

## 11 CUMULATIVE IMPACTS

### Director-General's Requirements - the EA must:

There are no DGRs for cumulative impacts listed in the "Revised Director-General's Requirements".

The Environmental Assessment covers this topic in Chapter 17

### 11.1 SUMMARY OF OBJECTIONS

**Cumulative Impacts:** Flyers Creek Wind Turbine Awareness Group (FCWTAG) objects to the Flyers Creek Wind Farm proposal:

- 11.1.1 The environmental assessment (EA) for the Flyers Creek Wind Farm has significantly failed to properly address the cumulative impact of the Flyers Creek Wind Farm with other industrial activity currently taking place within the immediate Flyers Creek district, namely:
- 11.1.2 Cadia Valley Operations (Newcrest) gold and copper mine adjacent to the proposed wind farm, and
- 11.1.3 Blayney Wind Farm situated 8 kilometres from the proposed wind farm.
- 11.1.4 Other industries also add to the cumulative impact of industrialisation, making the addition of the proposed FCWF a significant deterrent to new residents seeking a rural lifestyle and associated tranquillity.

### 11.2 CUMULATIVE IMPACTS OF CONCERN

- 11.2.1 Chapter 17 – Cumulative Impacts, of the Flyers Creek Environmental Assessment notes;

*The Department of Planning's Guideline for wind energy states that: "Cumulative impacts may result from a number of activities with similar impacts interacting with the environment in a region. They may also be caused by the synergistic and antagonistic effects of different individual impacts interacting with each other and may be due to temporal or spatial characteristics of the activities' impacts."*

- 11.2.2 In the Executive Summary on page S-13, the (EA) states,

*The main cumulative impact of multiple wind farm developments for the region is likely to be related to the combined visual impact of the wind farms at locations where more than one wind farm is visible. Flyers Creek Wind Farm is about eight kilometres to the north-west of the existing Blayney Wind Farm which comprises fifteen Vestas 660kW wind turbines. Due to distance, vegetation and/or topographic features, the cumulative visual impact is considered to very minor as discussed in Chapter 17.*

*Cumulative noise impacts from wind farms are not significant unless residences are within about 3 kilometres of both projects. As the Blayney and Flyers Creek projects are 8km apart, cumulative acoustic impact will not be an issue.”*

- 11.2.3 It is considered that the Environmental Assessment (EA) has grossly under estimated the potential cumulative impact of Blayney and Flyers Creek wind farms, from the point of view of visual impact and cumulative acoustic impact.
- 11.2.4 It is considered that the Environmental Assessment (EA) has grossly under reported on the potential cumulative impact of the Flyers Creek Wind Farm as negligible consideration has been given to the already present effect of the Cadia Mining Operation which flanks the NW sector of the proposal (See Figure 11.1).

### **11.3 FLYERS CREEK ENVIRONMENT**

- 11.3.1 This section of the submission provides a brief summary of the Flyers Creek Environment with respect to industrial usage highlights erroneous statements made within chapter 17 of the (EA) and highlights the likely cumulative impacts not addressed by the (EA).
- 11.3.2 The Flyers Creek district is in general a picturesque rural setting, classified as 1A general rural zone within the Blayney Shire. The northern portion of the district hosts a majority of smaller “hobby farm” rural residences and retirees while the southern or down stream portion of the district is host to larger pastoral rural enterprises. People within the district value the tranquillity and view of the rural setting. In addition, the Flyers Creek district is also host to the Cadia Mine Operations which was recently granted approval for a significant expansion. The mining operation will border the western portion of the proposed wind farm (see Figure 11.1). We believe there should only be a limited amount of industrial scale use of such a rural landscape and as such would have concern over the cumulative effects of both the mine and the wind farm. This is particularly so for residences that are situated in between the two in terms of noise and visual amenity.
- 11.3.3 The total area of the Cadia Mine Lease is approximately 5,500 hectares (13,600 acres) and the total approximate project area of the proposed Flyers Creek Wind Farm is 6,000 hectares (14,800 acres). This is an approximate total of 11,500 hectares (28,400 acres) attributed to industrial land use in close proximity within an otherwise tranquil rural environment. There are very few rural landholdings that are greater than 500 hectares (1,200 acres) within the Flyers Creek district, and these are generally located within the far south. At their closest, the Cadia Valley mining lease and Flyers Creek Wind Farm project are as little as 1km apart.

There are a number of small rural holdings that occur within the thin corridor between the Cadia Valley Mine Operation and the proposed Flyers Creek Wind Farm.

- 11.3.4 There are several erroneous or misleading statements made within chapter 17 of the (EA). On page 17-3, section 17.4 paragraph 1, the (EA) states;

“The Cadia Mine, owned and operated by Newcrest Mining Ltd, is located about eight kilometres north-west of the Flyers Creek Wind Farm project.”

This statement is misleading as the mining lease and proposed Flyers Creek Wind Farm project boundaries are **within 1km of each other**.

11.3.4 On page 17-3, section 17.4 paragraph 1, the (EA) also states;

“As the activities of the mine and the Wind Farm are so different, it is considered that the Flyers Creek project has a negligible cumulative impact in conjunction with Cadia Mine’s activities.”

The sheer consideration that on the basis of differing activities there will be negligible impact is in direct contradiction with the Department of Planning’s Guideline for wind energy which as the (EA) has already indicated, states that: *“Cumulative impacts may result from a number of activities with similar impacts interacting with the environment in a region. They may also be caused by the synergistic and antagonistic effects of different individual impacts interacting with each other and may be due to temporal or spatial characteristics of the activities’ impacts.”*

The above statement also suggests that a proper investigation into the potential cumulative effects of both the mine and wind farm on behalf of the proponent may not even have taken place.

#### **11.4 CUMULATIVE IMPACTS – FCWF AND CADIA MINE**

11.4.1 Such close proximity between large areas of industrial land use and much smaller rural holdings will have the following cumulative impacts;

1. There is the strong possibility of the Flyers Creek district becoming over industrialised should the Flyers Creek Wind Farm be approved. The Cadia Valley Mine has recently been granted approval for a significant expansion (Cadia East Project Approval 2010). In what is considered a tranquil rural setting, the addition of another industrial activity on top of the already expanding Cadia mine site will result in over industrialisation of the Flyers Creek district. The land areas of the Cadia mine together with the proposed Flyers Creek Wind Farm dwarf the areas of rural holdings in the area. Many of the smaller rural landholdings of the upper Flyers Creek district have purchased due to the current rural setting of the district. A likely over industrialised perception of the area will likely lead to significantly reduced land values and contests the very reason for which families have resided in the area over the previous decade.
2. There is the possibility of additional cumulative industrial noise within the upper Flyers Creek district due to:
  - a. the current Cadia Mine Operation and
  - b. the Flyers Creek Wind Farm.

When addressing the cumulative effects of the Blayney Wind Farm with the proposed Flyers Creek Wind Farm (Section 17.3, page 17-2, paragraph 2) the Flyers Creek (EA) states, *“Cumulative acoustic impact would only be a material issue if residences*

were located within about three kilometres of turbines from both projects”. There are a number of residences that are within three kilometres of Cadia Valley mine and proposed turbines for the Flyers Creek Wind Farm project. Given that, it would seem likely that there would be a material cumulative acoustic impact for residences located within about three kilometres of turbines from the Flyers Creek Wind Farm and Cadia Valley Mine. **This possibility has not been addressed within the Flyers Creek Environmental Assessment.**

3. It is likely that the Flyers Creek Wind Farm will have a cumulative effect on visual amenity for residences that already have visual amenity decreased due to the Cadia Valley Mine. This will be further exacerbated for residents who, in addition to the Mine, will also suffer decreased visual amenity due to the proposed wind farm. While the Flyers Creek EA notes the potential visibility of the Cadia Mine from some parts within and near the Flyers Creek project, it fails to make note of whether this observation has been investigated/consulted or not, and therefore whether or not it is of any significance.

## **11.5 CUMULATIVE IMPACT – FCWF AND BLAYNEY WIND FARM**

- 11.5.1 The cumulative visual effect of Flyers Creek Wind Farm and Blayney Wind Farm is dealt with in Chapter 6 of this submission but there is an issue of cumulative sound. There is 8 kilometres separating the two wind farms. Current work is indicating that there are adverse health effects from wind turbines due to noise impacts out to 10 kilometres<sup>16,51</sup>. If this proves to be the case then there will be impacts on health from the cumulative sound from both wind farms. **This issue is discounted as irrelevant in the EA.**

## **11.6 CUMULATIVE IMPACT – OTHER INDUSTRIES**

- 11.6.1 Blayney Shire is a rural area mainly involved in agriculture (cattle, both beef and dairy, and sheep). The principle town is Blayney (3000) and several significant villages within the shire. New population is being attracted to the area (see population figures on Blayney Shire website: <http://www.blayney.local-e.nsw.gov.au>) because of its rurality and life style. Already this rurality is compromised by the increasing number of industries in the area (eg. Blayney Foods, Nestle’s Purina Petcare, shipping container terminal etc). The establishment of a large wind turbine industry will detract still further from the very reason residents (established, new and potential) are attracted to Blayney Shire. Blayney Shire Council is anxious to see the population of the Shire increase thereby bringing increased economic activity and prosperity to the district. The industrialisation of the rural landscape by the intrusive nature of the proposed Flyers Creek Wind Farm will significantly impact the Shire as a destination of choice for those looking to adopt the “tree changer” life style. **Population will not increase with the establishment of the wind farm. The EA states there will be three (3) jobs only once the wind farm becomes operational.**



### Information sources

Cadia East Project – Project Approval Section 75J of the Environmental Planning and Assessment Act 1979, January 2010, The Hon Tony Kelly MLC, Minister for Planning.

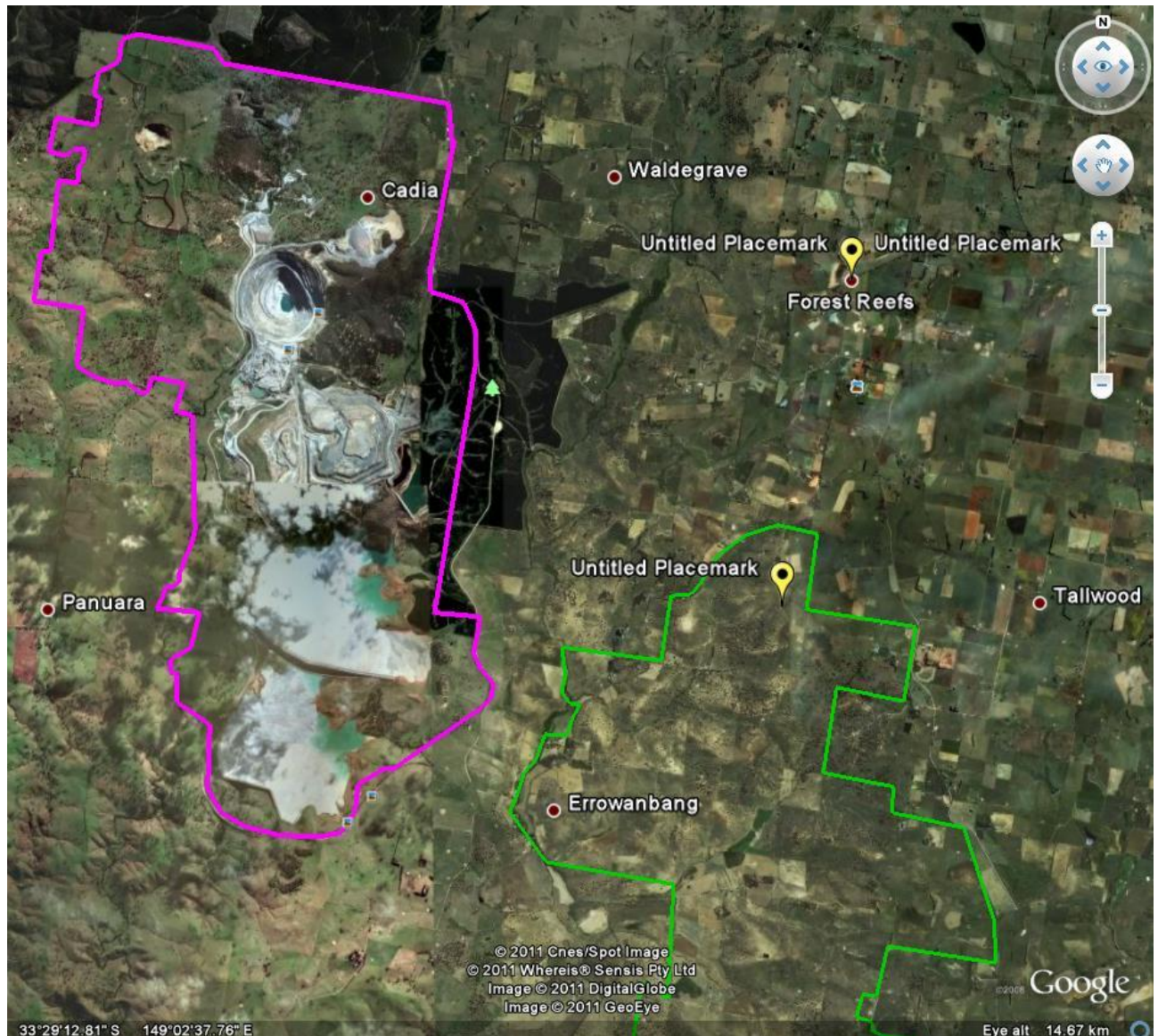


Figure 1.1: Google Earth image dated June 2010 highlighting the proximity of the Cadia Valley Mining and processing operations (pink outline) with the proposed Flyers Creek windfarm project (green outline). Field of view is approximately 17km across.