23/12/2024

Department of Planning, Housing and Infrastructure

Building: 4 Parramatta Square

Address: 12 Darcy Street, Parramatta NSW 2150

via email: dphi.nsw.gov.au

Attention: Pragya Mathema

A/Senior Environmental Assessment Officer

AE BESS 4 Pty Ltd as Trustee for AE BESS 4 Unit Trust'.

Address: 1 Suite 2, Level 10, 52 Alfred Street

Milsons Point NSW 2061

via email: tom.lukins@avenisenergy.com.au

Attention: Tom Lukins

Development Manager

DENILIQUIN BESS

Estimate Development Cost (EDC) calculation report for submission of SSD-72258210

Dear Pragya and Tom

Please find attached our Estimate Development Cost (EDC) report, which is prepared on behalf of the Applicant, AE BESS 4 Pty Ltd as Trustee for AE BESS 4 Unit Trust'.

We confirm that the EDC value is **$206,202,342** excluding GST.

This EDC value has been calculated in accordance with:

- The Planning Circular PS24-002 issued on 27th February 2024.
- AIQS Practice Standard 1st Edition published in March 2024

Xmirus confirms the EDC calculations reflect the costs of the development and has been achieved objectively and impartially to cover the full scope of works in the identified development proposal, at the date of 23/12/2024 lodgement of the Environmental Impact Statement.

If you require any additional information or have any questions, please advise.

Yours faithfully,

Bob Richardson *FAIQS, FRICS*

Managing Director

Department of Planning, Housing and Infrastructure

ESTIMATED DEVELOPMENT COST (EDC) REPORT FOR SSD-72258210

December 2024

Contents

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Version of Documentation:

Document	Prepared by	Reviewed by	Date
Deniliquin BESS_EDC Report V.1	Kien QTran	Bob Richardson	23/12/2024

A. EXECUTIVE SUMMARY

Estimate Development Cost (EDC) calculation report for SSD-72258210

This EDC is using the Planning Circular PS24-002, issued on 27th February 2024, to prepare the cost of development for the abovementioned development and the value of which is $206,202,342 excluding GST.

Project name:	Deniliquin Battery Energy Storage System (DBESS)
Project location:	21541 Riverina Highway, Deniliquin NSW 2710
Date of assessment:	23/12/2024
Scope of project:	The BESS Project Site is approximately 7.4 ha, which includes the BESS and associated permanent and temporary infrastructure, connection to the adjacent TransGrid substation and proposed intersection upgrade. This is modelled as a worst-case scenario allowing for uncertainty in design.

Deniliquin Battery Energy Storage System

ESTIMATED DEVELOPMENT COST (EDC)

21541 Riverina Highway, Deniliquin NSW 2710

AREA SCHEDULE

REF	Description	Quantity	UOM
1	**Project site area** *(approximately)*	73,726	m2
2	**Project disturbed area** *(approximately)*	47,500	m2
2.1	Major site area	37,055	m2
2.2	New 135kW spare bay (high voltage)	3,200	m2
2.3	Easement connect to Substation	970	m2
2.4	Access road - inside site boundary	3,175	m2
2.5	Access road - outside site boundary	3,100	m2
2.1	**Major site area:**		
2.1.1	Compound area, BESS systems and other onground structure	24,025	m2
2.1.2	Hardstanding area	2,540	m2
2.1.3	Internal maintenance road	6,275	m2
2.1.4	Internal fence	1,090	m2
2.1.5	Other area	3,125	m2
	Subtotal_Major area	**37,055**	**m2**

Deniliquin Battery Energy Storage System

ESTIMATED DEVELOPMENT COST (EDC)

21541 Riverina Highway, Deniliquin NSW 2710

SUMMARY OF ESTIMATE

REF	Description	Quantity	UOM	Rate	Subtotal
1	Site Preparation Works	37,055	m2	$ 97	$ 3,586,525
2	BESS and associated Equipment				
2.1	Battery System 120MW / 480MWh	37,055	m2	$ 2,741	$ 101,551,860
2.2	Electrical Substation & switchroom	4,800	m2	$ 3,033	$ 14,560,000
2.3	Electrical Reticulation & Transmission lines	37,055	m2	$ 173	$ 6,401,800
3	Associated Ancillary Facilities	37,055	m2	$ 57	$ 2,128,400
4	Earthwork and Enabling works - inside site boundary				
4.1	Site Services	37,055	m2	$ 33	$ 1,222,125
4.2	Access roads and Hardstands (internal & external)	9,450	m2	$ 201	$ 1,895,100
4.3	Transport and logistics		Item		$ 11,250,000
4.4	Landscape & fencings	37,055	m2	$ 10	$ 386,700
4.5	Decomission works	37,055	m2	$ 100	$ 3,705,500
5	Mitigation of Impact Items				
5.1	Biodiversity offset		Item		$ 70,000
	Indicative of Construction Cost (excluding GST)	37,055	m2	$ 3,961	$ 146,758,010
6	Preliminaries (excludes Transportation shown above)	4%			$ 5,870,320
7	Overhead and margins	3%			$ 4,402,740
8	Locality allowance (for cost variation for Deniliquin compared to Melbourne)	7%			$ 10,273,061
	TOTAL CONSTRUCTION SUM (excluding GST):	37,055	m2	$ 4,515	$ 167,304,131
12	Professional Fees	6%	%		$ 10,038,248
13	Authority Fees	2%	%		$ 3,346,083
14	Long Service Leave Levy (0.25%)	0.25%	%		$ 418,260
15	Contingency	7%	%		$ 11,711,289
16	Escalation *Assumed construction commerced on Jan 2027*	8.0%	%		$ 13,384,331
17	Development Management Fee		%		EXCLUDED
	SUB TOTAL				$ 38,898,211
	INDICATIVE COST ESTIMATE (excluding GST):	37,055	m2	$ 5,565	$ 206,202,342

Note: Refer to 'Basis of Estimate' for details of Exclusions and Inclusions.

Gross floor area (AIQS)	Item	Methodology-practice note
GFA (m2) (AIQS)		*Not applicable*
Construction Cost Only ($/GFA m2) (AIQS)		*Assessed based on Construction Cost and Plant and Equipment only* *Not applicable*

- Xmirus confirms that the calculations reflect the costs of the development and has been achieved objectively and impartially to cover the full scope of works in the identified development proposal, at the date of EIS lodgement (for State Significant Projects) 23/12/2024.

- This EDC report is issued on 23/12/2024, reviewed and signed by Bob Richardson, an AIQS Certified Quantity Surveyor / a RICS Chartered Quantity Surveyor with recent experience regarding State Significance Projects in NSW.

B. BASIS OF REPORT

B1. Guidance, Legislative and Regulatory requirements:

This Estimated Development Cost report has been prepared in accordance with legislative and regulatory requirements of the consent authority for calculating the EDC (EP&A Act, EP&A reg, SEPPs, the Planning Circular and SEARs).

Apart from the Planning Circular mentioned above, this EDC report has been prepared in accordance with:

- The EP&A Regulation, the Environmental Planning and Assessment Regulation (Development Certificate and Fire Safety) 2021 (DCFS Regulation)
- AIQS Practice Standard 1st Edition published March 2024
- AS1181-1982 Australian Standard Method of measurement of civil engineering works and associated building works/ICMS method
- Australian and New Zealand standard method of measurement of building works – 2018 edition
- SEARs requirements for SSD-72258210 in calculating EDC
- Standard Form of Estimated Development Cost Report (State significant projects) from DPHI – March 2024.

B2. Documentation:

The EDC has been calculated based on the list of documents as follows:

Description	Version	Issued Date
SSD-SSI Issued SEARs	-	19/07/2024
NSW.AE04.BS.D2.024.1.6 Indicative Deniliquin BESS Layout (1) REDUCED	Rev.06	09/10/2024
Deniliquin BESS Draft EIS Oct 2024	Full Draft	28/10/2024

B3. Limitation

There are limitations noted below in preparing the EDC that could impact the accuracy of the calculation of the report, including:

- This EDC have based on design information which is still in development. There is a certain level of cost risk and uncertainty associated with this estimate based upon the level of the design information. Refer to comments on contingencies and escalation below
- Refer to the list of exclusions that could influence the cost accuracy and which have not been allowed in the scope of EDC calculations.
- Contingencies: we have considered the risks in the design and information provided within the EIS and have included a contingency we considered appropriate for them.
- We have not observed any foreseeable matter that could impair the objectivity of the calculation at this current stage of design and planning.
- Escalation: we have allowed for escalation from November 2024 to January 2027, the anticipated start on site.

B4. Qualifications:

The preparation of this EDC Report for the relevant Consent Authority has been undertaken by a member of the:

- Australian Institute of Quantity Surveyors (AIQS), holding the Certified Quantity Surveyor (CQS) designation, residing in the State of New South Wales, and a
- Chartered Quantity Surveyor member of the Royal Institution of Chartered Surveyors (RICS), residing in the State of New South Wales

The employees undertaking or participating in the provision of this service have been supervised by a suitably experienced Certified Quantity Surveyor or Chartered Quantity Surveyor.

This EDC is signed by Robert Charles Richardson, FAIQS and FRICS, with recent experience regarding State significant projects in NSW.

C. SCOPE OF THE CALCULATION

This EDC report has been prepared acknowledging the following:

- The development proposal proponent is AE BESS 4 Pty Ltd as Trustee for AE BESS 4 Unit Trust (The Applicant).
- The Development proposal planning reference identifier/number of SSD-72258210
- The Scope of Project comprises of:
    - Approximately 42 medium voltage power stations that each include inverters and transformers that are skid mounted, distributed across the site.
    - Approximately 140 battery storage units, containerised, distributed across the site.
    - Electrical cables and conduits.
    - On site high voltage substation containing transformer, harmonic filters, associated high voltage switchgear, medium voltage switchgear room, earthing and auxiliary transformer, lightning masts and light poles.
    - Perimeter fencing and internal maintenance roads

- Minor vegetative landscaping
- Overhead or Underground transmission cable from the onsite substation to the Transgrid
- Operated Deniliquin substation interconnecting to either a new or existing bay.
- Construction laydown area.
- Car parking lot for onsite personnel
- Water tank (approximately 200kL capacity).
- Earthworks for pad preparation and drainage design.
- The proposed development is expected to operate for 35 years, and construction is expected to 12 months, commencing indicatively in Quarter 1 2027. After the operating phase, the proposed development would either be decommissioned, returning the site to its existing land use; or upgrade with new BESS equipment, pending any required approvals.

D. DETAILED CALCULATION SCHEDULE SUPPORTS EDC

D1. Details of Estimate

Detailed calculations for the estimate are attached in a separate document marked commercial in confidence.

D2. The Basis and Assumptions

The rates in the EDC Elemental Summary above is in December 2024 which have been escalated to January 2027, which is further outlined within the items description and summarised in the above-mentioned Executive Summary.

D3. Guidance and Documentation

The detailed calculation schedule has been prepared and measured in accordance with the base documents and guidelines that has been mentioned in Basis of Report B.1 above.

D4. Extent of Uncertainty

The following uncertainties and provisions which have been allowed in this EDC report are shown in the assumptions/calculation, construction method, and uncertainty features, escalation, programme and contingency and etc. noted in the details of the estimate.

D5. Schedule of key exclusions

As per section 6 of the EP&A Regulation, the **EDC**, of proposed development, does not include:

- amounts payable, or the cost of land dedicated, or other benefit provided, under a condition imposed under the EP&A Act, Division 7.1 or 7.2 or a planning agreement
- costs relating to a part of the development or project that is the subject of a separate development consent or approval
- land costs, including costs of marketing and selling land
- costs of the ongoing maintenance or use of the development
- GST.

Details of Estimate - COMMERCIAL IN CONFIDENCE- Refer separate document