Dalvui

Battery Energy Storage System (BESS)

FACT SHEET

The Dalvui BESS would improve the reliability of the electricity network by storing power for use during peak periods.

The Dalvui Battery Energy Storage System (BESS) will store off peak power for use during peak periods to help maintain a reliable energy supply.

The Project would be located just east of the existing Terang Terminal Station, within the Southwest Victoria Renewable Energy Zone. The site is located halfway between the Terang township and the Terang Harness Track, north of the Princes Highway and the railway line.

The Dalvui Bess will help the Terang community take advantage of the opportunities associated with renewable energy projects in the region.

Benefits

Key benefits of the project include:

- **Reliable energy supply**
- **Local investment with up to $24.3 million in investment retained locally during construction**
- **Employment opportunities during construction with up to 150 direct and 240 indirect jobs created**
- **Employment opportunities during operation with up to 7 direct and 20 jobs created**
- **Procurement of local goods and services**

Project Details

The Project has an indicative output of 196 MW / 392 MWh.

Key electrical infrastructure of the BESS includes battery pack containers, installation of up to two 66kV transformers (within the BESS site and/or TGTS), 33 kV transformers and inverters.

Key ancillary infrastructure includes an Operations and Maintenance (O&M) Building (that includes storage and site office), access track connecting the BESS from McCrae St via an existing access point and permanent site carparking.

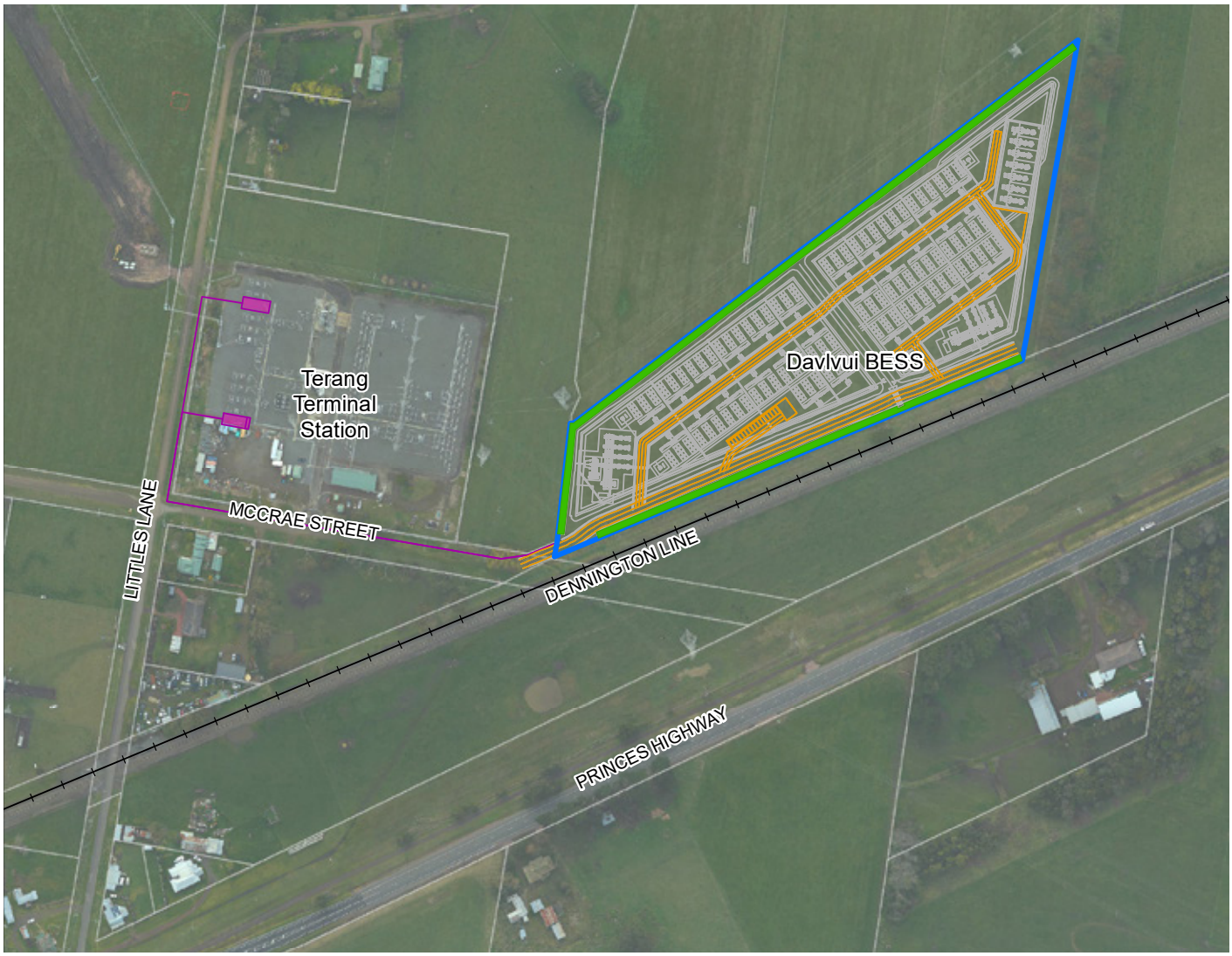
A section of McCrae St from the entrance of the TGTS to the existing access point may require upgrading to facilitate the Project's construction and ongoing operation.

The Project will further involve connection upgrade works within the TGTS, connecting to the BESS via an underground connection along Littles Ln and McCrae St.

What is a BESS?

Battery Energy Storage Systems (BESS facilities) store energy during times of low demand and release it at times of peak demand. BESS facilities most commonly use lithium to store the electricity until it is ready to be distributed to the network.
BESS facilities use computerised control systems to self-sufficiently manage the storage and discharge of power generated by renewable energy plants.

Site Layout



Legend

- Site Boundary
- Indicative BESS Infrastructure
- Underground cable (both options)
- 66kV Transformer (both options)
- Visual Mitigation Screening
- Access Road
- Railway
- Cadastre

N

0 50 100 150
Meters

GDA 1994 MGA Zone 54
1:4,000

Environmental Assessments

As part of the early feasibility phase of the Project, we identified key environmental constraints across the Project Area that informed the Indicative Project Layout with the aim of minimising environmental impacts where possible.

The following table summarises the potential impacts and associated mitigation measures of the Project.

Specialist Assessment	Potential Impacts	Mitigation Measures
Flora / Fauna	No threatened flora or ecological communities are likely to occur in the Project Area, and no threatened fauna species are likely to occur regularly or be reliant on habitats in the Project Area. As such, there are no implications for the Project under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act), Environment Effects Act 1978 (EE Act) or Flora and Fauna Guarantee Act 1988 (FFG Act).	Where works are required near areas of native vegetation, appropriate vegetation protection zones ('No Go Zones') will be established to ensure no construction vehicles or personnel enter these areas.
Cultural Heritage	Tilt Renewables has consulted with the Representative Aboriginal Party, Eastern Maar Aboriginal Corporation (EMAC) on the Project and undertook a complex assessment with members of EMAC. No Aboriginal places or Aboriginal cultural material were identified in the Project Area.	All onsite personnel who are involved in ground disturbance works will undertake a cultural heritage induction prior to commencing work.
Hydrology / Surface Water	The Project is located on historically drained agricultural land. The risk of potential impacts to surface water quality caused by spill leaks, erosion and sediment mobilisation is considered low. Appropriate management of the identified surface quality impacts will result in minimal residual surface water quality impacts. There is potential for drainage impacts into the train corridor to the south of the Project Area, however these will be appropriately managed to ensure stormwater flows are diverted.	As required, flood and drainage mitigation measures will be incorporated during the detailed design of the Project. A Surface Water Management Plan (SWMP) will be prepared to manage stormwater during construction, including erosion and sedimentation, protection of water from pollution and maintaining flows.

Specialist Assessment	Potential Impacts	Mitigation Measures
Landscape and Visual Impact	The Project is located in a Farming Zone, with the closest residential zone approximately 300 m from the BESS facility. The landscape character type within the Study Area is predominately rural and has been assessed to have the ability to absorb change given the high level of human modification already experienced. The visual impacts of the Project resulted in very low to low adverse impacts for most assessed viewpoints at operation. Existing residences predominately within the rural zone of the Study Area and road users would have partial or filtered views to the Project due to either the presence of existing intervening vegetation or the proposed vegetation screening. As such, the overall cumulative impact on residences and road users within the Study Area would be low. Sequential cumulative impacts will be experienced by motorists and rail passengers on the Princes Highway and adjacent train line, in addition from MacCrae Street, Dalvui Lane and Littles Lane. However, these sequential cumulative impacts would be low given the effects of the undulating topography, orientation of the roads and the effects of vegetation which would provide some screening and filtering of views. Further, any acoustic barrier that may be required has been assessed as having no change to the level of visual modification proposed by the baseline Project elements.	To mitigate against any visual impacts, vegetation screening is proposed along the southern, western and northern boundaries of the BESS facility whilst the existing vegetation along the eastern boundary is to be retained. Once the proposed vegetation screening matures, the residual visual impacts reduce for most of the viewpoints. Further mitigation measures will include minimising disturbance to existing vegetation in and around the Project Area, planting low-level vegetation where possible to soften views, and using materials and colours on structures to blend into the existing environment where possible.
Noise	The Project can achieve the noise criteria in the *Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues* (the Noise Protocol).	A final noise assessment will be prepared once the preferred BESS supplier has been selected and the Project's design finalised to ensure the Project can comply with the Noise Protocol. The final noise assessment will also identity any noise attenuation that may be required to ensure the final Project complies with the Noise Protocol, such as an acoustic barrier between the Project and surrounding residents.

Specialist Assessment	Potential Impacts	Mitigation Measures
Traffic	Access to the Project site will be from the Princes Highway, via Littles Lane and McCrae Street. Peak traffic movements are expected during construction, however construction phase vehicle movements on Littles Lane and McCrae Street are to remain within their intended capacities. Operational traffic for the Project is expected to be negligible, consisting of infrequent light vehicles.	Any required traffic management treatments and mitigation works are to be identified and addressed by way of an approved Traffic Management Plan (TMP).
Bushfire	Bushfire hazards in and around the Project Area are largely limited to grassland. Whilst there is potential for a grass fire to spread should one start at the BESS facility, BESS fire risks are managed at several levels in the BESS design and fire protection systems.	The final Project will be designed in accordance with the Guidelines for Renewable Energy Installations (CFA 2021) (or its latest version). Additional safeguards during the construction and operation of the Project will also be implemented, in accordance with all the relevant standards and regulations. An Emergency Management Plan (incorporating a Fire Management Plan) will also be prepared in conjunction with the relevant fire authority. An Emergency Information Book within the Emergency Information (Manifest) Container will also be present on site.
Hazard	Manageable through appropriate technical and management safeguards which reduce the residual risk and make it unlikely that a significant risk is posed. Subject to implementation of the appropriate risk mitigations, technical and safety measures, the Project will not constitute a hazardous industry.	

In addition to the above, an Environmental Management Framework (EMF) has been prepared to provide a framework with clear accountabilities for the design, construction and operational phases of the Project to manage key risks and set out environmental management requirements.
The EMF will inform the development of an Environmental Management Plan (EMP) that will be prepared during the detailed design of the Project.

View 1:
Rendered view of the indicative project from Princes Highway

View 2:
Rendered view of the indicative project with acoustic barrier from Princes Highway

View 3:
Rendered view of the indicative project with vegetation screening from Princes Highway

Community

Tilt Renewables is committed to open and honest dialogue with all stakeholders, with an aim to build and enhance community acceptance and trust in all projects and in the renewable energy industry as a whole.

Benefit Sharing

Tilt Renewables is committed to giving back to and enhancing our host communities by sharing the benefits of all our projects, including the Dalvui BESS.

For the Dalvui BESS, we are investigating how best to share the benefits of the Project with the community, with key focus areas to include support towards education and training programs. We welcome ideas from the community and encourage you to get in touch using the contact details below.

TALK WITH US

If you would like to know more about the Dalvui BESS or if you have any questions, please contact us on **1800 WE TILT (938 458)** or email **dalvuibess@tiltrenewables.com**.

SUBSCRIBE

Sign up for project updates to keep abreast of the project as it progresses. Hover over the QR code to visit the project webpage, or send us an email and we'll add you to the list.

dalvuibess@tiltrenewables.com

www.dalvuibess.com

Contact us:

For more information, or to provide any feedback, please visit the project website:

www.dalvuibess.com

Email: **dalvuibess@tiltrenewables.com** | Phone: 1800 WE TILT (938 458)