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For submission by Deadline 3
of the EN010117 Rampion Wind Farm Examination

This is a response to the Applicant's Deadline 2 Document 8.53 Category 8 Applicant's Response to Non-Prescribed Consultees' Written Representations- Appendix C

I refer to Paragraph 3.2, page 17 …

3.2 Has the Scale of the Project and its Visual Impact been fairly represented?

3.2.1
In its response, PCS refers to the welcome images used on the Rampion 2 website:
https://rampion2.com/latest/
and state that *"The website features a number of photographs showing wind farms and associated transmission platforms, substations, etc, and it would be easy to conclude these are representations of the Proposed Scheme."*

The Applicant can confirm that this is not a photo graph of Rampion 2 and is for illustrative purposes only.

Photomontages are included in
Figure 15.26
to Figure 15.79, **Chapter 15**
……

Comment:

It is appreciated that this may just be "Eye Candy", nevertheless both the Designer who selected this image and Applicant would have been aware that, besides providing a portal to the Consultation and Approval Process, one purpose of the Website is to promote the scheme and reassure the Public that the proposal will, overall, be beneficial, attractive, and incorporate new technology that will be an improvement in terms of energy cost, sustainability, and reduction of carbon footprint, and will show benefits to them personally as well as to future generations.

For their part, the Public, due to lifelong exposure to the culture and methods of advertising and publicity, would be inclined to expect that the illustration was somehow intended to represent the new offering - bearing in mind the subtle message suggesting that the two figures are somehow reacting as if in awe of this remarkable technology. They would probably be very surprised if they found the picture was showing 12-or-more-year-old technology, which in the Application is noted as being outdated and superseded.

So however unintentional, there is unfortunately a remaining suspicion that this particular image could be misleading.

As the RED response states, Photomontages were indeed available in the submission, and to my knowledge were reviewed by many of the individuals involved in preparing the PCS Local Impact Assessment.

The recurrent theme, not just in the PCS submission, but also from the National Park, Local Authorities and individual and corporate Interested Parties is not so much that research and consideration has not been carried out, but that conclusions understate negative impacts.

There was a shared feeling among PCS contributors that, in spite of the care taken and the detail shown in the montages, there are some important aspects of the Visual Impact that don't get revealed fully by these static representations.

One Aspect, which doesn't just apply to static representations, is a 'Perceptual Selective Zoom' that human Observers experience, the well know exaggeration of scale when remote objects, either because the object appears to be close to another object which the observer know is large, or because it's framed by a distant landscape feature or the horizon. A well-known example is the over-estimation of the size of Harvest Moons, that appear to be enormous as they rise, but seem smaller when high in the sky – but still appear larger than a 5p coin held at arm's length that will in fact blot out the moon. But not just blot it out, overwhelm it.

As popular science author Brian Clegg put it : *We are so familiar with cameras, we tend to think that the eye/brain combo works like a camera. It doesn't. The image that we 'see' is a composite assembled by the brain from a whole host of processes. It is a fake construct. This should be obvious, because we don't see the blind spot, where the optic nerve renders part of the retina inactive, nor do we witness saccades, the fast, jumpy movements our eyes are always making. We see a fake image. One of the modules in the brain recognize shapes - so we can give extra weight to a known shape like the moon. If it is near trees or other relatively close items on the horizon, we tend to see it bigger - but this is only our brain's processor getting things wrong. Seeing really shouldn't be believing.*

So therefore correctly scaled images showing distant wind turbines do not convey the size as perceived by a human observer.

And another, possibly more important, aspect of visibility, is the tendency of eyes, human and animal, to notice movement.

There are days when the sky at the horizon is essentially white rather than blue, and this can coincide with marginal visibility due to the level of moisture in the air, meaning that the white turbine pylons and sweeps merge into the white sky. And yet, in spite of the similar colour and very low contrast between the sky and the turbines, the rotation of the blades is readily detected, even if little detail can be seen of the turbines themselves.

For this reason Protect Coastal Sussex commissioned several accurate animations showing views of the seascape and turbines from a number of viewpoints along and above the Sussex Bay. So far it hasn't been possible to submit these videos, but some still frames are included in the PCS LIA on pages 67, 72 and 89.

The animations do realistically simulate the rotations of the sweeps (and stimulate the natural movement detection facility of the eye).

One would have though RED with its far greater resources could have responded to the requests to provide animations.

Comments on some of the Photo Montages and figures in Chapter 15

Figure 15.2 is interesting because it seems to show that the only mitigating evolution in the positioning of turbines consists of eliminating turbines located east of the Rampion 1 array, and removing some others further offshore to the south, with a further relatively small reduction at the westernmost end. The new field south of the Rampion 1 array is densely filled, and these turbines are all further from the shore than any of the Rampion 1 turbines, which does place them further from the Heritage Coast. However, all turbines to the west of the Rampion 1 array are arranged to be close to the shore, where they are overlooked by the coastal conurbation and the National Park hills.

This places all these turbines well inside the minimum buffer distance stated in OESEA4, although if they were at the southern side of the Offshore Array Area they would still be well short of the stated minimum buffer distance.

Figure 15.27a-h Viewpoint 2 Birling Gap
The night time view compellingly illustrates how intrusive the aerial navigation lights would be, and how they would change the whole nature of the outlook

Figure 15.32a-f Viewpoint 7 Beacon Hill, Rottingdean
Indicates just how intrusive and outlook-altering the turbines are from higher viewpoints – even at 21.12 kilometres (which of course is less than the 33-40km recommended by OESEA4)

The Rampion 1 Turbines are already particularly intrusive a little further west when viewed from **Whitehawk / Brighton Race Hill**. This is because the additional elevation adds to the perspective effect so that the arrays appear more spread out with far more noticeable horizontal distance between the rows which also makes them seem closer.

Figure 15.34a-l Viewpoint 9 Shoreham/A2 59 coastal road ((Kingston Buci)
This seems an eccentric choice of viewpoint given that the offshore shingle bars of the Canal and Shoreham Beach, together with the Harbour Arms, obstruct the line of vision from road level. Locals know this and tend to head for the Fort at the end of Shoreham Beach (clearly visible just to the right of the Coastguard Lookout on the West side of the harbour entrance) to get uninterrupted views of the sea.

Figure 15.35a-l Viewpoint 10 Worthing seafront promenade
Illustrates well the abrupt dramatic change in size of the Rampion 2 Turbines at the western end of Rampion 1

NOTE: The images in Document Chapter 15 (5 of 8) are displayed smaller than those on Chapter 15 (4 of 8) – giving the impression that the visual impact is less at this central to western part of the Sussex Bay, however personal experiences, as discussed with numerous people, speak of a greater impact than suggested, even from points as far west as Bognor and Selsey. Under conditions of daylight similar to those shown at Viewpoint 17, human perception somehow produces a larger image, the existing smaller turbines of Rampion 1 give an impression very like the on-screen images of the much larger Rampion 2 turbines shown on the montage.

Figure 15.43a-h Viewpoint 18 Cissbury Ring
The view from Cissbury shows that the highly developed urban and suburban spread along the coastal plain is low in terms of scale, and makes few inroads into the seascape as viewed from higher points such as this. Woodland conceals many of the houses, like the nearby ones at High Salvington, that were built specifically to take advantage of the wide outlook over the sea.

In many ways, apart from the strip of roofs beside the coast (and the far less intrusive Rampion 1 wind farm) it's the same seascape the Neolithic Flint Miners looked out on.

Figure 15.44a-l Viewpoint 19 Highdown Hill
Compared with Cissbury, the Coastal Plain is closer and much more visible here, but nevertheless the bulk of the seashore appears edged and defined by the trees and woods that Kipling and Belloc highlit as the essence of the County – foreground Factories and Glasshouses notwithstanding.

Figure 15.46a-h Viewpoint 21 Bignor Hill
This is the view the Romans saw on their final approach to Chichester on Stane Street.
Despite being located above the sprawl of Bognor Regis, the coastal conurbation is barely visible. But the large turbines would have a disproportional impact on this mostly rural outlook especially at night.
Being higher, this view point reveals a larger seascape.

The same applies to…
Figure 15.63a-f Viewpoint 50 The Trundle

And even more surprisingly to
Figure 15.65a-h Viewpoint 52 Chanctonbury Ring
Where the gradient of the dip slope conceals the majority of the urban development down the Findon Valley into Worthing, while the greater elevation raises the horizon and exposes a much larger expanse of the seascape – which is then abruptly fenced

by turbines, which also appear closer because their bases are more visible, and the footprint of the field more obvious.

Chanctonbury Ring has long been practically the most iconic feature of the Downs, being visible from much of mid- and west Sussex, since it was planted with trees in the 1700s.

Figure 15.47a-f Viewpoint 22 Eastoke Point (Chichester Harbour AONB)
Considering the very low viewpoint and the extent of the spits and arms of the inlets, It is surprising that so much of the farm is visible – even at 27.5Km

And the same can be said of….
Figure 15.48a-f Viewpoint 24 Bembridge, Isle of Wight
Even this far West the R2 Turbine Field is unmissable when the seeing is fair.

Figure 15.49a-b Viewpoint 26 Low Weald (A24, near Ashington)
Ashington is close to the north escarpment of the South Downs, so the line of vision is angled upwards in the direction of the coast (somewhat like Butser in Hampshire, see below).
There is no photomontage of this location, but in spite of the upward line of view, the wire frame representation shows that the turbines are tall enough to be visible OVER the Downs, and will thus radically change this locality, with more noticeable effects further north up the Adur Valley as the view angle lowers and the viewer's elevation rises.

Figure 15.50a-h Viewpoint 27 Hollingbury Golf Course/Hill Fort
The night views show the extent (but not the depth) of the aerial navigation lights.

Given the amount of street lighting, floodlighting, and other kinds of lighting along the coast from east Brighton through to Southwick and Shoreham, this may appear to be an insignificant change, but remember these lights would be equally visible from parts of the Downs where there is little or no urban development.

(The Rampion 1 lights when pulsing are visible from many miles away from sea level, not just from the Downs)

Figure 15.52a-b Viewpoint 29 Kingley Vale National Nature Reserve
There is no photomontage for this Internationally Significant Location, but in this case the wire frame diagram reveals the extent to which the two Windfarms would dominate the Sussex Bay.

Figure 15.54a-g Viewpoint 31 Butser Hill National Nature Reserve
Butser, like Ashington, is not a place where the sea is a feature – yet these photomontages show that Rampion 2 would change the nature of the place by

introducing the red flashing navigation lights at night. Visible above the hills even though the nearest turbine is 45.6Km from the viewpoint.

And another location north of the downs…

Figure 15.62a-b Viewpoint 47 High Weald (near Bolney)
Again, no photomontage, but the wire frame shows that air navigation lights will be visible at night in places. Which strongly suggests that many more will be visible from viewpoints further north as elevation increases towards the mid-Weald ridge about 8 miles further north.

In Summary, these photomontages show conclusively that Rampion 2 would alter and degrade a vital element of an entire county (West Sussex), a Unitary City (Brighton and Hove), and about a third of a second county (East Sussex) and would change the outlook for two more counties (Hampshire and the Isle of Wight). All these are to a greater or lesser extent dependent on the sea and seascape for income and the wellbeing of their population.

The images also underscore how reasonable the OESEA4 buffering standards are.