

File Ref: 23/012

29 May 2023

General Manager
Muswellbrook Shire Council
60-82 Bridge Street
Muswellbrook NSW 2333

Subject: Battery Energy Storage System Development Applications

Dear Sir/ Ma'am

HDB Town Planning and Design is acting for the Clean Energy Transfer Fund Pty Ltd who are proposing to install several Battery Energy Storage Systems (BESS) on private land in the Muswellbrook Local Government Area. This will require the lodgement of Development Applications with the Muswellbrook Shire Council for each site.

The purpose of this correspondence is to introduce the BESS system to Council and seek clarification regarding the approval pathway.

The following is an overview of BESS.

- Ten (10) BESS installations are proposed across the lower Hunter with two (2) proposed within Muswellbrook LGA. The 10 sites constitute a “hive”.
- A BESS is a 4.99 MW energy storage system that captures energy from the electrical grid at low demand and discharges electricity at times of high demand.
- Each Site has grid-forming inverters and super-fast frequency response capability.
- They need to be constructed near existing substations.
- All sites have been designed in consultation with the energy provider.
- Connects at 11kV and 22kV using transformers that do not have supply shortages.
- The proposed BESS will consist of 10 to 12 Battery Cabinets (ST2752UX), and other sheds to house power equipment, switchgear, and controllers. Ten (10) Battery Units will be initially installed on the land and a further two (2) in 4 years to cover degradation. The battery unit complex will be contained within a fenced compound.



- Construction of all equipment will be off-site and delivery and installation will occur over a 4 to 6 hours time period. The site will be operated remotely and visitation for general maintenance will occur 1 to 2 times per month.
- No permanent staff will be located on the site.
- No formal or dedicated parking facilities are proposed or required to be provided throughout the site, as the maintenance vehicles will park around the site as needed to service the batteries.
- Size of Compound - 32.5m X 44.2m = 1436.5 m²
- Battery Cabinet Size - 10m X 1.7m. Height – 2.52m.
- A 2.4 m high-security mesh fence will be constructed around the compound.
- Each site will operate for a period of 20 years and will then be decommissioned, and all equipment will be removed for recycling, and the site remediated pre-development standards.
- The projects are a low environmental impact.
- BESS falls under the definition of “electricity generating works” which are permissible with consent under Section 2.36 of the SEPP (Transport and Infrastructure) 2021.

The capital investment value for each site is approximately \$12 million per site due to the capital cost of batteries (compound).

The proposal will therefore have a capital investment value of more than \$5 million and will trigger Regionally Significant Development under the SEPP (Planning Systems).

Schedule 6, Section 5(a) of SEPP (Planning Systems) 2021 states:

5 Private infrastructure and community facilities over \$5 million

Development that has a capital investment value of more than \$5 million for any of the following purposes—

- (a) air transport facilities, electricity generating works, port facilities, rail infrastructure facilities, road infrastructure facilities, sewerage systems, telecommunications facilities, waste or resource management facilities, water supply systems, or wharf or boating facilities.*

We understand that the applications would ordinarily be determined by the Hunter and Central Coast Regional Planning Panel. However, we would request that Muswellbrook Shire Council request that the Panel delegate their authority to the Council to determine the applications for the following reasons:

- The potential impact of the facility is minimal.
- The BESS ongoing operation is passive.
- The development is not permanent and will be decommissioned after 20 years of service.
- All equipment is constructed off-site with minimal impact.
- Impact on the site consists of a gravel hardstand area of 32.5m x 44.2m only.

- All sites will be the same.

Yours sincerely

HDB Town Planning & Design

Mark Ihlein

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Principal - Planning

