Alex Wang

From: Michael Gray <Michael.Gray@rfs.nsw.gov.au>
Sent: Tuesday, 15 February 2022 11:08 AM
To: DPE CSE Information Planning Mailbox
Cc: Alex Wang
Subject: NSW RFS Draft Letter of response to DPE for Project Energy Connect (NSW Easter Section) NSW SSI-9172452

Department of Planning and Environment (Sydney Offices)
GPO Box 39
Sydney NSW 2001

Your reference: SSI-9172452

ATTENTION: Iwan Davies

Date:15 February 2022

Dear Sir/Madam,

Development Application
Other – Part3A – Electricity Generating Works
Project Energy Connect (NSW Easter Section) NSW

I refer to your correspondence regarding the above proposal which was received by the NSW Rural Fire Service on 19/01/2022.

Where significant infrastructure projects are proposed, the NSW RFS advocates that a suitable level of bush fire protection be provided to ensure functional and operational needs are met, and communities are provided with increased resilience. In relation to bush fire protection, critical infrastructure should be located and designed to minimise the impact of bush fires, commensurate with the level of bush fire risk and criticality of the infrastructure.

The following comments are provided for the approval authority's consideration in progressing this Critical State Significant Infrastructure project.

The NSW RFS notes previous correspondence dated 24/12/2020 was provided to Department of Planning and Environment, which identified a number of matters relating to bush fire matters that were required to be addressed in the preparation of the EIS (SEARs Comments).

The 'Final Report of the NSW Bush Fire Inquiry' (2020) identified ***'Preparing critical infrastructure for bush fire or providing a workaround - 4.4.5***' as well as other recommendations with similar intents, relating to bush fire, and safety of critical infrastructure. The recommendations reference ensuring critical infrastructure is resilient, identified as part of Bush Fire Risk Management Plans (BFRMP), are suitably protected and/or have suitable workarounds (should the infrastructure be adversely impacted).

A review of the Bushfire Impact Assessment (Technical Paper 12) prepared by Australian Bushfire Protection Planners Pty Ltd, dated December 2021 has been undertaken with focus on Chapter 5, Table 5.1 'Mitigation Measures'. The following NSW RFS Comments are provided as recommended inclusions/amendments/comment for each mitigation measure (where relevant).

BF-1 NSW RFS Comment – The Emergency Plan be prepared for each Local Emergency Management Committee LEMC area which the project traverses.

BF-2 NSW RFS Comment – APZs should be maintained at a height of 100mm or less all year round.

BF-4 NSW RFS Comment –Water supply should be clearly specified, and have minimum amounts dedicated (ie 20 000L) for firefighting at each camp/major construction area as part of a Fire Management Plan for each camp site.

Contractors and fire wardens should have access to, and the ability to, operate and transport water across the site as needed (water carts etc)

Adequate firefighting fittings for NSW vehicles (storz fittings 65mm)

Static Water Supply (SWS) for firefighting purposes be accessible via access roads for Cat 1 tankers, and provide 65mm storz outlet, located at all camps and key construction areas.

BF-6 NSW RFS Comment –Provision of all-weather access for Cat 1 tanker to all camps and key construction areas, including too points of SWS.

BF-7 NSW RFS Comment –Amend wording to include a requirement for the certification as compliant, for all the Mitigation Measures contained within the Bushfire Impact Assessment.

BF-8 NSW RFS Comment –Needs to provide for a suitable firefighting unit such as a trailer or vehicle with minimum 600 Ltr water supply and firefighting pump and equipment.

BF-11 states "*The proposal would be operated and maintained in accordance with Transgrid's Bushfire Risk Management Plan. This includes reduction in fuel loads, management of APZs and inspections of infrastructure*"

This mitigation measure outlines the vegetation management works proposed for the power lines. These are outlined in the Bushfire Impact Assessment and copied below for reference:

EXTRACT FROM BUSHFIRE IMPACT ASSESSMENT SECTION 4.5.1

In relation to the transmission lines proposed, the clearance distances required are expected to be:
– nine metre clearance between vegetation the ground and maximum conductor sag point for the 330kV line: and
– eleven metre clearance between vegetation the ground and maximum conductor sag point for the 500kV line.

– Inner maintenance zone:
• for the 330kV transmission line easement, vegetation with growth heights of up to four metres can be retained from the centreline out to 20 metres distance from the centreline (i.e. a 40 metre wide inner section of the easement)
• for the 500kV transmission line easement, vegetation with growth heights of up to four metres can be retained from the centreline out to 30 metres distance from the centreline (i.e. a 60 metre wide inner section of the easement)
– Outer maintenance zone:
• for the 330kV transmission line easement, vegetation with growth heights of up to 10 metres would be able to be retained in the easement section which is 20 metres to 30 metres from the centreline. This is permitted as the maximum sag point height is increased at this greater distance for the centreline and therefore taller vegetation is permitted without impacting on the vegetation clearance requirements which are identified in Table 4-4
• for the 500kV transmission line easement, vegetation with growth heights of up to 10 metres would be able to be retained in the easement section which is 30 metres to 40 metres from the centreline. This is permitted as the maximum sag point height is increased at this greater distance for the centreline and therefore taller vegetation is permitted without impacting on the vegetation clearance requirements which are identified in Table 4-4.

BF – 11 RFS comment
The NSW RFS would recommend that vegetation management works should achieve the standards of an Asset Protection Zone (APZ) around all assets that avoids potential flame contact,

and mitigates radiant heat (providing for reduced ignition and heat damage and a safer environment for fire fighters to operate).

As such, all structures (transmission lines, substations, camps, ancillary works etc) should be designed with materials that withstand the applicable radiant heat level (kW/sqm) and any flame contact from surrounding vegetation.

The above referenced vegetation management standards in the Bushfire Impact Assessment do not demonstrate this is being achieved. In particular, the proposed revegetation height within the inner maintenance zone of up to 4-10 metres, may result in substantial flame contact and radiant heat impacting the assets. The NSW RFS recommends this is further investigated, and that the approval authority be satisfied that the proposal provides a suitable level of bush fire protection particularly with regard to vegetation management standards surrounding the length of the transmission lines.

The RFS recognises the need for balance between social and environmental, economic and safety in considering developments. However, where new critical State significant infrastructure is planned, our past and recent bush fire experiences (ie the 2019/2020 fire season) have proven the need to provide for increased levels of resilience and protection in planning for future infrastructure assets.

For any queries regarding this correspondence, please contact Martha Dotter on 1300 NSW RFS.

Martha Dotter

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