

9th June, 2024

Project Information:

Tamworth Battery Energy Storage System
696 Burgmanns Lane, Tamworth NSW 2340
SSD-23830229

Overview:

This submission is provided as a request to consciously and deliberately respond to the proposed Tamworth Battery Energy Storage System (BESS) project, SSD-23830229.

I submit my opinion as a qualified NSW Master Builder, a current NSW building licence holder with over 45 years of industry experience, as long-term serving Tamworth resident having lived in the region for over 20 years and a cattle grazier with an active operational farm injecting annual revenue into the local community. My family and I reside within 1.5 km proximity of the proposed development.

I recognise and understand the importance of renewable energy initiatives regionally and more broadly, however the intent of this submission is to express my opposition to the proposed project based on several contribution factors. Such as, unfavourable location strategy, potential environmental impacts and other detrimental local and social issues that may adversely impact the region as a direct result of this proposed development.

In my view, there is reasonable cause for concern to the proposed development and the proponent has not satisfactorily addressed these concerns through their community consultation and engagement strategies, scoping report, noise report and other general correspondence deployed to date.

Critical challenges that need to be addressed include:

1. Location concerns, close proximity to residential precinct, topography and orientation
2. Serious potential risk of fire to residential and agricultural land (high BAL)
3. Serious potential risk of water leaching into the watercourse and groundwater supply
4. Social and economic impacts
5. Traffic management, including dust, road noise and congestion during civil construction development phase.

Location Concerns:

The proposed project is within 5 km of Tamworth's main business district, zoned R4U Rural. Located 300m from a major housing estate with over 2,000 residents, adjacent to the Department of Agriculture's Plant Research Facility, and near the historic Farrer Agricultural High School.

Renewables should not be considered within 5 km of residential or planned growth areas or within 10 km of a regional town's CBD, as stated in the DPI guidelines. The proposed development site falls within these restricted zones.

Three BESS facilities are actively participating in approval stage applications within 1km radius of one another including the proposed site and congestion is increasing with a further two more in planning stages.

The west-facing development will be prominently visible from the New England Highway which is 2.4km directly to the west of the site and the National Equine Centre is 2.7km. Both would look directly at the BESS site.

Serious potential risk of fire:

The site is in a high fire zone (BAL). The proponent's report fails to detail the fire management system and catastrophic risk mitigation systems should a fire or several fires occur result from overheating, if the optimal temperature BESS units is not adequately maintained. Particularly when the proposed development site is a predominately west-facing orientation. There is evidence to suggest that other such fires have occurred and are likely to occur as a result of the continuous air-conditioning units overheating, I refer to the fire in BESS south of Gracemere in Queensland late last year 2023 at Boulderstone.

I also understand that the local fire brigade was unaware of the development and require specific information on the battery types to ensure appropriate PPE and respirators.

Due to the possible overheating of units while charging or discharging, or if a malfunction of the unit and thermal runaway was to occur, would our local fire services be able to handle the situation if it were to happen.

Serious potential risk of water leaching:

Major watercourses near the proposed site feed directly into the Tamworth water supply. The proposed site is flanked by major watercourses, Calala Creek to the east and Goonoo Goonoo Creek to the west, which in my view, have not been adequately considered. Effective measures to prevent leaching into the water table need to be established and to date have not been provided by the proponent.

Site stormwater has been acknowledged in a previous submission by Tamworth Regional Council, however, does not address the steep embankment of the proposed sites, nor does it indicate the amount of civil earthwork and undertaking required to level the proposed development sites.

The proponent fails to detail the steep topography and amount of cross fall at each site, which from my approximation is 10 ~15m. The volume of cut and filled civil construction activities required to block and bench the site to level, and in my opinion, it is considered substantial. I estimate that the road embankment would increase.

Furthermore, if this course of action were to take place, the unintended consequences would significantly increase the likelihood of stormwater runoff if correct falls are not obtained and have the potential to diminish the structural integrity of the surrounding high voltage tower foundations if surface water runs toward them, posing potential risk of stormwater entering the town water supply. I am deeply concerned that the proponent's report has not identified this risk, nor provided detail of how this risk would be mitigated as they presume the sites are level

Social and economic impacts:

As stated within the noise report, a solid 3.5m high screen is to be placed around the development site to reduce the visual impact and to minimise the noise generated by the continuous cooling systems and inverters. I note that with the site facing west and having 10~15 m cross fall, if the benching approach were to be adopted each row would need to be raised. Given that it's known that the BESSs units themselves are 2.4m high, to form the first row of units on will have a height of ~1.5m; as the subsequent rows as they progress up the hill will by default, exceed the threshold of the 3.5m solid screen.

As a result, it is my view that this development would be easily visible from New England Highway and somewhat of an eyesore. Given that one of the major economic drivers for Tamworth Region is the revenue generated from tourism, an unsightly infrastructure development such as this has the potential to detract from the area's rural aesthetic appeal and tourism efforts.

All of the submissions I have studied recently, found to have predominately been small scale developments, of which have been located in industrial estates away from residential areas or isolated rural locations 20-30km away from regional towns. The placement of approximately 1,300 BESS units on several different sites within 300 m of residential properties has the potential to significantly diminish property values. The land to the south of the proposal is rural for about 1km, then it returns to rural residential house sites which look back directly at the site.

In addition, the scarcity of accommodation due to multiple renewable projects would necessitate temporary housing solutions which are not available within the region at present, placing greater economic pressure on local residents already experiencing the cost-of-living crisis and inflation.

I am strongly against the current proposed BESS or any future applications in this current location.

Traffic management:

The only sealed sections with direct route to these sites are the New England Highway and through the Calala and Lampada Housing Estates which the Tamworth Regional Council in previous submissions have strongly opposed. The alternative route suggested involves access via rural dirt roads, increasing dust and disturbance for local residents who rely on rainwater collection for drinking. Proper policing of traffic and speed during construction is a concern and have not been satisfactory addressed.

Conclusion:

The proximity to a substation does not outweigh the negative impacts on the 2,000 residents within 300 meters of the site. The site's steep cross fall necessitates extensive cut and fill, posing structural and visual challenges.

The high BAL rating and potential effects on residential and agricultural land are significant concerns. The west-facing sites will require continuous cooling, adding to noise and energy consumption concerns.

Risks of leaching into the groundwater supply from BESS need thorough evaluation, if a fire was to break out.

Increased dust from dirt roads and continuous noise from cooling systems will adversely affect local residents. The noise, percussion and electromagnetic fields generated from continuous cooling systems and inverters for over 1,300 BESS units pose a detrimental threat to residents.

AS all of the land associated with the proposed site probably classified as H1 (highly reactive) as much of Tamworth is, I don't believe I have read any Geo technical reports in regards to issues raised for all of the proposed sites. All are presumed flat, but if anyone looks on Google Maps they will see how many lines are across all of the proposed sites. These lines are contour banks which are used to retain fast flowing water on them and to prevent erosion. There are so many of these because the land is steep.

Other considerations are:

1. Excessive excavation required to locate all structures.
2. Ground heave between long periods of dry and or wet seasons.
3. Visual impact (as the photos show) doesn't stop at the 2km mark because this lot is quite high and faces west. It is readily visible from the New England Highway 2.4km away and the Equine Centre 2.7km all to the west of the site and gateway to the town centre. I believe it would be visible at least 5km to the south on the approach and 4km to the west on Burgmanns Lane.

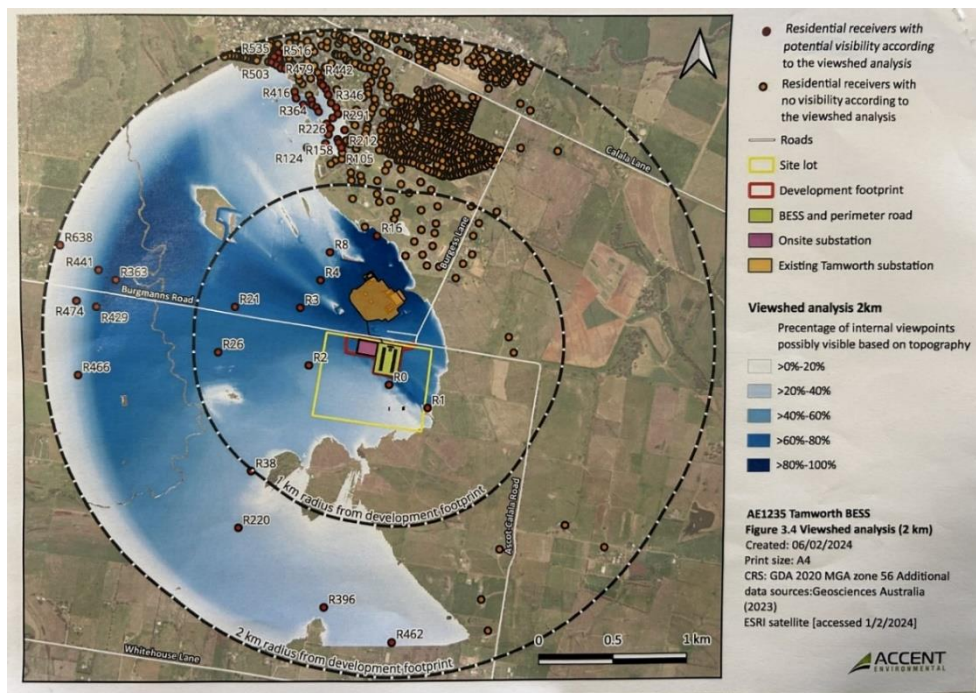
Given these concerns, I strongly oppose the current and any future BESS proposals in this location.



VIEW FROM WHITEHOUSE LANE HOUSING ESTATE TO THE SOUTH OF THE SITE.



**THIS IS THE VIEW FROM NEW ENGLAND HIGHWAY AT BURGMANN'S LANE INTERSECTION
2.4km to the west ON THE APPROACH TO TAMWORTH TOWN CENTRE**



PROPONENT'S 2KM RADIUS VISUAL IMPACT.

HOWEVER, AS THE PHOTO SHOWS, VISUAL IMPACT DOES NOT STOP AT THE 2KM RADIUS