## Visual Impact from nearby residences.

Trustpower and their consultant Green Bean Design were asked to assess the Visual Impact of the revised Rye Park wind farm on non-associated residences within 3 kilometres of a turbine.

There is little technical skill required to assess the Visual Impact of 109 turbines, each over 40 stories tall, from residences and their curtilage within 3 kms of the nearest turbine. It requires knowledge of the actual visual impacts of recently constructed wind farms, honesty and common sense, characteristics present in Departmental staff, PAC members and many in the community closely surrounding current and future wind farms.

The only dubious skill requirement remaining is the ability to come up with a Visual Impact (VI) assessment on such non-associated residences with MODERATE or less in the impact description. Green Bean Design (GBD) has come up with that assessment but it is, once again, not believable.

GBD fails because:

- No real attempt was made to evaluate the VI for residences in the 2 3 km band.
- the evaluation matrix is flawed
- photomontages are misleading
- evidence is not provided that existing screening of each residence and its curtilage is as described.
- impractical and incomplete mitigation strategies are offered.

Trustpower, in its 2016 Response to Submissions, no doubt with GBD input, has not attempted to seriously address the landscape and visual impact issues raised in the 45 submissions presented during the 2014 exhibition period.

As a result of this, the LVIA should be ignored as it relates to the visual impact on residences within 3km and a second opinion sought.

Once again, we are disappointed that the Department believed that the Response to Submissions, (and in particular, this LVIA) was of such a standard to enable it to go on exhibition. The Department refuses to make strong decisions, preferring instead to punt it to the community and then to the PAC.

## **Response to submissions – LVIA**

In the Landscape and Visual Impact Assessment (LVIA), Green Bean Design advises that: "Around 45 submissions presented to the Department of Planning & Environment (DPE) raised direct or indirect issues with regard to potential landscape or visual impacts. The majority of submissions were made with regard to specific visual issues that could arise at residential dwellings surrounding the wind farm site."

It is therefore apparent that Visual Impacts are of significant importance to the Rye Park community, as they are to any rural residential community inflicted with a wind farm.

"Detailed responses to submissions have been provided in Section 8 of the amended Environmental Impact Statement."

Rubbish. The total response to the 45 LVIA submissions covered 8 paragraphs.<sup>1</sup>

For example, in response to 20 submissions which raised the following issue as précised by Trustpower in paragraph 1, page 144:

<sup>&</sup>lt;sup>1</sup> Pages 144-145, Revised EIS Main Report

"The proposed turbines will have a significant visual impact from my property and they will dominate the skyline and landscape"

Trustpower replied:

"The wind farm will have a visual impact on some residences that are located close to the proposed wind turbines. The Revised LVIA found that there are two non-associated residences within the 3 km viewshed that will have a high visual impact."

That's it in <u>total</u> for paragraph 1. GBD said Trustpower provided <u>detailed responses</u> and Trustpower flicked it back to GBD.

Pointing to a flawed LVIA which is fundamentally the same as the original 2013 flawed LVIA does not answer the issues raised. These 20 submitters are not stupid and should not be treated as such.

## Green Bean Design and the Crudine Ridge and Sapphire wind farms

The Department sought the services of GBD as an independent (gasp) consultant on the Assessment of the LVIA section of the Crudine Ridge EIS. Therefore, the ownership of that section of the Assessment is shared by the Department and GBD as no dissenting opinion exists.

The first thing you notice is that GBD abandons its traditional matrix based assessment methodology and instead supports the Department's still-born Refined Assessment Matrix (RAM).

A little while later (exhibition period end 29/03/16), in support of the Sapphire wind farm mod 1, GBD once again completely abandons its traditional matrix (having used that matrix to assess Visual Impact in the original Sapphire EIS) in favour of the RAM.

For a critique of the RAM, please see my submission to the Sapphire wind farm Mod 1 which contains a number of statements and questions for both GBD and the Department. The submission in its entirety remains unacknowledged by both the developer and GBD (in the Response to Submissions) and the Department.<sup>2</sup> A more comprehensive critique of the RAM by Dr Michael Crawford is with Secretary McNally but unfortunately has not been published

Today, in the Rye Park revised LVIA, GBD reverts back to its traditional assessment matrix albeit with "refinements".

In its role as an independent (gulp) consultant to the Department for the Crudine Ridge Assessment, GBD determined that there were six non-associated residences that would suffer a HIGH visual impact. These residences were from 1.9 to 2.7 kms from the nearest turbine.

Compare that to their Rye Park LVIA where only 2 out of 54 non-associated residences between 0 and 3 kms were afforded a HIGH visual impact rating. Doesn't pass the smell test, does it? Different client, different result?

## **Photomontages**

I thought we were making some progress in this area.

Every photomontage presented by GBD is misleading, primarily in that it does not show the correct scale of the landscape and therefore the correct size, scale and visual impact of the turbines.

<sup>&</sup>lt;sup>2</sup> http://majorprojects.planning.nsw.gov.au/?action=list\_submissions&job\_id=7522&title=EA%20-%20Website%20Submissions&type=2

Some experts recognise that the photomontages presented in a wind farm LVIA do not give a fair representation of what the constructed wind farm will look like.

"It is recognised that the small photographs and photomontages within this assessment are not indicative of the actual view or the visual impact."  $^{3}$ 

<u>Panoramic</u> photomontages of the type once again presented by GBD are "generally useful to show the horizontal extent of the landscape affected" and are "a useful tool to give a general impression of the extent to which the proposal is visible in the horizontal view field"<sup>4</sup>

The GBD photomontages are hardly fit for that purpose with their camouflaged silhouettes.

The issue is simple, as is the solution.

Most affected residents would typically review photomontages published in an EIS on a computer screen or a tablet. Or they would print out a page from the EIS on A4 paper. Modern photomontages note on each photomontage the correct paper size and viewing distance (for instance, A0 - 16 times larger than A4 – at arms length).

<u>GBD photomomtages have no such notation</u>. So we are offered no clue as to how the photomontages as published could be used to give some indication of actuality (they also omit other important information such as photograph time of day, turbine identification etc)

If realistic photomontages can only be viewed at A0 size, then take an A4 section of that A0 image and publish that in the LVIA. If that means there are only one or two turbines on the page, then so be it. Or publish both the panoramic image and a realistic section of it. We have only seen this concept in a few documents, one authored by Moir Landscape Architects dated November 10, 2014, which was published as an attachment to the developers <u>Response to Submissions</u> for Capital 2, Modification 2.

It was also used by Truescape for the Collector wind farm modification 1. This one deserves another outing.

Here is the panoramic shot (slightly smaller than published).



Truescape scanned the horizon and picked the section below to blow up to the correct size (slightly smaller than published).

Why did they have to pick the section with the dead tree in the centre foreground?

<sup>&</sup>lt;sup>3</sup> Yass Valley wind farm. Planning Application Report LVIA. Environmental Resources Management. August 2009, Page 35

<sup>&</sup>lt;sup>4</sup> Richard Lamb & Associates. Yass Valley wind farm peer review 10/09/14. NSW Major Project Register



Also, the Department in its assessment of the Crudine Ridge wind farm uses the concept which was originally used by Moir Landscape Architects in the Crudine Ridge LVIA.

If this realistic A4 image is taken to the photograph location and held at reading distance, we should see the identically scaled landscape (and turbines).

### Additionally:

We accept that the turbines are in correct proportion, height-wise, to the photographed landscape, however, GBD, having told us of the increase to the blade swept area then proceeds to ignore it. The turbines in the photomontages are therefore significantly out of scale.

Turbine blades seem to be clearer in the original 2013 LVIA. Both are unsatisfactory. Almost every day I see 4 of the Capital wind turbines from my residence on the skyline. They are 11 (eleven) kilometers away and show a clarity and contrast missing from all GBD Rye Park photomontages.

GBD carried out a strange photomontage peer review process against the Capital wind farm turbines. Ultimately you are comparing a photomontage with a photomontage. GBD would appear to have peer reviewed its own photomontages.

Finally, any photomontage that is not "worst case" from a residence, and it will vary, is misleading. We know that visual impact on a rainy or foggy day will be reduced. We don't go round at these times reciting blessings to the VI Gods.

### Visual Impact on residences between 2 and 3 kms.

GBD advises:

"In accordance with a request from DPE the extent of detailed assessment from residential dwellings has been increased from 2 kilometres to 3 kilometres from the wind turbine locations."

(the Department further advised me that this request was only made verbally so I cannot include the exact departmental wording)

Trustpower advises that there are 29 residences in the 2 - 3km band.<sup>5</sup> GBD confirms this in table 17

GBD includes 4 photomontages for residences in this band in the revised 2016 LVIA. (R15, which was also in the 2013 LVIA, R68, R83 and R266)

Therefore, how did GBD arrive at the visual impact ratings for the other 25? Surely, if they had gone onsite, they would have taken photographs.

GBD advise that no extra fieldwork was done for the revised LVIA. Both LVIAs contain this identical statement:

"GBD undertook a total three and a half days of fieldwork associated with the Rye Park wind farm development:"

Both LVIAs also contain this identical statement:

"The Proponent undertook separate fieldwork to capture panorama photographs from residential dwellings within 2 km of the proposed wind turbine locations."

From that we assume the photomontages for the 4 residences between 2 and 3 kms were taken for the original LVIA.

We therefore ask again.

How did GBD arrive therefore at the visual impact ratings for the other 25?

We know their expert opinion of the visual impact on residences outside the 2 km radius. They told us in the 2013 LVIA:

8.4 Summary of residential visual significance (beyond 2 km of wind turbines)

The majority of residential dwellings located beyond the 2 km wind turbine offset are unlikely to be significantly impacted by the wind farm development. The localised influence of topography, as illustrated in the ZVI diagrams, has a direct and marked impact on the extent and nature of views within the 2 km and wider viewshed.

In the 2016 LVIA, they confirmed that opinion by classifying in the 2-3 kilometre band:

- No residences with a HIGH visual impact

- 7 residences with a HIGH MODERATE visual impact

- the remaining 22 having a visual impact ranging from MODERATE to NIL.

GBD knows that residences in the 2-3 km band can have HIGH Visual Impacts. As the Department's independent (shudder) expert, they concurred with the Department in classifying 6 of the Crudine Ridge residences as such.

The Department management and planners know it as well, having viewed from selected residences at the proposed Jupiter wind farm and others.

The PAC knows it as well, having determined that the developer should purchase the 6 highly impacted Crudine Ridge properties if requested.

## Data inconsistencies.

There is no way the Department can determine whether Trustpower and GBD have addressed the issue of the visual impact on residences out to 3 kms.

<sup>&</sup>lt;sup>5</sup> Revised EIS Main Report Page 108

The developer advises that there are 54 non-involved residences in the range 0-3 kms.<sup>6</sup> Table 7-3 Non-involved residences within 5 km

Distance to nearest turbine	Number of Non- Involved Residences	Cumulative Number of Non- Involved Residences
0 to 1 km	1	1
> 1 km to 2 km	24	25
> 2 km to 3 km	29	54
> 3 km to 4 km	94	148
> 4 km to 5 km	57	205

The developer also advises in the main report that there is an attachment 2 containing residence coordinates (whether they are for non-involved or involved residences is never stated)

"03. Rye Park Wind Farm RTS - Attachment 2 - Residence Coordinates" as published on the Register as part of the revised EIS contains 44 residences. It would appear that this list contains non-involved and involved residences only within the 2 km boundary. No GPS Coordinates would appear to be provided for residences in the 2 - 3 km zone. GBD did provide coordinates from which photographs were taken but in some cases that was at some distance from the residence.

The Department and the community only has the LVIA to make a judgement of the visual impact. It should be easy if the expert has done their job.

To try and work out the difference takes time and effort. For instance, the photomontage for R324:



Uninvolved residential dwelling R324 - Proposed view through 120°, Approximate distance to dosest visible wind turbine 1,784 m

Is the photo taken from the residence? No, it is taken at the entrance to the property 160 metres away from the residence.

Is the residence in the photo R324? No it is R50.

Which turbines are in the photomontage? Who knows, without significant extra work.

Is the panoramic photo centred at the nearest turbine? No, the nearest turbine (101) is at the extreme right, behind the tree, if it makes it into the photomontage at all.

<sup>&</sup>lt;sup>6</sup> EIS Main Report Page 108

Speaking of trees.

All wind farm landscape architects should know by now not to have foreground vertical objects in their photomontages. GBD could have walked to the other side of the tree and taken the photographs. This is one of many similar examples. For this and other reasons, the whole of the photomontage section of the LVIA is therefore highlighted in the "Neither false nor misleading section" of this submission

To further try and understand the photomontage for residence R324, I needed to plot R324 and surrounding residences on Google Earth



Issues with this cluster. The most detailed map (33MB) is contained in Attachment 5 to the RTS.



It would appear all 4 residences are plotted to the west of where they actually are. R50 is on the west side of the road in the image above when it is actually on the east side. R53 should be between the road forks.

On the subject of R50:

View location (Refer to Figure 28)	Category of view location and sensitivity	Relative number of people	Approximate distance to closest turbine	Duration of effect	Extent of visibility (ZVI hub height)	Degree of visibility	Visual significance
R50	Uninvolved landowner Residential dwelling High sensitivity	Very low	Short 1,674 m	High	Medium	Elevated views extend toward wind turbines on ridgeline and low hills within central portion of the project area. Landform and wind turbine enclose and occupy skyline view through north to east orientation. Views would also extend toward the 330 kV powerline along the ridgeline and between the wind turbines.	Medium to High

2016

	SENSITIVITY			MAGNITUDE			
1000 C 1000 C 1000	Category of receiver location and sensitivity grading	Approximate distance to closest turbine	Potential duration of effect	Extent of visibility (ZVI hub height)	Overall magnitude grading	Degree of visibility and screening	Visual impact
R50	Non associated landowner Residential dwelling Sensitivity: High	Short 1,676 m	High	Low	High	Elevated views extend toward wind turbines on ridgeline and low hills within central portion of the project area. Landform and wind turbine enclose and occupy skyline view through north to east orientation. Views would also extend toward	High

## Why has GBD raised the VI rating?

What has changed? The sham factor, "relative number of people" has been omitted. Distance hasn't changed. Extent of visibility has gone DOWN. The screening description is identical. Perhaps Mr Homewood could explain. However, to a layman, the visual impact has always been HIGH.

## Additionally:

GBD, in table 17 on page 86 says residence R328 is "involved" but in the photomontage Fig 70 (no page number) it says it is "uninvolved"

GBD in table 17 on page 54 says residence R1 at 910 metres is a **short** distance away. Of course it should be **very short** on their published criteria.

These are not meant to be exhaustive, but only examples picked up when reviewing the 2016 LVIA. I did not go looking for data inconsistencies. They found me.

In order to do an analysis of the visual impact for each non-associated residence I would have liked to have seen more data.

- Which is the nearest turbine?

- How many turbines are within the 3 km zone. For instance, residence R01 has 10 turbines within 3 kms (6 within 2 kms)

- and less data: stop jumbling up associated and non-associated properties in visual impact assessments. Just provide a separate listing of associated properties.

# Peer Review

If any LVIA cries out for some sort of peer review, it is this one.

But it is difficult. The pool of peer reviewers is small to start with. They are either long term suppliers to the wind industry (GBD) or they become suppliers (Clouston Associates) or would love to be should the wind farm business recover. Truly independent peer reviewers are a rarity. You can't keep using Richard Lamb, otherwise he becomes, in effect, a departmental employee. The truth is, the Department probably has the skills already in-house to assess the <u>key issue</u>; the Visual Impact on a residence within 3 kms of a turbine, but a Department evaluation may be perceived as not having the required credibility. Recent peer reviews are also too broad and devolve into academic discussions of pre European settlement

Recent peer reviews are also too broad and devolve into academic discussions of pre European settlement landscapes and whether <u>our</u> landscape has the capability to absorb these huge industrial structures.

The Department should consider obtaining a second opinion just on the issue of the VI on the 54 nonassociated residences out to 3 kms, not a peer review.

The Department should seriously consider using a panel containing:

- An expert other than GBD

- Representative(s) from non involved residents within 3 kms.

GBD has never sought the opinions of the 54 potentially affected residents. The Department should not need convincing that involving the affected community might counteract the inevitable critiques of EISs, the RAM, revised EARS and revised CCC Guidelines, to name a few recent examples.

- Departmental representation.

Give the panel some genuine photomontages, decide on a strategy and send them off.

## Landscape and Visual Impact Matrices

Many wind farm landscape architects have tried to come up with a standardized process for both the landscape assessment and the visual impact (often combining both). None have succeeded as is evidenced by the lack of an agreed model.

Others do not share GBD's opinion that it is even possible.

"Qualitative and subjective components of a visual assessment, such as determining the existing landscape character and degree of visual modification, cannot be measured against a standardised process."<sup>7</sup>

GBD, on the surface would appear to have great confidence in its visual impact assessment matrix as there is little change from the 2013 Rye Park LVIA to this one.

The potential degree of visibility and resultant visual impact would be partly determined by a combination of factors such as:

- category and type of situation from which people could view the wind farm (examples of

receiver location categories include residents or motorists);

- visual sensitivity of receiver locations surrounding the wind farm;

– potential number of people with a view toward the proposed wind farm from any one location;

- distance of visual effect (between receiver locations and the wind farm); and

- <u>duration of time people could view the wind farm from any particular static or dynamic receiver</u> <u>location</u>.<sup>8</sup>

Having abandoned two matrix factors in its development with the Department of the RAM, GBD brings them in again (highlighted above).

Only weeks ago, GBD, in its LVIA for the White Rock solar farm, dropped all reference to the "potential number of people" from its assessment matrices.<sup>9</sup> Why? On closer examination, having mentioned it as above in the 2016 LVIA and included it in the 2013 LVIA, they have also dropped this factor from the impact measurement matrix in the 2016 revised Rye Park LVIA.

Also, for all of the 54 non-associated residences evaluated in the current LVIA, the "duration of time" factor has been rated as HIGH.

Also the visual sensitivity for each of these residences has been rated as HIGH.

All we are left with then, for GBD to justify that only 2 out of 54 non-associated residences have an overall visual impact of HIGH are these matrix factors:

- Distance
- Extent of visibility, and
- Degree of screening

Distance:

GBD offers the following criteria for Distance.

<sup>8</sup> Page 24. Revised Rye Park LVIA, 2016

<sup>&</sup>lt;sup>7</sup> Riverina Solar Farm EIS. http://majorprojects.planning.nsw.gov.au/index.pl?action=view\_job&job\_id=7482

<sup>&</sup>lt;sup>9</sup> White Rock solar farm VIA, March 4, 2016.

http://majorprojects.planning.nsw.gov.au/index.pl?action=view\_job&job\_id=7487

#### Table 15 - Magnitude assessment criteria

Criteria	Definition	
Distance		
Very short	<1 km	
Short	1 – 3 km	
Moderate	3 km – 5 km	
Long	5 km - 10 km +	

Perhaps Mr Homewood would like to share the links to the peer reviewed literature that supports these criteria for 157 metre turbines, because, until he does, we are left to draw the conclusion that these matrix criteria were chosen to reinforce the necessity of claiming that overall, the visual impact of the Rye Park wind farm from non-associated residences is ho-hum.

The Distance matrix factor would also appear to be variable and arbitrary.

From another GBD LVIA, Crookwell 3, we find:<sup>11</sup>

View Distance	
Distant	>20km
Long	10km – 20km
Medium	5 – 10km
Short	1 – 5km
Very short	<1km

It can't be because of turbine height as the Crookwell 3 and Rye Park turbines are identical at 157m.

#### And from their Collector wind farm LVIA

View Distance	
Long Distance	>10km
Distant	5km – 10km
Medium	3 – 5km
Short	2 – 3km
Very short	<2km

Using a distance matrix factor with the above criteria invalidates the assessment.

Extent of visibility:

GBD offers the following criteria for Extent of visibility

<sup>&</sup>lt;sup>10</sup> Note the skewed criteria once again. 3 out of 4 are Moderate or less

<sup>&</sup>lt;sup>11</sup> Note the **<u>unskewed</u>** criteria, subsequently abandoned

Extent of visibility		
High	81 -109 wind turbines visible	
Moderate	41 – 80 wind turbines visible	
Low	21 – 40 wind turbines	
Very low	1 – 20 wind turbines visible	
	12	

GBD would like you to believe that if you had 40 (forty) 157 metre tall turbines in your view the resultant visual impact for that factor would be LOW. We don't need to ask for peer reviewed evidence. There is none. This table is nonsense.

Compare it to the one GBD offered in its Paling Yards LVIA (still nonsense).

Extent of visibility	
High	41 -59 wind turbines visible

For a start, why should it be different?

Why should 41 turbines be HIGH for Paling Yards and MODERATE for Rye Park?

More importantly, convince us that on this factor alone, any number of wind turbines in your view is not a HIGH impact.

<u>GBD gives the game away in its LVIA for the Sapphire wind farm Modification 1 as a footnote in the Appendix:</u>

"Observations and measurements for individual residential dwellings must also take into account the potential visual effect of single or small numbers of wind turbines within a proposed wind farm development. Single or small numbers of wind turbines to moderate and high visual impacts under certain circumstances."

Let us summarize the visual impact matrix to date for non-associated residences.

SENSITIVITY - HIGH DURATION OF EFFECT - HIGH DISTANCE - UNJUSTIFIED CRITERIA EXTENT OF VISIBILITY – NONSENSE

So far, GBD's matrix measurement, with genuine criteria would surely deliver a HIGH visual impact rating to each of the 54 non-associated residences within 3 kilometres.

We are left with the remaining matrix factor – <u>DEGREE OF SCREENING</u> For degree of screening, GBD offers:

<sup>&</sup>lt;sup>12</sup> Note the skewed criteria once again. 3 out of 4 are Moderate or less. Page 51, Rye Park wind farm LVIA

Degree of screening	
High	Screening effectively blocks views toward wind turbines
Moderate	Screening partially screens views toward wind turbines
Low	Screening filters some views toward wind turbines
Very low	Limited or no screening toward wind turbines

Of course we agree that existing screening by topography or vegetation can influence the visual impact. (The Moderate and Low descriptions look suspiciously alike)

We remain totally unconvinced that GBD has correctly judged this factor from the <u>curtilage</u> of each of the 54 non-associated residences. It certainly has not provided the evidence. This is a fundamental issue as **their whole visual impact case rests on this factor.** 

Additionally, GBD's matrix suffers from some of the usual technical issues:

- All factors carry equal weighting.

- All factors are skewed to the exclusion of a high visual impact.

## Neither false nor misleading.

Section 148b or the Environmental Planning and Assessment Act says:

"A person must not provide information in connection with a planning matter that the person knows, or ought reasonably to know, is false or misleading in a material particular"

Photomontages. Need I say more?

Trustpower tells us in the conclusion to the section on Visual Impact that:

The revised LVIA has determined that the Rye Park wind farm would have an overall medium visual significance on the majority of non-associated and associated residential dwellings within the projects 10 km viewshed. The Rye Park wind farm would have a slightly lower visual significance on views from surrounding road corridors and public spaces.<sup>14</sup>

Let us examine this whole paragraph (which is the conclusion in totality with respect to LVIA). Notice how the developer avoids the use of visual **impact**, which for wind turbines is rightfully negative, replacing it with **significance** which is innately positive. They think we are stupid. They took their lead from GBD. No expert shies away more from the term Visual Impact than does GBD, especially in their conclusions.

You don't need to be an expert to speculate that at some distance from the Rye Park wind farm it would have an overall medium visual significance on non-associated dwellings. Maybe it is 10kms. The LVIA certainly doesn't **determine** if that is the case.

The conclusion doesn't address the issue of interest to the Department, namely the <u>Visual Impact on</u> residences out to 3kms. To come up with such a conclusion is misleading.

<sup>&</sup>lt;sup>13</sup> Note the skewed criteria once again. 3 out of 4 are Moderate or less. Pages 51-52, Rye Park wind farm LVIA

<sup>&</sup>lt;sup>14</sup> page 76 Rye Park RTS – Main Report

GBD advise on Page 10:

"Amendments have been made to the wind farm layout, turbine dimensions and the number of proposed wind turbines following submission of the Rye Park Wind Farm EA."

It is true that amendments were made following ("subsequent to", not necessarily "as a result of") the submissions to the original EA. A reasonable person would assume, seeing the above in an LVIA, that these amendments may have been influenced partly by the 45 submissions that raised visual impact issues. <u>Trustpower advise that not one turbine was deleted or moved as a result of a Visual Impact submission.<sup>15</sup></u> (17 turbines were deleted and 80 were moved 10 metres or more) Also I struggle to find a submission that recommended larger turbines.

## Does the LVIA meet the DGRs?

The Rye Park DGRs of record state:

"include photomontages of the project taken from potentially affected residences (including approved but not yet developed dwellings or subdivisions with residential rights),"

The Department chose not to formally issue revised EARs; an opportunity lost.

Photomontages were presented for most of the residences within 2 kms in the 2013 LVIA. Only 4 were presented in the 2016 version for the 29 residences in the band between 2 and 3 kms.

No consideration was given to approved but not yet developed dwellings or subdivisions with residential rights.

With 157 metre turbines, the literature would strongly indicate that "potentially affected residences" extend well outside the 3km limit and in some cases screening is not an option. I would be surprised if the Rye Park community could not show the Department a residence further out than 3 km subject to a HIGH Visual Impact. We can.

Why is the Department allowing the developer the latitude to ignore their current DGRs?

### **Mitigation**

GBD writes:

"In general mitigation measures would reduce the potential visual impact of the project in one of two ways:

 firstly, by reducing the visual prominence of the wind turbines and associated structures by minimising the visual contrast between the wind turbines and the landscape in which they are viewed; and

- secondly, by screening views toward the wind turbines from specific receiver locations.  $^{16}$ 

(To the end GBD has to fight and say "potential" visual impact. I guess it is better than "alleged"

The best mitigation measure they can come up with is to paint the turbines an appropriate colour. Surely, like Henry Ford's original Model T, that is a given.

<sup>&</sup>lt;sup>15</sup> Pages 15-18 RTS – Main Report

<sup>&</sup>lt;sup>16</sup> Page 138 – 2016 Rye Park LVIA

It is widely acknowledged by VI experts that screening by vegetative planting may not be acceptable to the affected residents.

GBD reluctantly admits:

"Planting vegetation would not provide effective mitigation in all circumstances and can reduce the extent of existing views available from residences...."<sup>17</sup>

Other landscape architects go further:

"WTGs [Wind Turbine Generators] are by their nature tall and visually intrusive. The turbine design and location is limited by functional requirements and minor changes such as colour choice and reflectivity are unlikely to alter any of the impact ratings recorded within this report. Whilst screen planting can be highly effective in blocking or filtering views, the impact is often of a highly local nature and can remove parts of the view that may still be considered desirable. New screen planting around affected dwellings would likely reduce some of the visual impact ratings recorded within this report but may not be acceptable to landowners. The most effective mitigation measures will involve siting, design and screening of ancillary facilities such as the substation and access roads."<sup>18</sup>

The last sentence is a clear admission that there is no effective screening mitigation strategy for the turbines.

Even some of our local councils understand the issue.

"Existing and proposed screenings may be used to minimise visual impacts to non-related properties. However, due to the height of turbines, screening is not the preferred method of minimising visual impact. Turbines shall be located in positions so as to have minimal visual impact on nearby properties, especially existing dwellings and lots on which dwellings may be constructed;"<sup>19</sup>

This Council also recognises that the impact should be minimal on the <u>whole property</u>, not just the residence

Let us be honest. Affected residents are being offered by GBD the choice of destruction of their views by the industrial eyesore of a wind farm or no view at all. Many will not accept either and should not be expected to.

Aside from the ultimate mitigation strategy of planning rejection, it is becoming increasingly obvious and accepted that the only practical mitigation strategy for a wind farm is financial, either through a Benefit Sharing Agreement at a compensation level agreeable to both parties, or acquisition of the property by the developer at a value assuming the wind farm was not there plus outgoings. All we need are some realistic impact assessments.

### Landscape

This submission has concentrated mainly on the VIA part of LVIA as for most of us the landscape is a given. We have chosen it and come to love it. We don't need 16 pages of photographs to describe what we see in the Southern Tablelands and surrounds. We accept that the landscape has changed since settlement. We came here expecting to see roads (we all have a road), the low profile electricity infrastructure, stock, man made changes through the seasons, sheds and neighbouring residences. Our personal landscape can never absorb a wind farm. The only structures that I see that are not as expected are the 4 Capital turbines

<sup>&</sup>lt;sup>17</sup> Page 138 – 2016 Rye Park LVIA

<sup>&</sup>lt;sup>18</sup> Clouston Associates. Biala LVIA July 2015, Page 82

<sup>&</sup>lt;sup>19</sup> Upper Lachlan Development Control Plan 2010, Page 93

and one high voltage tower in the distance taking intermittent energy supposedly to the mothballed Sydney desalination plant. Compared to the rest of my rural outlook they are offensive. Coming back to the key issue, could Mr Homewood advise in relation to his statement

"the landscape will have some capability to accommodate change".

that this statement remains true with respect to properties within 3 kms of a turbine and if so, could he please quantify what "some" is.

### In conclusion.

From page 10 of the LVIA, we are advised

"Where relevant, issues raised in submissions have been reviewed against the original LVIA, and considered within the revised LVIA."

It is not obvious. Perhaps Mr Homewood can point to examples where a modification was made within the revised LVIA as a result of a "relevant" submission and maybe some examples of irrelevant submissions.

The most interesting difference between the two variations of the Rye Park LVIA is that in the current one there is no longer a listing of all the wind farms for which GBD has prepared LVIAs. Mr Homewood would appear to agree with us that being the wind industry's consultant of choice has implications for independence and believability.

In many of these LVIAs (White Rock, Collector, Crookwell 3, Eden etc) Mr Homewood has concluded, in various wordings, but always including the double negative:

"This LVIA has determined that the wind farm would not be an unacceptable development within the Rye Park Wind Farm viewshed."

Once again, he could not bring himself to say "the wind farm would be an acceptable development within the Rye Park Wind Farm viewshed" because he knows what that implies.