



23 June 2021
DT:7284

Endeavour Energy
PO Box 811
SEVEN HILLS NSW 1730

Attention: Ms Parisa Sadeghi

Dear Madam

**UIL5961 – 250 VICTORIA STREET, WETHERILL PARK
PROPOSED METHOD OF SUPPLY**

We are acting as Consulting Engineers to Woolworths Limited for development of a new temperature controlled distribution centre located at the above address. The existing buildings will be demolished and the Lots combined to make way for the new distribution centre.

The load required at the new development is 9,200kVA or 13,500Amps per phase. We have lodged a technical review request to Endeavour Energy in June 2020 regarding the electricity capacity for this site, and the response to the request was that due to the large load we would need to install a new dedicated 11kV High Voltage feeder from the nearby Wetherill Park Zone Substation. This new feeder would be installed in new and existing underground ducts along Redfern Street to the development site. We also propose to have the supply for the development connected and metered as a High Voltage Customer (HVC).

Our main reasons for requesting a HVC for this development are as follows:-

1. The site area is very small in relation to the floor area of the distribution centre being constructed. The facility will be over three levels as follows:-
 - a. Basement – Underground truck queueing and staff carparking, and truck maintenance.
 - b. Ground – Produce distribution centre and returns facility with receiving and despatch docks.
 - c. First – Chilled distribution centre and receiving and despatch docks.
 - d. A three level office building in the northwest corner.
2. Due to the size of the distribution centre noted above and the building being over several levels there is little opportunity to locate multiple Endeavour Energy Padmount substations or chamber substations on the site. 10.0MVA load would require six (6) padmounts/transformers located on the site (5 x 1500kVA and 1 x 1000kVA).
3. By being connected as a HVC we can design and install four (4) off 2500kVA Padmount substations to support the load which have a much smaller footprint required.
4. The development will have 100% diesel generator backup to the main switchboards. Having fewer transformers means we can have fewer generators.
5. Due to space constraints it is proposed to install the generators onto a plant platform that runs over the transformers. This is only possible if the site is connected as a HVC as Endeavour Energy would not allow us to build over the Padmount substations.
6. The main load for this site is the refrigeration plant to chill the distribution centre to 2 degrees. Therefore the transformers need to be located in the one area on the site and not spread out around the site. Due to all the truck roads and ramps, it is not possible to install padmounts around the site in any case.

7. The proposed location we have for the substations is at ground level and is over the basement level, so they are on a suspended slab. Endeavour Energy normally do not accept Padmount substations on suspended slabs.
8. Woolworths already have Supply Agreements in place with their electricity retailers and are able to purchase the electricity at a lower rate when the site is connected as a HVC.
9. Woolworths have other sites in Australia and New Zealand that are already connected as a HVC, so their maintenance ability is already established to be able to look after a new site connected as a HVC. Their other sites connected as a HVC include:-
 - a. Tasmania RDC, Launceston, TAS
 - b. Melbourne Liquor DC, Laverton, VIC
 - c. Woolworths Meat Facility, Trugganina, VIC
 - d. Melbourne Fresh DC, Trugganina, VIC
 - e. Auburn Customer Fulfilment Centre, Auburn, NSW (Site in design but Ausgrid have approved 4.0MVA connected as HVC).
 - f. Janus DC's, Moorebank, NSW (Currently in design phase at Qube Logistics Park)
 - g. Brisbane RDC, Larapinta, QLD
 - h. Hilton Foods Meat, Heathwood, QLD
 - i. Heathwood TC, Heathwood, QLD
 - j. Auckland Fresh DC, Wiri, NZ

From the above number of sites it can be demonstrated that Woolworths would be more than capable to maintain a private high voltage network.

Please also refer to additional supporting documentation provided within our Proposed Method of Supply package.

Should you have any questions please do not hesitate to contact the undersigned.

Yours faithfully
SHELMERDINES



David Taylor
DIRECTOR