

From: [REDACTED]
To: [Do-Not-Reply IPCN Submissions Mailbox](#)
Subject: FW: Thunderbolt Wind Farm (SSD - 108076896) Request for Further Information
Date: Friday, 12 April 2024 3:35:15 PM
Attachments: [IPCN Thunderbolt Wind Farm review.pdf](#)

Dear Sir/Madame,

Further to my previous email, please find attached my submission in pdf format.

**Kind regards,
Ian McDonald
Walcha Grazier**



From: [REDACTED] <[REDACTED]>
Sent: Friday, April 12, 2024 1:37 PM
To: submissions@ipcn.nsw.gov.au
Subject: Thunderbolt Wind Farm (SSD - 108076896) Request for Further Information

Dear Sir/Madam,

Pursuant to the Independent Planning Commission (Commission) Panel request for further information on the Thunderbolts wind farm (SSD – 108076896), please find attached my submission dated 12th April 2024..

**Kind regards,
Ian McDonald
Walcha Grazier**

THUNDERBOLT WIND FARM (SSD-10807896)

IPCN Request for Further Information – 8th April 2024

12th April 2024

Question 1: Water Resource

Water is the most valuable resource in New England, and due to the absence of any large rivers in the region, it is a precious commodity that has been successfully managed in balance with nature and agriculture over generations.

Both biodiversity and agriculture have experienced plenty of bad droughts, and we were again tested as recently as 2019/20 from a major drought resulting in ‘*The Black Summer*’ bushfire event. But due to the important water asset of large rural dams, particularly the Pine Creek Dam, dedicated firefighters fortunately drew sufficient water from that dam for aerial and ground firefighting crews to save much of the rural landscape of Kentucky and beyond.

The Independent Planning Commission (IPCN) has asked the proponent, Neoen, to “*clarify the estimated capacity of the Pine Creek Dam*”. Neoen has not answered this question, nor has the depth of the dam been determined. The Department of Planning and Environment (DPE) however in its response to the commission, and without empirical evidence having been provided, has misleadingly stated that the dam has “*depths up to 1.5m*”, and the DPE has

also avoided addressing the critical question of the dam's capacity. The apparent unsupported inclusion (dam is a maximum 1.5m deep), and the omission by Neoen is significant, because in their response to RFI Question 3. Neoen states that Bell's Turtle requires habitats greater than 1.5m deep.

Anecdotal evidence however suggests that the dam had up to 17m depth of water at its wall when constructed. I have looked at the topography and elevation contours around Pine Creek Dam (information readily available to anyone on the internet), and it is evident the extent of the waters edge of the dam aligns closely with the 870 metre contour, but the creek floor immediately below the dam wall is lower than the 860 metre contour. This would suggest to me that it is likely that depth of water in the dam, when the normal practice of extensive excavation is factored in, could be deeper than 17 metres, and the dam could have an average depth of around 6m, not a maximum depth of "up to 1.5m" as put forward by the DPE. In any event, the topographical and elevation contours fully support anecdotal local knowledge that the Pine Creek Dam is holding deep water.

NSW Local Land Services (LLS) Senior Ecologist and Project Manager for 'Turtles Forever', Mr Martin Dillon, has told me that The Namoi River Snapping Turtle (*M. bellii*), also known as (Bell's Turtle) only occurs in the New England and therefore this endemic species holds special significance as a rare and unique species in the Northern Tablelands. The species is highly aquatic and the Kentucky Reservoir, which is similar in size and characteristics to Pine Creek Dam, has the largest population of Bell's Turtle known in existence, this gives credence to the likelihood that Pine Creek Dam also supports a large population of Bell's Turtle.

Mr Dillon went onto say that Carlisle Gully, which has also been surveyed by another ecologist, Mr Phillip Spark of North West Ecological Services, provides a high-quality habitat and it, and its tributaries within the Thunderbolt development footprint, support a good population of Bell's Turtle's, which is only 600 metres downstream of the Pine Creek Dam. Neoen, and as supported by the DPE however, say in their response to RFI Question 3: that the Bell's Turtle "requires waterholes at least 1.5m deep waterholes to persist. Based on the biodiversity surveys undertaken across the

Development Corridor, including aquatic habitat assessments, none of the creek lines or drainage lines present support the deep waterholes required for Bell's Turtle “.

In support of My Dillons observations and in so refuting Neoen and the DPE, I offer the following excerpt from DCCEEW (2023): “The western saw-shelled turtle (*M. bellii*) lives in habitat that often forms deep pools (~2m deep) characterized by granite boulders and bedrock, separated by either riffles or dry beds (Chessman 2015; Fielder et al. 2015). The aquatic habitat is complex with underwater caverns, aquatic macrophytes and coarse granite sand substrate (Fielder et al. 2014)”. It is significant that Fielder refers to underwater caverns habitat that support Bell's Turtle, an observation that has been incompetently overlooked by Neoen's biodiversity consultants. All is not what it seems on the surface!

Although professional government personnel and/or consultants, including Mr Spark have not been granted access to date by the current owners' management of the dam to carry out proper scientific surveys, he thinks the dam is well suited to a perfect habitat for Bells Turtles. A view supported by Mr Spark who considers it a highly likely habitat. Mr Dillon went onto say that although the turtle's nest on the banks of ephemeral streams, it is essential for them to have access to deep water (more than 2m) and mud as shelter to survive the cold winters in New England. There also needs to be a constant deep level of water to maintain a healthy population of turtles, and any sudden drop in the water level is undesirable.

Firefighting also needs a reliable source of clean deep water to supply aircraft with aerial water bombing capabilities.

Due to good water management practices, The Bell's Turtle, agriculture, and firefighting have coexisted for generations. But Neoen now proposes drawing very large quantities of water (100ML) from the dam over an 18 to 24-month construction period or perhaps longer if delays develop and admits that “Water extraction from the Pine Creek Dam has the potential to lower water levels within the Pine Creek Dam”. Neoen goes on to say however, “the water within the dam will not be exhausted” But Mr Dillon has said that “there needs to be constant deep water to maintain the Bell's Turtle population”. I believe

Neoen response lacks sufficient quantitative information to provide confidence that water extraction would not negatively impact Bell's Turtle in the Pine Creek Dam catchment, in Pine Creek Dam or downstream in Carlisle Gully or its tributaries, which extend into the wind farm development footprint. For example, as the dam has a surface area of 320,000 metres-squared and given that a megalitre is 1000 cubic metres, extracting 100ML from the dam has the potential to reduce the water level by around one third (320,000 cubic metres minus 100,000 cubic metres). One must also consider the substantial loss of constant flow, particularly during drought, to downstream of the dam, thereby reducing water flow and pool depths in known Bell's Turtle habitat in Carlisle Gully downstream of its confluence with Pine Creek.

This procurement of water could very well upset the fine balance of supply and demand, and furthermore Neoen has not offered any contingency plan should the construction period happen to coincide with another severe drought/bushfire event and the dam is then subjected to a sudden drop in water level. Such an outcome could be to the detriment and very survival of the endangered Bell's Turtles in the dam, in the catchment and the downstream Carlisle Gully and its tributaries.

Rather than relying on anecdotal evidence, hearsay and assumptions, I appeal to the commission to stay proceedings to allow time to seek an instruction to gain access to the Pine Creek Dam and its tributaries, that will enable access for government professionals and/or their consultants to carry out proper scientific and bathymetry engineering surveys to establish empirical evidence as to the current biodiversity, capacity, water depth, and flow dispersal of the dam, and its environs.

Question 2: Firefighting Operations

20,000L storage capacity is absurdly inadequate. This isn't the capacity of a typical house tank and would barely hold enough water to protect a garden shed.

Question 3: Accommodation

There doesn't appear to be any plan to accommodate the hundreds of itinerant workers that will be needed to construct the Thunderbolt wind farm and associated infrastructure.

The towns of Bendemeer, Uralla and the village of Kentucky have similar demographics to Boorowa, a small western slopes town servicing another local farming community.

Boorowa was once a pretty model town with soul, but it now resembles a forsaken hamlet surrounded by ghost-like wind turbines. Initially the influx of itinerant workers drove many long-term residents and businesses out of town, their places to be filled by carpetbaggers, who came for nothing more than short term financial gain. Once the wind farm projects were completed, the carpetbaggers left, leaving what now resembles a ghost-like town.

Of course, the communities of Bendemeer, Uralla and Kentucky don't want this scenario to play out in their townships, with hundreds of itinerant workers impinging on the locals of these little hamlets. Integration didn't work in Boorowa, and I very much doubt it will work anywhere on the New England.

The people of New England don't want a bar of it, and we consider the proposal of a workers camping in our backyard totally inappropriate.

Let's save our social fabric and keep workers camps stand-alone facilities and as far away from our local communities as possible. The obvious place to me is for them to be located somewhere in the middle of the project itself.

Conclusion:

It is imperative that the proponent and DPE answer the RFI Question: 1 “Clarify the estimated capacity of the Pine Creek Dam”. To derive an accurate estimate, a professional bathymetry survey is required to assess and report on the dam’s catchment, volume, and flow dispersal.

It is imperative that the annual flow of water in Pine Creek in Megalitres that would normally flow over/past the Pine Creek Dam wall needs to be quantified so that downstream impacts of water extraction and subsequent lost water flow and pool depth in Carlisle’s Gully can be confidently assessed. And this reporting needs to consider historical weather records with respect to drought.

It is imperative that a turtle trapping survey by qualified turtle specialists is conducted within Pine Creek Dam to determine whether Bell’s Turtle (*M. bellii*) is present, and if so, whether the dam holds a significant population like that of the Kentucky Reservoir near Uralla.

I firmly believe that the extraction of large quantities of water from Pine Creek Dam will significantly impact on *M. bellii* downstream in Carlisle Gully and its tributaries within the Development Corridor, and will most likely significantly impact on *M. bellii* in the Pine Creek Dam and its catchment.

Finally, having done much research into the Bell’s Turtle (*poor little helpless things*) to enable me to respond to the Commissions Review, I can’t help but feel discouraged by both the proponents and the Department of Planning and Environments responses to the Commissions requests.

Ian McDonald, Walcha Grazier.

