

Rye Park Wind Farm
Traffic and Transport Issues
Prepared by: Christopher C Braid BURP
For the BDLG

This submission is in response to Epuron's Rye Park Wind Farm Environmental Assessment and the issues surrounding transport, traffic and impacts that will occur on local roads and to the community.

1. Primary Routes

The primary routes as outlined in the EA will pose major obstacles to Epuron, particularly the underpass on Cooks Hill Rd under the Hume Highway for the Northern Section of the proposed development. Given that the bridge has a clearance of 5.3m many if not all of the large turbine and substation components will be forced onto the secondary route of the Lachlan Valley Way through Boorowa. Any over mass loads, nacelle, towers or substation components, would be required to use the secondary route through Boorowa as the rail crossing bridge on Cooks Hill Rd may not be of engineering standard to carry up to 80 tonne.

Should the primary route for the northern section not be able to be used by over size / over mass loads then 104 of the proposed 126 would have to enter through Boorowa as connection between Jerrawa Rd and Rye Park Dalton Rd is not possible.

The end of Cooks Hill Rd and sections of the Rye Park Dalton Rd in the Upper Lachlan LGA are unsealed and must undergo a study in the same manner as Coolalie Rd.

The Rye Park Dalton Rd has a low level crossing over Flakeney Creek and a bridge over Pudman Creek. Both would need to be inspected by engineers prior to over mass loads using this route

2. Secondary / Alternate Routes

The secondary route of the southern section passes through residential areas of Yass. This would mean disruption to local residents particularly for any night oversize deliveries. Coolalie Rd has a bridge over the Hume Highway which could require consultation with engineers if over mass loads are to enter the development via route.

The secondary route for the northern section uses the Lachlan Valley Way between Yass and Boorowa. As advised to Epuron the Boorowa Council has asked that the main street not be used for the transport of over size or over mass loads. Councils preferred route is to use Trucking Yard Rd which becomes Dillon Street then left onto Long Street and right onto the Boorowa Rye Park Rd. All of this passes through residential areas.

The turn from Dillon St into Long St is a sharp left turn with a reasonable incline. This corner would have to be substantially modified to allow over size loads to turn.

On Long St before the intersection with the Boorowa Rye Park Rd there is a steep decent that would require the use of compression braking by trucks with a residential area. Long St passes to the east of the Boorowa hospital and retirement home.

The Boorowa Rye Park Rd has narrow sections 1.5 to 4km east of the town and 2 bridges over creeks that would require consultation with engineers.

As stated in the EA (page 222) each turbine could consist of 10 sections, 5 tower sections, 1 nacelle, 1 hub and 3 blades. The northern section could have 104 turbines that need access through Boorowa. That would equate to 1040 oversize/ over mass loads passing through the town of Boorowa.

Alternate route through Boorowa would pass through higher density residential areas along Court St or Farm St to Brial St. This would involve passing the Boorowa Central School and Pre School. The Main St of Boorowa is not an option given the roundabout at the corner of Marsden and Pudman St.

3. Construction Material Transport and Traffic.

3.1 Gravel and Road Base

Throughout the EA a number of differing distances are given for the length of road/track construction that will be undertaken for the development. Page 64 Table 3-1 shows access and spur road construction to be 10m in width and 88.9km in length. Page 277 Table 16-6 shows assess track width of 5-6m and 89.13km. Table 7-2 of the Biodiversity Assessment prepared for Epuron by NGH Environmental shows there would be 125.755km of new tracks and 40.705km of widening existing tracks.

Epuron has estimated the total volume of road base (page 277) to be 306,960 m³. Estimated rock extracted from the 126 foundations is 64,512m³. This estimate is from the total extraction and includes top soil and non-useable gravel. These estimated will still result in 242,448 m³ being sources from off site.

A typical gravel truck and dog trailer will carry 16m³. This equates to 15,153 truck and trailer loads to be carted in from outside sources.

Epuron have used the minimum road width, 5m, to calculate their figures. If you use their figures from the Biodiversity Assessment and allow 8m for formed width of access tracks plus gravel requirements for hardstands and compounds then they will require 414,816m³. This estimate does not include requirements for connection substation, 2 collection substations, control building or the 2 concrete batch plants as Epuron do not outline these in the EA. Estimated gravel requirements for these structures is 36,000m³.

If the figures from the biodiversity assessment are correct and 166.46km of track are to be constructed or widened then 661,872m³ of gravel would be required for the construction of roads, compound and hardstands. That equates to 41,367 truck and trailer loads.

If Epuron is able to extract some of the material from foundations, approximately 60% or 38,707m³, they will still require an additional 412,109m³ to 493,965m³ of gravel from off site or 25,757 to 30,873 truck and trailer loads. All of this material will need to be carried over local roads. Should the geology show that the gravel is not up to standard and it all has to be sourced off site then 28,176 to 41,367 truck and

trailer loads will be required dependent on which of Epurons road length and width figures are actually correct

3.2 Concrete

Epuron states that foundations will occupy an area of approximately 16m x 16m and 2m deep. This gives a foundation of 512m³ at ground level. If 750mm is allowed for the height of the foundation above ground level then the concrete materials required are double what Epuron outlines on page 278 of the EA. Epuron has only allowed for a 350m³ concrete foundation in the EA.

This will equate to 88,200m³ of concrete required for the turbine foundations. If this is batched off site it will equate to 14,700 concrete truck loads assuming 6m³ per truck. Even if batched on site all the material will need to be delivered and would equate to approximately the same number of truck movements.

3.3 Water

Epuron has estimated 8.0 ML (megalitres) of water will be required for general construction and 7.6 ML will be required for foundations (page 265). This equates to 15.6 million litres of water. A water truck has a capacity of approximately 16,000 litres so will require 975 truck movements.

The water is to be sourced off site at Yass or Boorowa but more likely at Burrinjuck Dam. These figures do not include requirements for the construction of substations, batching plants, compounds, etc.

The water requirements for the foundations could also double as shown above if foundations are actually 650m³ to 700m³ rather than the 350m³ that Epuron is using for the EA. This would result in 23.2 million litres of water being required for construction.

This will not only add to the strain on the local roads but potentially Yass and Boorowa's water supplies should the water be sourced from these towns.

4. Conclusion

This environmental assessment produced by Epuron appears to have been rushed. Many of their figures related to transport and traffic volumes do not correlate throughout the EA. Epuron is either negligent or deceptive in its figures and much, if not all of the traffic and transport sections of the EA must be revised.

The fact that Epuron has not included gravel, concrete or water requirements for the construction of the connection substation, 2 collection substations, control building or the 2 concrete batching plants in the EA shows that Epuron are being deceptive and these figures must be included in any revision of the EA.

Epuron has failed to outline any of the predicted traffic and transport issues that will arise during the decommissioning and rehabilitation phase of the project. Epuron have failed to outline expected traffic volumes during this period or expected materials required to be carted to the site. ie top soil, gravel etc

The material requirements for the Rye Park Wind Farm will mean truck movements in excess of 48,000 over local roads. In addition to this would be 1200 plus over size / over mass truck movements of turbine components plus the delivery of equipment i.e. dozers, graders, cranes, etc. This does not take

into account vehicle movements for staff during construction, operation, or decommissioning of the wind farm.

The cumulative effect if Bango and Rugby wind farms are approved would be large. With an addition of approximately 180 turbines for the two projects, truck movements would exceed 120,000. The cost to local roads would be at the expense of the communities of Yass, Upper Lachlan and Boorowa. Many of the local roads are not constructed to handle such large volumes of heavy traffic and as such will deteriorate greatly.

Epuron must undertake greater consultation with the local councils in relation to road conditions as large scales road degradation will result from the volume of heavy traffic. An independent review of all roads involved must be undertaken at Epuron's expense and legally binding contracts entered into between Epuron, local and state government so that all roads are returned to a minimum of pre development condition at Epurons expense. If this is not done it will be the local communities and state government that are required to fund all road repairs.