south of Pantcefnffordd.

5.9 On this basis, it is questioned whether an adequate and robust assessment has been undertaken. Nevertheless, it is acknowledged that the above concerns could be addressed by the applicant in response to this LIR, albeit these matters have been raised directly with the applicant independent of this report for their comment.

5.10 With regards visual assessment from the assessed viewpoints, the reference in the submitted ES that the stacks are likely to be visible from various viewpoints is acknowledged, however it is questioned whether the statement that there would not be any visible plume emanating from the stacks during operation has fully taken into account the local weather conditions that may result in condensation creating a white plume. The BBNPA is concerned that vapour emanating from the stacks will condense upon release to cold air, especially in winter months when the plant is likely to be more active, and would particularly have a visual impact far wider than currently assessed. It is

not considered that this is sufficiently set out in the supporting documentation to the application.

5.11 In terms of the visual assessment undertaken from relevant viewpoints, the report attached and Appendix 1 provides detailed commentary which in general accepts the majority of the assessment's conclusion with the exception of the following:

- VP8 Lay-by on Minor Road North of Penderyn Reservoir is assessed by the applicant as high sensitivity with a negligible magnitude of change resulting in slight predicted effects, whereas it is considered that the magnitude of change is minor not negligible given that the stacks would appear as a new landscape element in this view, therefore raising the predicted effects to moderate rather than slight.
- VP14 this is the nearest viewpoint to the site which lies entirely within the National Park and as such its receptor sensitivity should be classed as high rather than medium. Concerns are raised in relation to the viewpoint assessment having regard to existing and planned development and those under construction to the extent that it has been concluded that this viewpoint assessment is inaccurate and unreliable and requires review. In addition, it is noted that there are two photomontages produced for VP14 one which appears to be on top of the reservoir embankment and the other on the foot of the embankment, it is therefore unclear which position has been assessed.
- VP19 should be considered as being high sensitivity given its location within the National Park thus resulting in a moderate significance of effect.

5.12 Given the above concerns, it is considered that the assessment is not entirely accurate thus leading to an increased visual impact on the National Park than currently assessed.

5.13 It is noted from the report at Appendix 1 that a significant failing of the visual assessment is consideration of the cumulative impacts of planned development and those under construction, in particular the Pen y Cymoedd wind farm, Enviroparks and the Rhigos Substation, particularly as none of the photomontages produced include these developments to aid interpretation of the potential impacts. This matter has been raised with the applicant and it has been suggested that additional photomontages should be produced to include these cumulative impacts.

5.14 Turning to the photomontages produced, concerns raised are as follows:

- generally dark and not easy to interpret;
- the proposal is rendered in grey rather than the proposed gradation of colours as set out by the Design and Access Statement;
- the viewing distance from the viewpoint to the proposed development has not been given;
- inconsistency in the photomontage titles and those referred to in the ES text creates confusion; and
- it appears that there is a compression of vertical scale between the photomontages and the actual view.

5.15 These collectively raise concerns over the robustness of the photomontages produced and their reliability in presenting an accurate visual representation of the scheme.

5.16 The Authority has consistently requested that night time effects of the development should be taken into account having regard to the National

Park's status as a Dark Sky Reserve. Whilst the content of the current Lighting Strategy is noted, the Authority is concerned over the impact of the development on its Dark Sky status. To this end, the Authority is aware that the applicant is seeking to undertake such an assessment to include a review of the baseline lighting situation and the proposed development and additional information has very recently been submitted to the Authority for consideration (19 August 2014) and is being reviewed.

5.17 It is recognised that the application site is located within an established industrial area with lighting emanating from nearby towns and villages and the local highway network, however until such time an assessment has been undertaken and a revised lighting strategy produced, the BBNPA is unable to accept that the development would not have a night-time visual impact. Nevertheless, it is accepted that the applicant has now acceded to requests to formally include the BBNPA as a consultee for DCO Requirement 16 by agreeing to include the words *"in consultation with the Brecon Beacons National Park Authority"* after the words *"approved by the relevant planning authority"*.

5.18 With regards the proposed external appearance of the building, the efforts made in relation to the possible use of a gradation of colours reflecting the surrounding landscape is generally welcomed as a means of possibly mitigating the impact of the stacks from a visual impact perspective. However, the Authority raises concerns that the backdrop colours against which the stacks would be viewed change with the seasons, weather and the location the stacks are viewed from. As such, the Authority is not necessarily convinced that the proposal is a better solution to a single neutral colour as illustrated on the photomontages. It would therefore assist if the photomontages could be reviewed to include a representation of the visual impact of the development if the design principles set out in the design and access statement were applied.

- 5.19 It is recognised that DCO requirement number 4(4) safeguards the submission of further details regarding the external appearance of the stacks as well as other proposed buildings and as such provided that the BBNPA are formally party to such discussions, it is considered that the finer details of the overall design and final appearance of the building could be satisfactorily addressed. The applicant has confirmed in writing on 15 August 2014 that they would be willing to include within requirement 4 (4) the words *“in consultation with the Brecon Beacons National Park Authority”* after the words *“approved by the relevant planning authority”* and as such, provided that this wording is included, the BBNPA considers that adequate safeguards are in place to finalise detailed designs at the post-decision phase.
- 5.20 Similarly, in terms of landscape mitigation, the report at Appendix 1 has identified various issues with regards to the extent of information contained within the current landscaping proposals and concludes that insufficient detail has been provided to assess whether the proposed landscaping would provide the mitigation intended. In particular the report identifies that a full Landscape Strategy should be provided setting out full details of plant species, sizes, mixes and ground preparation as well as considering the use of alternative soft and hard landscaping that would be more representative of the locality. Specific comments on the landscape mitigation proposals are set out in paragraph 8.5 of the report at Appendix 1. Whilst it is recognised that DCO requirement 5 indicates that such details would be finalised and approved for each defined numbered work, and that the applicant has now agreed to include the words *“in consultation with the Brecon Beacons National Park Authority”* after the words *“approved by the relevant planning authority”*, it is considered that further landscaping detail at this stage of the application process would be beneficial.
- 5.21 In summary therefore, the BBNPA acknowledges that the scheme has progressed in a favourable direction in terms of the now proposed maximum height of the stacks and possible treatment of the external appearance to

lessen its visual impact and that controls are being proposed via relevant requirements. However, it remains to be the case that the proposal will introduce new vertical features that break the existing built height line thus interrupting views out of and into the National Park, it can only therefore be concluded that this will have a negative impact on the National Park. In terms of the level of impact, at present, given the concerns raised above it is considered that the proposal would have a moderate impact, however subject to further detail and points of clarification from the applicant, this level of impact could be reduced.

### ***Cultural Heritage Impacts***

- 5.22 The cultural heritage impacts of the development are confined to the impact of the development on the setting of areas of cultural heritage within the National Park. Nevertheless, it is considered by virtue of the visual impact of the development, the development would have a **negative minor impact on the setting of heritage assets within the National Park.**
- 5.23 The BBNPA welcomes the recognition in Chapter 14 that the proposed development has the potential to impact upon the setting and appreciation of heritage assets and that the ES includes an assessment of the potential impact of the development on non-designated heritage assets within the Brecon Beacons National Park (BBNP) that fall within the Zone of Theoretical Visibility (ZTV). It is also acknowledged that viewpoint 21 and associated photomontages appear to be within or very close to the boundary of East Fforest Fawr and Mynydd y Glog Landscape of Special Historic Interest and that in general it has been concluded in the ES that the residual effects of the development range from neutral to slight/moderate on the setting of heritage assets within the BBNP.
- 5.24 Whilst the BBNPA does not necessarily dispute the conclusions of the assessment undertaken, a review has identified a number of deficiencies that raise concern over the robustness of the assessment. These deficiencies

have recently been provided to the applicant for consideration and whilst the deficiencies may not necessarily fundamentally change the conclusions of the assessment, it is considered necessary to summarise them.

- ES, Section 14 refers to superseded National Park documents (e.g. Local Plan and Deposit Local Development Plan) rather than the Local Development Plan that was adopted in 2013.
- Some of the non-designated heritage assets referred to in Table 14.16 as being within the National Park lies outside its boundary thus raising doubts over whether the assessment has been accurately undertaken.
- A number of heritage assets were not actually visited to undertake the assessment only the general area was visited e.g. Wernlas Ring Cairn and hut circle (01229m and 02136m) and as such it is questioned whether the assessment can be fully relied upon.
- East Fforest Fawr Historical Landscape (presumably this is a reference to East Fforest Fawr and Mynydd y Glog Landscape of Special Historic Interest) is listed in table 14.16 as a '*Non-Designated Assets within the Brecon Beacons National Park*', whereas Registered Historic Landscapes are nationally designated heritage assets and are considered to be the best examples of different types of historic landscapes in Wales.
- Reference to the East Fforest Fawr Historic Landscape appear to be inaccurate and refer in parts to the Fforest Fawr Geopark. The Registered Historic Landscape of East Fforest Fawr and Mynydd y Glog is the nationally designated landscape that is included on the 'Register of Landscape of Special Historic Interest in Wales'. The Fforest Fawr Geopark is a European landscape designation for landscapes which have geological heritage of European significance and therefore is not itself a heritage asset or a historic landscape.

- Furthermore the East Fforest Fawr and Mynydd-y-Glog Registered Historic Landscape of Special Historic Interest, lies at its nearest just 2km from the proposed development site with lines of sight down to the development site with three different Historic Landscape Character Areas (HLCA) within the Historic Landscape falling within the ZTV. It is not considered that this is adequately referred to in the documentation.
- The assessment makes mention of the fact that Mynydd-y-Glog is a Landscape of Special Historic Interest, whereas Mynydd-y-Glog is part of the Registered Historic Landscape of East Fforest Fawr and Mynydd-y-Glog.
- Chapter 11, Table 11.8 lists landscape designations within the 5km study area, including the National Park at a national level, and at a local level a number of historic landscapes, but it does not include the nationally designated East Fforest Fawr and Mynydd-y-Glog Landscape of Special Historic Interest, which would suggest that the landscape and visual impact of the development on the setting of this asset has not be fully accounted for in the Landscape and Visual Impact assessment.

5.25 Whilst it is considered that clarification from the applicant in relation to the above mentioned inaccuracies would be welcomed, it is considered similar to the BBNPA's assessment of the Landscape and Visual Impact of the development that by virtue of the introduction of the development, in particular the stacks and their visibility from heritage assets within the National Park, that the proposal would have a negative impact on the setting of heritage assets, but in terms of the magnitude of that impact given the distances and possible mitigation measures as referred to in the landscape and visual impact section above, that the magnitude in relation to the setting of heritage assets would be minor and possibly could be reduced to a negligible magnitude subject to mitigation measures and the finer design details.

### ***Ecological Impacts***

- 5.26 The principal ecological impacts relate to the deposition of emissions emanating from the proposed stacks on ecological receptors within the National Park, especially having regard to the prevailing south westerly winds and the site's juxtaposition with the National Park. Whilst the BBNPA has no in-house expertise to fully assess the air quality impacts of this proposal on the National Park, based on the information available it is considered that the proposal would have a **negative minor impact on ecological receptors within the National Park**. However, the BBNPA will be guided by the expert opinion of NRW in relation to air quality impacts on ecological receptors.
- 5.27 It is acknowledged that a full suite of ecological surveys has been undertaken at the development site and that the ecological impacts within the site are primarily local in nature. There will be some impacts on mobile species such as bats, breeding birds and otter; however, the species recorded present at the site are not rare or endangered and it is not considered that there will be ecological impacts on metapopulations within the National Park. It is understood that there was no evidence of the marsh fritillary butterfly being present on the development site; in spite of the presence of suitable habitat, no evidence of the primary food plant for the larvae (devil's bit scabious) was found.
- 5.28 The BBNPA agrees with the identified Valued Ecological Receptors and welcomes the inclusion of an assessment of the impacts on nearby Ancient Woodlands as requested at the meeting on 13th December 2013.
- 5.29 There are potential impacts during construction as well as operation; decommissioning impacts are likely to be similar to those during construction. Nitrogen oxides, carbon monoxides and particulate matter are the principal pollutants.

- 5.30 Natural Resources Wales has the responsibility for issuing an Environmental Permit for the operation of the Power Generation Plant with respect to the emissions from the stacks. As such the BBNPA will be guided by NRW as to the acceptability of the impacts, in particular with regard to the impacts on the nearby Special Areas of Conservation (SACs) within the BBNP – Blaen Cynon SAC, Coedydd Nedd a Mellte SAC and Cwm Cadlan SAC. Whilst it is accepted that there may be other factors affecting air quality within these sites, the BBNPA suggests that the full impact of the proposal could be assessed via a programme of monitoring of the designated features of the SACs prior to and during the operation of the Power Plant, the details of which could be secured by way of a Section 106 agreement.
- 5.31 The BBNPA welcomes the acknowledgement of the impacts on nearby locally important habitats including Ancient Woodlands, as well as the designated sites above. It is a concern that the daily mean critical levels may be exceeded on some sites, but it is acknowledged that provided the annual critical levels are not exceeded, the impacts are likely to be acceptable. Nevertheless, it is suggested that monitoring of the sites and habitats that are at most risk would further assist to understand whether the proposal is having an impact.
- 5.32 The hydrology of the site is such that the main drainage is to the west along the River Camnant and the Afon Sychryd to the confluence with the Afon Mellte and Afon Nedd; the river flows through the Coedydd Nedd a Mellte SAC. There are potential impacts for water quality, principally through pollution incidents. Again, the BBNPA does not have in-house expertise to assess the hydrological implications of the proposals, and will be guided by NRW as to the acceptability of the conclusions in the ES.
- 5.33 It is however recognised that DCO requirement 12 includes provision for a Construction Environment Management Plan for each numbered work to be submitted to and agreed by the relevant planning authority prior to

commencement. It is considered that adherence to an acceptable CEMP to avoid negative impacts will be essential. Given that the CEMP will cover issues to prevent negative impacts on habitats within the BBNP, principally pollution prevention measures to avoid impacts on air and water quality, the BBNPA should also be involved in the approval of the contents of this document. Similarly, it is noted that the Decommissioning Strategy will also need to include a similar Decommissioning Environmental Management Plan.

- 5.34 In summary therefore, it is considered inevitable that the development will have a negative impact on ecological receptors within the National Park given that the proposal will represent an increase in emissions compared to the baseline position. The level of impact is more difficult to quantify without the expert advice of NRW, nevertheless, it is considered reasonable to conclude based on the assessment set out in the ES that the level of impact on the National Park would be minor, subject to NRW's conclusions.

#### *Traffic and Transport Impacts*

- 5.35 The Authority has not raised specific concerns regarding traffic and transport impacts of the development on the National Park, given the proximity of the A465 and the intended traffic routes of construction vehicles on principal roads which lie outside the National Park. It is acknowledged that the greatest impact on nearby roads will be during the construction phase as indicated in the ES, however given the intended peaking use of the plant and limited employees required to be located at the site, it is not considered that there will be discernible impact during operation of the development. In this respect, and having regard to the traffic routes set out in the ES which avoids construction traffic travelling through the National Park, the development would have a neutral impact.

### *Noise and Vibration Impacts*

5.36 Similarly, in terms of Noise and Vibration, the Authority has not raised any specific concerns, and it is noted within the ES that such impacts would be mainly limited to the construction period. In this regard, given the nature of the proposal, distance from the National Park and the assessment set out in the ES, it is considered that the development would have a neutral Noise and Vibration impact.

### *Socio-Economic Impacts*

**5.37** In terms of Socio-Economic Impacts, it is considered that the proposal has the potential to impact upon tourism and the enjoyment of the National Park by virtue of the visual impact of the proposal on the local landscape and the effect that would have on the enjoyment of recreational users. The social-economic assessment concludes that in relation to tourism in general, the project would have a slight adverse impact. It is considered that it is reasonable to conclude that by virtue of the visual impact of the proposal on views from within the Park, that the development would have a negative impact on recreational users of areas of open access land and public rights of way with views to the site. It is considered therefore in combination with the Authority's consideration of the landscape and visual affects that the effect of the development on tourism, particularly recreational users would be negative and of a moderate impact. However the magnitude of this impact could be reduced subject to the mitigation measures, including design **principle proposals**.

# **Appendix 1**

Review of Landscape and Visual Aspects

By

Anthony Jellard Associates

## **HIRWAUN POWER PROJECT**

Review of Landscape and Visual Aspects of the Parsons Brinckerhoff March 2014  
Environmental Assessment

**Prepared for the Brecon Beacons National Park Authority**



**Anthony Jellard Associates**

August 2014

## **1. Introduction**

- 1.1 Anthony Jellard Associates (AJA) were originally commissioned by Natural Resources Wales (NRW), in conjunction with the Brecon Beacons National Park Authority (BBNPA) in June 2013 to provide advice on landscape and visual matters in relation to the proposed Hirwaun Power Project, the construction of a gas-powered electricity generating station and related infrastructure, on land at Hirwaun Industrial Estate in the County Borough of Rhondda-Cynon-Taf, South Wales.
- 1.2 The proposals constitute a Nationally Significant Infrastructure Project (NSIP) under the terms of the Planning Act 2008 and so an application for a Development Consent Order (DCO) is to be made to the Secretary of State (SoS). The Planning Inspectorate will therefore formally examine the application and representations made about it at Examination led by an Inspector, in order to come to a decision on the proposals. The proposals also constitute an EIA development under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (as amended), and therefore an Environmental Statement (ES) will be required to support the DCO application.
- 1.3 The first stage of that commission was to provide NRW and BBNPA with advice on landscape and visual matters to inform their response to the Scoping Report submitted by the applicant, Hirwaun Power Ltd. AJA prepared their advisory report on scoping in June 2013 and this advice was incorporated in NRW's and BBNPA's response to the applicant at that time.
- 1.4 The second stage of that commission was undertaken when the applicant submitted a further tranche of material as part of the consultation process, in the form of a 'Preliminary Environmental Information Report' (PEIR) and AJA were given instructions to advise on how NRW and BBNPA might respond in respect of the landscape and visual implications of the project, insofar as it was being described, designed and presented at that time. This included a fieldwork review element. AJA reported on their findings to NRW and BBNPA in November 2013. That report included a number of conclusions and recommendations on a range of topics which were suggested to be communicated to the project developer, to be addressed in their approach to - and presentation of - the Landscape and Visual Impact Assessment (LVIA) component of the ensuing formal Environmental Statement. These conclusions and recommendations will be revisited in this review of the submitted LVIA, as part of a commentary as to how and to what extent the submitted LVIA has addressed the concerns previously raised by NRW and BBNPA.

- 1.5 It is understood that NRW no longer wish to advance a landscape argument in relation to the application and so BBNPA has independently commissioned this follow-on LVIA Review work following the submission of the formal ES in support of the Hirwaun Power Project.

## **2. LVIA Review Brief**

- 2.1 BBNPA required the LVIA Review to undertake the following assessment:
- A full review of the Landscape Chapter of the submitted Environmental Statement and its accompanying appendices and figures to ascertain whether the submitted assessment is sufficiently robust in terms of, but not limited to, its methodology, assessment of effects, viewpoints and mitigation measures in so far as they are applicable to the landscape and visual impacts of the development on the Brecon Beacons National Park Authority (including the setting of cultural heritage assets within the National Park);
  - A full review of the submitted photomontages of relevance to views into and out of the Brecon Beacons National Park Authority only;
  - A full review of the submitted lighting strategy in so far as it impacts upon the night time effects of the proposals;
  - A full review of the proposed design, appearance and materials as set out in the Design and Access Statement and other documentation in so far as it mitigates the landscape and visual impact of the proposal;
  - A written report setting out the consideration of the above matters providing definitive conclusions as to whether or not the Authority should accept the assessments and documentation as robust and/or outline where there are deficiencies/inaccuracies and what would be required to rectify those deficiencies/inaccuracies.

## **3. Documents Supplied for the LVIA Review**

- 3.1 A comprehensive tranche of documents submitted in support of the application were provided in electronic format by BBNPA. These were the documents formally submitted to BBNPA by the applicant under the title *The Hirwaun Power (Gas Fired Power Station) Order: Application under section 37 of the Planning Act 2008* (PINS Reference Number: EN010059), dated March 2014.
- 3.2 As noted at paragraph 1.4, above, in preparing this LVIA Review for BBNPA we have also referred back to the findings of our November 2013 advisory report on the PEIR submitted by the applicant in October 2013.

## **4. Revisions to the Project since the Submission of the Scoping Report and PEIR**

- 4.1 The applicant has made some changes to the proposed development since the submission of the Scoping Report in June 2013 and the PEIR in October 2013 which have potentially significant implications for the predicted landscape and visual effects which would result.
- 4.2 There is no longer any consideration of constructing a single smoke stack to a height of 90 metres at the Power Generation Plant site, which was being considered at the time of preparing the Scoping Report. Instead, there would be 5Nr smoke stacks, each rising to a height of 35 metres and being 8 metres in diameter. The proposed connection to the electricity grid would not be by means of an overhead line, which was one of two options previously under consideration. The grid connection now proposed is to be via an underground cable, installed along the existing adjacent main road, to connect to a new National Grid sub-station some 250 metres to the west of the Power Generation Plant site; this is currently under construction to serve the extensive Pen y Cymoedd wind farm, also under construction. The selection of construction materials and the colours proposed for surface finishes of buildings and structures is now set out in more detail than in the PEIR, including an elaborate approach to the justification of colour selection contained within the submitted Design and Access Statement (DAS).

## 5. LVIA Review

### Baseline Condition

- 5.1 The ES notes in the general section on Methodology that the EA has included *inter alia* 'Establishing a comprehensive understanding of the existing baseline environmental conditions for the Project Site and the relevant study areas for each environmental topic;' <sup>2</sup>
- 5.2 Section 11 of the ES contains the LVIA and section 11.4 deals with 'Assessment Methodology and Significance Criteria'. Baseline work is described under the sub-heading 'Nature of Receptor' at section 11.4.

### Commentary

- 5.3 We note from paragraph 4.6 of our PEIR Review Report of November 2013<sup>3</sup> that we had observed that the assessor has taken into account the relevant scoping responses from our June 2013 report at the Scoping Stage, in respect of the documents which should be referred to in establishing the baseline condition.

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<sup>2</sup> Hirwaun Power Project 6.1.0 Environmental Statement, Parsons Brinckerhoff; March 2014; section 3.2.1, p.53

<sup>3</sup> Hirwaun Power Project: Review of Landscape and Visual Aspects of Parsons Brinckerhoff, October 2013, Preliminary Environmental Information Report; Anthony Jellard Associates, for Natural Resources Wales and Brecon Beacons National Park Authority, November 2013; p.4

We note and concur with the explicit statements in Section 11.4.7 of the ES, which confirm that

*'Baseline studies for assessing landscape and visual effects require a mix of desk study and field work to identify and record the character of the landscape and the elements, features and aesthetic and perceptual factors, which contribute to it. The use of Landscape Character Assessments is an important element of establishing the current baseline and potential forces for change. The Brecon Beacons National Park Authority Landscape Character Assessment and LANDMAP has been used for this assessment as it covers the necessary local area and evaluates each area in terms of its five key aspects, geological landscape, landscape habitats, historic landscape, cultural landscape, and visual and sensory landscape.'*<sup>4</sup>

- 5.4 Section 11.6 of the ES details the assessment of the *'Baseline Conditions and Receptors'*. It is subdivided into landscape and visual baseline observations and differentiates between areas of land within the BBNP and outside it.
- 5.5 Reference is made in section 11.6 to both the BBNPA's Landscape Character Assessment and the constituent LANDMAP data across all five Aspects in describing and analysing the baseline landscape condition.

### **Commentary**

- 5.6 The description of the landscape baseline follows a logical progression from national through to local landscape designations, but the detailed text referring to LANDMAP becomes unclear when the various Aspect Areas are not referred to by their discrete reference numbers or titles or the relevant prefix (such as V & S or GL). This does not aid ease of interpretation. As regards the establishment of the visual baseline condition, the assessors have not continued with the informative differentiation between receptors in the BBNP and outside it which they provided for the description of the landscape baseline. There is no specific discussion of the users of public rights of way and Open Access Land within the BBNP in general as being particularly sensitive visual receptors, as opposed to those outside the national park. Only Mynydd y Glog Open Access Land - not the closest such land within the BBNP - is mentioned specifically, yet it is grouped with Open Access Land on Hirwaun Common, well outside the BBNP boundary to the south. By implication, these two areas of land with potentially significant visual receptors appear to be regarded as being equally sensitive, which we cannot agree with. By contrast, there is much more detailed comment

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<sup>4</sup> *Hirwaun Power Project 6.1.0 Environmental Statement, op.cit.*; March 2014; section 11.4.7, p.459

on the users of the A465, A4059 and A4061 main roads in the vicinity as being visual receptors, as well as users of local roads.

- 5.7 The visual baseline text provides information as to the number of viewpoints used in the assessment and their justification, acknowledging that a further 9 viewpoints were added to those identified initially by the assessors, following consultation with NRW and BBNPA<sup>5</sup>. We assume that part of that consultation would have been the responses provided by NRW and/or BBNPA following our advisory report on the PEIR, and our commentary below is made with this in mind.

### **Commentary**

- 5.8 We note that, of the 6 additional viewpoints which we recommended in our report on the PEIR be included in the LVIA, only 1 has been assessed: that located on the public bridleway which crosses the Open Access Land below the summit of Moel Penderyn (included as VP18, with a photomontage provided). No explanation is given for the failure to include the other 5 recommended additional assessment viewpoints.
- 5.9 This is a particular concern with regard to the recommended Coed Morgannwg Way additional viewpoint at Mynydd Beili Glas, given the fact that the views towards the Power Generation Site from the assessed viewpoint at the promoted panoramic viewpoint at the car park on the A4061 overlooking Craig-y-Llyn (VP22) are partially obscured by the intervening promontory of high ground at Twyn Canwyllyr above Hirwaun Common. The recommended additional viewpoint location would include the recreational receptors on the promoted long distance route of the Coed Morgannwg Way and would have clear views over the site to the BBNP land beyond. Also, by omitting the two recommended additional viewpoints to the east of Cefn Rhigos and close to the Heads of the Valleys Road east of Hirwaun, the assessment has failed to take specific account of the users of the promoted National Cycle Route 478, recreational visual receptors enjoying views along the edge of and into the BBNP (*'Route 478 links the Taff Trail to the south and the Brecon Beacons and Heads of Valleys cycle route (Route 46) to the north'*)<sup>6</sup>.
- 5.10 We would also observe that some of the viewpoints included are of very limited use in informing the assessment, notably VP7, included instead of the recommended footpath location south of Pantcefnffordd; and VP12 near a solitary remote farmstead on a track which is not a public right of way. The

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<sup>5</sup> *Hirwaun Power Project 6.1.0 Environmental Statement, op.cit.*; March 2014; section 11.6.50, p.483

<sup>6</sup> Sustrans website, entry for National Trail 478, 11<sup>th</sup> Aug 2014

omitted viewpoints – and some of those assessed - would appear to be at variance with the ES statement that

*‘The selection of locations was based on the criteria that viewpoints should:*

- Be representative of the likely impacts;*
- Show a range of different types of views;*
- Represent selected heritage assets referred to in this ES Section;*
- Be representative of different receptor groups;*
- Be representative of the varying image of the Project in the landscape; and*
- Be accessible from public vantage points.’<sup>7</sup>*

- 5.11 In our PEIR advisory report, at paragraph 4.15, we recommended that NRW and BBNPA should be consulted on the final choice of viewpoints and photomontages when the ZTV had been prepared, and we stressed the importance of potential impacts from the development on views to and from the BBNP. BBNP communicated these matters to Peter Brett Associates (letter to Colin Turnbull dated 28<sup>th</sup> November 2013) with the specific wording as follows: *‘It is requested that the ZTV is produced as soon as possible to assist with agreeing the relevant viewpoints to ensure that the landscape and visual impact of the development on views both from and to the National Park are appropriately assessed.’* It is understood that no such discussions took place prior to the submission of the application. We comment further on the visual assessments from specific viewpoints at paragraphs 7.4 to 7.21, below.

### **Methodology**

- 6.1 The assessment methodology has generally followed the approach advocated in current published guidance, including specific reference to the *Guidelines for Landscape and Visual Impact Assessment, 3<sup>rd</sup> Edition, 2013*, published by The Landscape Institute and the Institute of Environmental Management and Assessment (GLVIA3).

### **Commentary**

- 6.2 Landscape and visual ‘impacts’ have been assessed at the construction stage, at operation and at decommissioning, which is accepted practice and required by the EIA Regulations. However, there is some use of the terms ‘impacts’ and ‘effects’ (for example at section 11.4.24, p.463) which does not accord with the guidance given in GLVIA3, which is absolutely clear on this point of interpretation and definition of terms:

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<sup>7</sup> *Hirwaun Power Project 6.1.0 Environmental Statement, op.cit.*; March 2014; section 11.6.51, pp.483-484

*'The process is generally known as **impact** assessment but the European Union Directive refers to assessment of the **effects**, which are changes arising from the development that is being assessed. This guidance generally distinguishes between the 'impact', defined as the action being taken, and the 'effect', defined as the change resulting from that action, and recommends that the terms should be used consistently in this way.'*<sup>8</sup>

We would advocate the consistent use of the term 'effects', being the outcomes of changes, not the actions involved in bringing about those changes, and we would suggest that this definition of effects would be more readily understood by a non-specialist reader. This important consideration is also the subject of specific guidance in GLVIA3 (at paragraph 1.21, p.10).

6.3 The assessment of cumulative landscape and visual effects is based on those effects arising in combination with those developments with planning permission but not yet constructed, and those developments which have been submitted for planning permission but which have not yet been granted consent.<sup>9</sup> This clarification of a matter we raised in our PEIR review report is to be welcomed. However, the consideration of the combined effects of these projects does not seem to have been taken forward into the visualisations – the photomontages provided at selected viewpoints do not take account of three major changes taking place to the visual baseline which are relevant to the assessment, especially in respect of views out from the BBNP:

- the construction (in progress) of the substantial new National Grid substation at Hirwaun Industrial Estate to connect the power outputs from the Pen y Cymoedd Wind Farm, around 250 metres to the west of the proposed Power Generation Plant site;
- the very large turbines of the Pen y Cymoedd wind farm (also under construction), a number of which will appear along a large proportion of the skyline forming the southern horizon; and
- the consented Enviroparks Energy from Waste power generation plant development on nearby land at Hirwaun Industrial Estate to the north-east of the proposed Power Generation Site near the Penderyn Reservoir.

We comment further on specific photomontages at section 7, below.

6.4 In our PEIR review report, we specifically observed at paragraph 4.9 that the assessment should include analysis of impacts and their resultant effects against the specific relevant 'Special Qualities' of the BBNP. The Special Qualities are

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<sup>8</sup> GLVIA3, 2013; paragraph 1.15, pp.8-9

<sup>9</sup> Hirwaun Power Project 6.1.0 Environmental Statement, *op.cit.*; March 2014; section 11.4.19, p.462

tabulated in the BBNPA's National Park Management Plan, 2010-2015 – there are eleven listed and described, with examples of 'Stakeholder Quotations' included alongside each of them.<sup>10</sup> The LVIA at section 11.2.31 deals with the BBNP Special Qualities, with direct reference to the Management Plan. The ES lists three of these Special Qualities, with the comment by the assessor that 'a few of these are directly relevant to landscape and visual amenity:

- *A National Park offering peace and tranquillity with opportunities for quiet enjoyment, inspiration relaxation and spiritual renewal.*
- *The Parks sweeping grandeur and outstanding natural beauty observed across a variety of harmoniously connected landscapes.*
- *A working, living 'patchwork' of contrasting patterns, colours and textures comprising well maintained farmed landscapes, open uplands, lakes and meandering rivers punctuated by small scale woodlands, country lanes, hedgerows and stone walls and scattered settlements.'*

### **Commentary**

6.5 We would consider that the following BBNP Special Qualities should also have been included in the category of being of direct relevance to landscape and visual amenity and used in the assessment of landscape and visual effects predicted to arise from the proposed development, both as a stand-alone project and in combination with other relevant planned or consented projects:

- *'In the context of the UK, geographically rugged, remote, and challenging landscapes.*
- *Access to plenty of open country and the attraction of endless opportunities for everyone to pursue walking, cycling, fishing, water-based activities, and other forms of sustainable recreation or relaxation.'*

6.6 The ES provides its 'Definition of Significance of Effects' in tabular form at Table 11.7 on page 470. Whilst the term 'special qualities' is mentioned in the column which is entitled 'Visual Effects', it is included as part of a phrase which includes the term 'key characteristics', and there is no specific mention of the BBNP Special Qualities. This could be construed as placing insufficient emphasis on assessing the effects on the BBNP Special Qualities in particular, and failing to acknowledge that the BBNP Special Qualities relate to the consideration of landscape as well as visual effects.

### **Viewpoints Assessment**

7.1 We are confining our commentary on the visual assessment to matters relating to the major timespan of the project, the operational stage. We acknowledge that

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<sup>10</sup> Brecon Beacons National Park Management Plan, 2010-2015, BBNPA; Table 3.1, p.28

this project is designed to operate as a back-up power resource to deal with peak demands on the electricity generation capacity and that the ES has stated that the operating time in any given year is likely to be around 1500 hours, which we calculate to be just over 17% of the year. We also assume that there would be more times of peak demand during the winter than the summer.

- 7.2 The ES states that the *'key visual effects arising from the Power Generation Plant will be in relation to the gas turbine generators and their associated stacks [35m high]. Due to the choice of technology, there will not be a visible 'plume' arising from the stacks. Although the site is already well screened by trees on the existing industrial estate, the stacks are likely to be visible from locations in and around the site as well as from further afield'*. We would question whether the plume would be invisible during very cold, still winter weather conditions with dry air and clear visibility when hot vapour, though it may be colourless at the point of emission, could condense to form a white vapour plume. Such a plume would be moving and draw the eye to the top of the stacks which might otherwise be far less conspicuous. We would suggest that this point is put to the developer with a request for clarification.
- 7.3 We visited the following viewpoints on 7<sup>th</sup> August during the course of our fieldwork in preparing this LVIA Quality Review: VP4, VP8, VP12, VP14, VP15, VP18, VP21 and VP22. We also attempted to gain access to VP19 but the access road was gated and locked and, since this viewpoint location is on private land, we did not attempt to gain access on foot.

#### **VP 4 A4061 Hirwaun Common**

- 7.4 The ES states that:  
*'The site is visible above conifer screen planting and the upper parts of the stacks, turbines and main structures will be visible. The viewpoint has Medium sensitivity as it lies adjacent to A4061 and provides long distance views into the National Park. The predicted magnitude of change will be Moderate, due to visibility of upper parts of the new power generation structures. The significance of effect will be Moderate.'*<sup>11</sup>

#### **Commentary**

- 7.5 We would suggest that the A4061 is a main road which does not justify an increased level of receptor sensitivity merely because it has long distance views up into the BBNP. We would ascribe a 'Low' not 'Moderate' sensitivity to receptors at this viewpoint, being users of a busy through road well outside the national park, which does not have any associated footways, cycleways or

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<sup>11</sup> *Hirwaun Power Project 6.1.0 Environmental Statement, op.cit.*; March 2014; section 11.8.16, p.513

special status as a promoted route, and which is adjacent to opencast mining infrastructure and other industrial facilities in the near vicinity to the north. The proposed stacks would be a new landscape element introduced into this view and we note from the photomontage that pale coloured roofs to the rear of the two easternmost stacks increase their visibility, when compared to the other three which are seen against a dark coniferous woodland backdrop. We would concur with the magnitude of change assessed here as being 'Moderate'.

#### **VP8 Lay-by on Minor Road North of Penderyn Reservoir**

7.6 The ES states that:

*'The Power Generation Plant Site will be visible however there is considerable intervening vegetation that breaks up the view. The view is from above and at a distance, so that the vertical structures (such as the stacks) are diminished in size. The viewpoint is of High sensitivity as it is a view from within Brecon Beacons National Park. The magnitude of change will be Negligible as the view is at a distance from the site, the predicted effects are therefore considered to be Slight.'*<sup>12</sup>

#### **Commentary**

7.7 We agree with the high sensitivity ascribed to receptors at this viewpoint, being within the national park. Although they would be seen amongst other industrial facilities and steel lattice towers carrying high voltage electricity lines in the near vicinity to the north, the group of proposed stacks would be a new landscape element introduced into this view. They would be more conspicuous if emitting a moving plume of vapour and we note from the photomontage that pale coloured roofs to the left of the two easternmost stacks draw the eye towards the Power Generation Site. There is only a single oak tree in the middle ground partially screening the stacks. We would therefore assess the magnitude of change here as being 'Minor' not 'Negligible', using the assessor's own criteria, especially if a plume is present, resulting in a 'Moderate' significance of effect, not 'Slight', as assessed in the ES.

#### **VP12 Near Llwyncoch**

7.8 We visited this viewpoint to assess the likely effects from this location, the easternmost viewpoint assessed and within the BBNP. We confirm that the proposed development would not be visible from here. We do not understand why this location was included in the assessment, given the fact that it would appear to lie on private land in a very remote area, at the end of a narrow road leading to a solitary farmstead and with no nearby Open Access Land or public

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<sup>12</sup> Hirwaun Power Project 6.1.0 Environmental Statement, *op.cit.*; March 2014; section 11.8.18, p.514

right of way. As such, it does not conform to the rationale for viewpoint selection set out in the ES, as noted in paragraph 5.10, above.

#### **VP14 South Side of Penderyn Reservoir**

7.9 The ES states that:

*'The winter view allows views towards the Power Generation Plant Site. The current bright white roofscape will be removed. The upper parts of the stacks and gas turbines will be visible through the branches of the trees. In places, the stacks will be visible above the trees and therefore partially visible in summer (with the leaves on the trees). Intervening trees and buildings will screen the remainder of the site infrastructure. The current open cast workings are a significant detractor in the background. The viewpoint is considered to be of Medium sensitivity due to a local PRow and other recreational uses in the area such as angling. The magnitude of change will be Moderate due to the visibility of upper parts of new structures, particularly in winter. The significance of effect is considered to be Moderate.'*<sup>13</sup>

#### **Commentary**

7.10 The observation that the upper parts of the stacks would be seen above the trees is inaccurate: it would appear that around half of the height of the stacks is visible. This is a level viewpoint located on an artificial embankment, so we don't understand the observation that in places the stacks will be visible above the trees – which other places are being referred to? This is a location at an elevated local point, publicly accessible and in the BBNP, so we do not agree with the receptor sensitivity here as being 'Medium' – it should be 'High'. It is also the closest assessed viewpoint within the BBNP.

7.11 Whilst noting that the opencast workings are a significant background detractor in this view, no assessment is made of the effects of the new National Grid substation now under construction to the right of the stacks, and its connecting overhead lines; or of the large Pen y Cymoedd wind turbines which would be visible above the southern horizon in this view; or of the Enviroparks EfW facility, which will occupy the vacant site in the foreground beyond the line of trees. There is also no mention of the detracting effects of the two large steel lattice overhead line towers which break the skyline, as shown on the photomontage. These are much closer to the viewer and much more intrusive than the opencast coal workings. We would therefore suggest that the assessment here is unreliable and needs to be re-visited, in the light of the baseline factors which have been omitted, and the failure of the assessor to comment on the significance of the tall overhead line towers in this landscape and view.

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<sup>13</sup> Hirwaun Power Project 6.1.0 Environmental Statement, *op.cit.*; March 2014; section 11.8.19, p.514

### **VP15 A4061 North of Hirwaun Common**

7.12 The ES states that:

*'The Power Generation Plant Site is visible above conifer screen planting and the upper parts of the stacks, turbines and main structures will be seen. The viewpoint has Medium sensitivity as it lies adjacent to A4061 and provides long distance views into the National Park. The magnitude of change will be Moderate due to visibility of upper parts of new structures. The significance of effect is considered to be Moderate.'*<sup>14</sup>

#### **Commentary**

7.13 We challenge the observation that the upper parts of the stacks will be visible: the photomontage clearly indicates that the greater part of the stacks would be clearly visible at Year One and we would expect this situation to change only slowly during the operational stage, given the relatively high elevation of the site, ground conditions, short growing season and a realistic assessment of plant growth rates for the planting proposed in mitigation. As at Viewpoint 4, we judge the sensitivity of receptors here to be 'Low', not 'Medium', as explained at paragraph 7.5, above. In view of the conspicuous nature of the group of new stacks - entirely new landscape elements in this view - and the relatively close range of the view, we would assess the magnitude of change to be 'Major', using the assessor's own criteria. However, a 'Major' magnitude of change when combined with our judgement of 'Low' receptor sensitivity, would mean the resultant effects would remain as being of 'Moderate' significance, as concluded by the assessor.

### **VP18 Moel Penderyn**

7.14 The ES states that:

*'The Power Generation Plant Site is visible but at some distance away and the vertical structures (such as the stacks) when viewed from above are diminished in size, as demonstrated by the adjacent pylons. The Power Generation Plant Site is also placed in context with the industrial estate and the backdrop of open cast coal workings. The viewpoint is of High sensitivity as it's a view from within Brecon Beacons National Park. The magnitude of change will be Negligible due to the distance of the view and the backdrop of existing industrial landscape. The significance of effect is considered to be Slight.'*<sup>15</sup>

#### **Commentary**

7.15 We note that observations as to the effects of the electricity pylons are included here, whereas these were not mentioned in the assessment at Viewpoint 14,

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<sup>14</sup> Hirwaun Power Project 6.1.0 Environmental Statement, *op.cit.*; March 2014; section 11.8.20, p.514

<sup>15</sup> Hirwaun Power Project 6.1.0 Environmental Statement, *op.cit.*; March 2014; section 11.8.21, p.514

which is much closer to the proposed development site. We note also that the assessor has ascribed – rightly – a ‘High’ level of receptor sensitivity at this location, with the justification that it is a view from within the BBNP. Again, this is not consistent with the ‘Medium’ sensitivity ascribed to Viewpoint 14, also within the BBNP. Similar to the assessment at Viewpoint 14, whilst noting that the industrial estate and opencast workings form part of the backdrop in this view, no assessment is made of the effects of the new National Grid substation now under construction to the right of the stacks, and its connecting overhead lines; nor of the large Pen y Cymoedd wind turbines which would be visible above the southern horizon in this view; nor of the Enviroparks EfW facility, which will occupy the vacant site partly visible above the local horizon formed by line of trees at the edge of the open grassland below the viewpoint. The photograph contains a semi-permeable yellow highlighted panel intended to facilitate identifying the proposed development on the Year One photomontage. This is in the wrong position, the proposed stacks being clearly visible some way to the left hand side of the panel. We would concur with the assessment from this viewpoint, but note that it should have taken account of the changes in the baseline which are under construction or planned.

#### **VP19 Tyle-morgrug**

- 7.16 As explained at paragraph 7.3, above, we were not able to gain access to this viewpoint on private land because of a locked gate on the access track. Our assessment review therefore relies upon the submitted photomontage. The ES states that:

*The Power Generation Plant Site is hidden behind intervening woodland. Only the very tops of the stacks will be visible with coniferous trees as a background, further reducing visibility. Pylons dominate the views towards the industrial estate from this angle. The viewpoint is of Medium sensitivity as it lies on a PRow that connects with the Penderyn bridleway. The magnitude of change will be Minor due to only partial view of tops of stacks, backgrounding and intervening pylons. The significance of effect could be either Slight or neutral, but due to the proximity of the National Park it is considered to be Slight.’<sup>16</sup>*

#### **Commentary**

- 7.17 Our scrutiny of the existing view photograph and Year One photomontage leads us to suggest that the construction of the group of five stacks is an entirely new element in this view and that more than the very tops of the stacks would be visible. We disagree with the ‘Medium’ level of receptor sensitivity ascribed here; this is on a public right of way within the BBNP and it should be a ‘High’ level of receptor sensitivity. On the basis of the submitted photomontage, we would

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<sup>16</sup> Hirwaun Power Project 6.1.0 Environmental Statement, *op.cit.*; March 2014; section 11.8.22, p.515

concur with the 'Minor' magnitude of change in the view. This, when combined with the 'High' level of receptor sensitivity which should have been ascribed, would result in a 'Moderate' level of significance of effects, not 'Slight', as considered by the assessor. We would regard the assessor's consideration of the significance of effects as being possibly 'Neutral' as groundless, and the justification of the final judgement of 'Slight' being because of the 'proximity of the national park' as being factually incorrect – the location is well within the BBNP boundary.

### **VP21 Mynydd y Glog**

7.18 The ES states that:

*'The viewpoint is located on Open Access land and has unobstructed views towards the Power Generation Plant Site. The stacks and turbine units are visible but at some distance. The view from higher ground looking down on the Power Generation Plant Site and with the existing backdrop of the industrial landscape diminishes their visibility. The viewpoint is of High sensitivity as it is a view from within the National Park and is Open Access Land. However, the magnitude of change will be Negligible due to the distance and industrial backdrop. The significance of effect is considered to be Slight.'*<sup>17</sup>

#### **Commentary**

7.19 We concur with the assessment at this viewpoint location.

### **VP22 Craig y Llyn Picnic Area, A4061, Mynydd Beili-glas**

7.20 The ES states that:

*'Whilst the view across the wider landscape is extensive with a dramatic backdrop of the Brecon Beacons National Park, the site is a long way away down in the valley below. Part of the project will be obscured by the hillside. The viewpoint is considered to be of High sensitivity due to its popularity as a tourist viewpoint and the extensive views into the National Park. However, the magnitude of change will be Negligible due to a combination of distance, partial visibility and back grounding of vegetation. The significance of effect will be Slight.'*

#### **Commentary**

7.21 We concur with the assessment at this viewpoint location.

### **Photomontages and Wire-frame Diagrams – General Comments**

7.22 The existing viewpoint photographs and their companion photomontages are generally very dark and not easy to interpret. Given the extensive analysis of the

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<sup>17</sup> Hirwaun Power Project 6.1.0 Environmental Statement, *op.cit.*; March 2014; section 11.8.24, p.515

landscape colours and textures in pursuit of appropriate materials, colours and finishes for the proposed structures and stacks, we were surprised to see that the proposed buildings and structures applied in the photomontages are rendered in grey, not the emerging palette of colours referred to in the Design and Access Statement submitted in support of the project.

- 7.23 We are also accustomed to seeing the recommended viewing distance clearly displayed on a photomontage, so that the correct scale relationship with the existing view can be achieved in the field. Also, we would expect the distance from the viewpoint to the proposed development site to be shown on each photomontage sheet. A further observation is that there is no consistency between the title of the viewpoint location shown on the photomontage and that used in the text which contains the assessment. For example, the VP22 photomontage sheet has the title of 'Craig-y-Llyn picnic area, just off A4061'; whereas the text entry for Viewpoint 22 is 'Myndd Bell-glas Pass' (sic). This does not engender confidence in the document review process which has been followed.
- 7.24 The ES states that the assessment has followed current best practice and guidance, with specific reference to *Advice Note 01/11: Photography and Photomontage in Landscape and Visual Impact Assessment*, Landscape Institute (2011).<sup>18</sup> This guidance clearly states the approach to be followed in presenting photographs and photomontages, including the following:

*'All photographs, whether printed or digitally displayed, have a unique, correct viewing distance - that is, the distance at which the perspective in the photograph correctly reconstructs the perspective seen from the point at which the photograph was taken (SNH 2006, para A18-25). The correct viewing distance should be stated for all printed or digitally displayed photographs and photomontages, together with the size at which they should be printed. All photographs and photomontages used in a document should have the same viewing distance whenever possible.'* (Paragraph 5.2, p.5)

It is evident that this guidance has not been followed, as claimed.

- 7.25 Furthermore, we compared the photographs and photomontages in the field to the actual view and consistently observed that there was a compression of vertical scale apparent in the photographs and photomontages when compared to the actual view. The Landscape Institute guidance is again clear on this point:

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<sup>18</sup> *Hirwaun Power Project 6.1.0 Environmental Statement, op.cit.*; March 2014; section 11.4.3, p.458

*'It is critical that the scale of the proposal and its location within the scene depicted in the photograph are accurately represented. In order to achieve this, it is necessary to match the perspective parameters of the photograph accurately, to record viewpoint location and camera settings, and to use rendering software correctly (SNH 2006, para 209ff). (Paragraph 5.1, p.5)*

Whilst the LVIA text provides some details in respect of 'photographs and panoramas' in section 11.4, key details should be provided on the photomontage sheets.

### **The Design & Access Statement in Relation to Landscape and Visual Effects**

- 8.1 The submitted Design & Access Statement (DAS) accompanying the application includes an extensive investigation into the colours of the receiving landscape and seeks to achieve a range of colours for the proposed structures and finishes which will assist in assimilating the development into the local and wider landscape.

#### **Commentary**

- 8.2 The following general points are applicable to the content and presentation of those sections of the DAS which relate to landscape and visual matters:
- The most important criterion in landscape and visual terms is to be able to demonstrate how the proposed development can be assimilated into the surrounding landscape particularly the National Park. This element of the DAS does not really address this in a comprehensive way;
  - The report appears to be more concerned about views from within and also close by, such as those from the A 465, Heads of the Valleys Road;
  - There is no clear evidence that an analytical approach has been adopted to find the optimum locations for the bulky structures - namely the stacks and the tanks – so as to take maximum advantage of the screening value of the existing woodland;
  - We would like to see more evidence that the colour gradations chosen for the cladding will work at other times of the year and in other light conditions as well as those depicted;
  - Landscape Strategy and Mitigation: there is really insufficient detail provided to enable an informed judgement on the scheme to be made. The landscape mitigation proposals as currently presented raise more questions than answers. An example of this is the proposed Above Ground Installation adjacent to the A4061 main road which will contain the gas pipeline infrastructure providing the connection from the underground main to the proposed Power Generation Site. Figure 9 Figure 9 (Document Reference

2.6) shows the plan view of this fenced compound, indicating a palisade fence around the perimeter and a band around the whole of the site perimeter annotated with the word 'Landscaping'. This scales at around 2 metres wide, the implication being – in the absence of any information to the contrary – that this would be a planted area. Such a mitigation proposal would be entirely inappropriate in this open moorland and rough grassland context, where the most appropriate treatment would be sensitive earth modelling over a much wider area with a mixture of grassland and native ericaceous shrub cover.

- 8.3 The following more specific comments apply to **Section 04 – Design Response**:
- Generally the text is often muddled, clumsy, grammatically incorrect and lacking in punctuation, leading to difficulties in interpretation and frequently leaving the reader scratching his head and wondering 'what does it all mean?'
  - Paragraph 4.6; the author refers to a detailed study of the landscape, but no supporting evidence is provided. The claim that *'the mixture of tones would be representative of changing seasons in the Hirwaun valley'* is unsupported. There is no obvious evidence to justify this. Do they have a suite of photos taken at different times of the year?
  - We are not convinced by the supporting photographs included on the following page, all taken from the A465;
  - Paragraph 4.8: we are unsure of the meaning here. Why does spreading out components across the site *'assist immediately in the visual impact'*? How are views into the site and beyond to the surrounding landscape achieved by separating out various components? This appears to be symptomatic of the emphasis being placed upon short-range views, from the A465 road corridor and within the industrial estate, which we believe are subordinate considerations to the effects on the nearby landscape of the BBNP. We would suggest that locating bulky or tall items, such as the tanks and the stacks, adjacent to areas of existing mature mixed woodland would be the effective way to reduce visual impact;
  - Paragraph 4.9: we do not understand why this point is being made so as to suggest that this design approach is a desirable improvement;
  - Paragraph 4.10: we are not convinced that enough consideration has been given to the use of the existing woodland in screening stacks and tanks. Furthermore, views from the A465 are not nearly as important as those from and towards the BBNP;
  - Paragraph 4.11: Although it has been referred to before and appears to be a cornerstone of the design philosophy, we do not understand what the author means by *'enclosure'* approach. This seems to be completely at variance with the approach in paragraph 4.9 which advocates a more open aspect;

- Paragraph 4.12: refers to 'detailed studies of the landscape' referred to here and illustrated on the following pages, but there are no details of where these studies can be examined;
  - Paragraph 4.13: refers to photographs taken from within the site looking out to distant hills (Brecon Beacons), but these are not provided.
- 8.4 The following specific comments apply to **Section 05 – Development Proposals: Axonometric:**
- It would be helpful to differentiate between existing and new planting;
  - We are not sure that showing the proposed development as a recessive grey, and other buildings in white is very helpful and could be interpreted as being misleading.
- 8.5 The following specific comments apply to the drawing **Figure 11.5 Landscape Mitigation Proposals:**
- Generally this is a very sketchy drawing, lacking in any useful detail, and graphically very weak;
  - The landscape mitigation should be shown as part of a wider Landscape Strategy, for both the development itself and, in a wider context, the whole of the Hirwaun Industrial Estate
  - Indicative species and planting mixes should be included;
  - Where belts of trees for screening are shown, their dimensions should be shown and a clear statement of which species are proposed;
  - It would be useful to see how the proposed landscape mitigation relates to the layout of the proposed Power Station Scheme and associated infrastructure, rather than overlaid on an Ordnance Survey base map depicting the existing site condition;
  - The use of the term '*Shallow Rooting Shrubs*' is inadequate to inform the appropriateness and the likely success of the proposed mitigation planting; we would need to see examples of what is intended;
  - Where it is necessary to breach the belts of existing woodland to achieve gas or electricity connections, it would be preferable to make the breach at an angle thus retaining overlapping trees which will retain more effective screening in important views. This approach is consistent with the Holford Rules' approach to power line design and routing.
- 8.6 The following specific comments apply to the drawing **DAS Appendix 2: Design Principles Statement:**

- Paragraph 2: We are of the opinion that all planting is soft! This text is far from clear and we would need more details and examples of what is meant by '*shallow-rooting species*';
- Paragraph 3: '*amenity planting*' is a meaningless term which requires a full explanation;
- Paragraph 5: an avenue of tree planting implies something formal. Is this really appropriate in an industrial estate and in a relatively hostile microclimate? We would suggest that informal groups of specimen trees planted in verges and at junctions and entrances would be more appropriate; once again the landscape strategy for the power project needs to complement a wider landscape strategy for the Industrial Estate;
- Paragraph 6: we are surprised that the 'Draft Lighting Strategy' is buried deep in Appendix F and that, given the sensitivity of this location in relation to the national park, its recommendations have not been summarised in the DAS (*see paragraph 9.1, below*);
- Paragraph 8: the details of how this screening is to be achieved should be provided;
- Paragraph 11: the details of what constitutes the '*durable and well finished*' surface referred to should be provided;
- Paragraph 15: once again, '*amenity planting*' is referred to but not explained. Are all trees specified to have a clear stem of 1.8m? We think this is fallacious; this would preclude the planting of woodland transplants, the most economical and appropriate way of achieving new belts of woodland, especially in this relatively hostile microclimate with less than optimal ground conditions for plant growth;
- Paragraph 17: soil bunds are mentioned, but no details are provided. Are these to be functional engineering bunds with side slopes of 1 in 2 or steeper, or sensitively profiled landscape mounding with considerably more gentle gradients and complex slopes to harmonise with the surrounding terrain?

## **Draft Lighting Strategy**

- 9.1 The Draft Lighting Strategy (DLS) notes at section 1.4.4 '*The recommendations set out in this report will be used to prepare a detailed Lighting Design for the proposed Project Site during the Detailed Design Stage.*' The DLS includes reference to national policy on infrastructure provisions (NPS EN-1) regarding the landscape and visual effects, quoting this at section 2.1.6 as follows:  
*'Paragraph 5.9.12: "The duty to have regard to the purposes of nationally designated areas also applies when considering applications for projects outside the boundaries of these areas which may have impacts within them. The aim should be to avoid compromising the purposes of designation and such projects*

*should be designed sensitively given the various siting, operational, and other relevant constraints.”*

- 9.2 We are not competent to comment on the technical parameters referred to in the design of lighting to minimise night-time light pollution. Therefore, we restrict our commentary to matters regarding potential landscape and visual effects.

### **Commentary**

- 9.3 We note that the proposals are yet again in draft, with the detailed strategy to be provided ‘*at the detailed design stage*’. This appears to be a similar position to the landscape mitigation proposals design and BBNPA will need to take a view as to whether the level of detail provided is sufficient for them to be able reach a conclusion as to the acceptability or otherwise of the lighting impacts likely to arise from the proposed development; and the adequacy of the lighting design strategy in mitigating the resultant effects. It should be borne in mind that this is not at present a completely dark rural scene. The landscape setting of the development site to the south of the national park has significant lighting arising from the following:

- The Hirwaun Industrial Estate itself;
- The A465 trunk road, illuminated at the roundabout junction with the A4061 and A4059 west of Hirwaun;
- The town of Hirwaun;
- The village of Rhigos
- Tower Colliery.

It should also be noted that the village of Penderyn is nearby within the national park and that there are two large operational hard-rock quarries adjacent to the village which have significant lighting to illuminate their processing plant and access roads. The A4059 main road runs through the village and this too is illuminated.

- 9.4 We therefore suggest that a measured approach is taken to establishing what the additional light pollution effects of the proposed development are, following the submission of detailed lighting design proposals and a detailed review at that time.

## **10. Conclusions and Recommendations**

- 10.1 We do not consider that the LVIA is robust, since it has frequent inconsistencies in the use of terminology and cross references, and it has not followed current best practice guidance with sufficient rigour. The results of the assessment are broadly in agreement with what we would have concluded, but there is no clear

evidence from the report text as to how they got there – it would seem to have been ‘more by good luck than management’. However, we cannot agree with the nature and extent of the landscape mitigation measures as proposed. They are inadequate and are not the product of a rigorous analysis of the landscape context of this site and its sensitivity in relation to the setting of the BBNP.

- 10.2 The LVIA has incorporated only outline landscape mitigation proposals which provide insufficient detail and do not convince us that they are based upon a sound analysis of the landscape context lacks important detail. We recommend that a landscape strategy is provided which provides full details of plant species, sizes, mixes and ground preparation, as well as the proper consideration of earth modelling as an appropriate landscape design element, especially at the gas connection point near the A4061.
- 10.3 There appears to be insufficient weight given to the effects upon views out of and into the BBNP, when compared to views of the site from the A465 and from within Hirwaun Industrial estate. There is a tendency to understate the visual effects of the proposed group of stacks.
- 10.4 The photomontages are not presented in full accordance with current technical guidance published by the Landscape Institute. They do not include significant alterations to the landscape and visual baseline which have arisen from the infrastructure projects already under construction by National Grid and the developers of the Pen y Cymoedd wind farm, as well as the Enviroparks EfW project. The rendering of the stacks and tanks does not reflect the evolution of colour treatments as described in the DAS. It is our opinion that some photomontages from views within the national park (VP14 and VP18) as well as at VP15 and VP22 outside the park should be fully revised to incorporate the cumulative effects of the above projects planned or under construction.
- 10.5 The LVIA failed to assess the effects from 5 of the additional viewpoints recommended in previous consultation responses at the PEIR stage without an explanation as to why this approach was taken. We recommend that these additional viewpoints be used to provide a supplementary assessment.
- 10.6 We recommend that BBNPA request a detailed lighting strategy be submitted before the landscape and visual effects of the additional lighting required by the proposed development can be fully assessed.
- 10.7 The DAS is a document which has too great an emphasis on graphic presentation and insufficient content. The considerable effort expended on colour research appears to be work in progress and it is surprising that the photomontages did not incorporate coloured rendering of superimposed images

of structures. We remain to be convinced that the colours being investigated are any more effective than a muted battleship grey which is very recessive in such landscapes. We would expect that the further work required would take account of the vary variable weather and light conditions which can occur in this locality, if the proposed colour scheme is going to respond effectively to the landscape and visual context.