Submission to Bellambi Heights BESS SSD – 33344237

As a long time resident of the Mudgee/Gulgong area, I **object** to the planned industrial BESS by VENA Energy.

The EIS fails to satisfy relevant SEARS requirements.

Employment and Economic Benefits to the Region

1. The EIS fails to "provide an estimate of the retained and new jobs that would be created during the construction and operational phases of the development, including details of the methodology to determine the figures provided."

More particularly, Section 3.4 of the EIS is **fluid** in relation to the duration of construction, the nature of the jobs created and the workforce numbers. It states that the commencement of construction is early 2025 but this is subject to determination and variation. So we don't know when construction will commence. Construction may occur in one stage but it may not. It may occur in two stages. If it occurs in one stage, there will be an average of between 8 to 55 personnel of unspecified qualifications as a peak workforce at any given time, the non-peak variations being between 8 and 100 personnel! These figures and timeframe are so fluid as be meaningless for the community which will be dealing with their impacts.

There is no estimate in Section 3.4 of personnel required in the operational stage of the battery. Elsewhere in the document, the developer admits that **there will be no permanent workforce on site after construction.** Routine operations and maintenance will be carried out by a work force of between 6 - 10 "staff" **approximately one week a month.** There is no information as to the nature of the maintenance required or whether this part time work will create a new local job or not. This should be detailed.

2. As it stands, the EIS *fails to demonstrate any economic benefits of the project for the region* and the State. Simply put, there will be no permanent work force on site after construction. So, no jobs long term. Just the adverse physical, social, and environmental impacts of construction and then, nothing. All for an alleged 2 hours of back up for solar farms.

The developer should be required to provide specific details of the economic benefits which will flow to the community and the region as a result of this project.

The Social Impacts of Construction/ Accommodation for Temporary Workers

3. The EIS fails to deal with the **social impacts** of the construction work force. This is of course difficult when the developer is unable to specify the timing, numbers and nature of the temporary construction force.

Nevertheless, the EIS states - VEA's strategy for accommodating the Bellambi Heights BESS workforce will be to maximise local employment opportunities. So, the strategy to minimize social impacts is to employ locally and reduce the extent of temporary workers. The experience of construction of renewable projects in other areas of the State has been that temporary workers provide the overwhelming bulk of the work force. They are housed in work camps and bussed to the site. The proponent should be required to detail and specify -

- The extent to which there is a labour market available locally to meet demand and
- the nature and number of jobs which are likely to be available for and suitable to the local labour market.

When these details are provided, it may be possible to gauge whether the proposed strategy has any prospects of success, as well as the numbers of flyin, fly-out workers which the community will need to accommodate and provide for.

Further, the EIS states:

VEA's strategy for accommodating the Bellambi Heights BESS workforce will be ... to accommodate the visiting workforce as close to Gulgong as possible. How VEA will do this without adversely impacting tourism will be prescribed in an accommodation plan. A plan prepared closer to the circumstances in which it is to be enacted will have more certainty of being achieved than one prepared 18 months in advance of construction. Closer to construction start the plan can capture changed circumstances and incorporate any solutions that may have emerged over the next 18 months. These could include changes in project timelines for other major projects, accommodation camps, or the on-ground realisation of some of the potential accommodation solutions being considered by EnergyCo, Councils, developers and accommodation providers.

This may be translated as *"we are going to put these people somewhere close to the town* of Gulgong but we haven't got a clue and will work out what to do at the time." **The proponent should be required to provide the specifics of an accommodation plan which meets the reasonably foreseeable accommodation demands.** If the proponent cannot reasonably foresee the accommodation demands, and provide the details of how these may be met, the project should not be approved. The EIS fails to meet the requirement of the SEAR to deal with the impacts of the development proposal. This failure is an insult to the Mid Western Regional Council (which will be dealing with the problem) and to the rural communities of Gulgong and Mudgee.

Cumulative Impacts

4. The EIS fails to provide an assessment of "cumulative impacts of the site and existing or proposed developments in the region in accordance with the Cumulative Impact Assessment Guideline (DPIE, Nov 2021)." The developer acknowledges potential cumulative impacts on accommodation demands and services in the area but makes no attempt to deal with them. As outlined above, any analysis is fobbed off with "we'll work it out as we go."

Section 6.13 of the EIS is asserted to deal specifically with all cumulative impacts. It lists Tallawang Solar Farm, 3 Energy Co transmission projects, Barneys Reef Wind Farm and Mayfair Solar Farm as within **close proximity** to the project and with overlapping timing. It accepts that impacts will be **significant but does not detail the number of proposed temporary workers for these projects.** In addition however, there are then Stubbo Solar Farm, a 13km EnergyCo 500kV transmission corridor, the southern extension of the Energy Co transmission network of 17 km, The Birriwa Solar Farm and BESS,

the Spicers Creek Windfarm and the Orana Wind Farm. All of these projects are less than 20 km from this development but the impacts are asserted to be *"limited by the distance"* between the project and the development. This is completely false. It is absurd and duplicitous to suggest that the cumulative impacts of these projects that are within 20 kms of the project development are limited by their distance from it when all projects are drawing on the resources of Gulgong and Mudgee.

The current anticipated temporary workforce for the region in 2025 when this project may commence is 5,000 workers. This is one fifth of the current total population of Mid-Western Regional Council area. The closest town is Gulgong. The township and area of Gulgong has one of the richest European cultural heritages in NSW. The literary history of Australia is strongly intertwined with Henry and Louisa Lawson. The cultural, social, agricultural and economic history is intertwined with the gold rushes and the pastoral development of the area. For many years, Gulgong graced our \$10.00 note. Local legend was that dogs wagged their tails up and down in Gulgong where the narrow streets of the town prevented a side to side movement. As a consequence, Gulgong has been an important cog in tourism in the Central West.

The cumulative impacts are ignored by this developer's EIS. It doesn't matter that tourism will be destroyed because visitors will not be able to get accommodation as the area buckles under the strain of the beds needed by thousands of temporary workers for an extended period. Nor is there any consideration of the strain on the health services which are already inadequate and the impact for the local community which the additional burden on these services will create.

Water

5. The development will consume 10.3 ML of extracted ground water per year during construction. This is without taking account of drinking water requirements which will be purchased locally. "The project is expected to obtain a WAL for the Lachlan Fold Belt MDB Groundwater Source through a temporary or permanent trade within the water trading market, with a small amount of potable water to be purchased off the local water utility for drinking water and primary contact water." The EIS asserts that these requirements will have "minimal impact" of other water users.

A Megalitre of water is 1,000,000 litres of water. So the water extraction is anticipated to be 10,300,000 litres per annum.

The developer fails to explain or detail the impacts which this large quantity of extraction will have on the **30 registered bores within five kilometres of the project area. Until this assessment has been specifically carried out, the developer has not satisfied the SEAR requirement of an assessment of the impact on agricultural resources and agricultural production on the site and region.**

Fires and Safety

6. It is well established that BESS have been increasingly used in recent years and as the number of installed systems has increased, so have the "field failures" that result in firstly fire and then explosions:

Lithium-ion batteries contain flammable electrolytes, which can create unique hazards when the battery cell becomes compromised and enters thermal runaway. The initiating event is frequently a short circuit which may be a result of overcharging, overheating, or mechanical abuse. During the <u>exothermic</u> <u>reaction</u> process (i.e., thermal runaway), large amounts of flammable and potentially toxic battery gas will be generated. The released gas largely contains hydrogen, which is highly flammable under a wide range of conditions. This may create an explosive atmosphere in the battery room or storage container. [Journal of Loss Prevention in the Process Industries, v.81, Feb. 2023]

Heat control is of great importance. As the battery ages and degrades, additional heat may be generated. The desired range of optimal operating temperature is narrow and can be difficult to maintain. Ordinary fire suppression measures cannot extinguish a Lithium chemical reaction fire. The heat of the fire is intense – between 900 and 1500 degrees Celsius – hot enough to damage structural steel. Lithium fires make their own oxygen. You cannot extinguish a lithium-ion battery fire. You can suppress it and try and keep it from spreading but you cannot put it out. A fire that occurred in a BESS in Victoria two years ago burned for three days and resulted in evacuation of residents because of the toxic fumes.

The EIS asserts that because the battery is within its own 25ha site, there is a sufficient separation distance for safety purposes. But the project BESS is being placed in a region which can experience extremes of summer heat. It is also, as the EIS admits, in an area where vegetation growth and development *"constitute a bushfire threat."* It will operate 24 hours a day, seven days a week, 365 days a year. It will be operated remotely with no permanent work force on site. There are no details of how it will be operated remotely and no details of how long it would take emergency services to reach the site. The 72 residences within 4 km of the site are ignored as well as the Gulgong township itself which is only 6.5 km away.

Decommissioning

7. The Project includes the decommissioning of the BESS. The full extent of the details provided in relation to decommissioning is that "at the end of the 25 year operational life of the BESS, the project will be either replaced and upgraded or built infrastructure will be fully decommissioned and removed, and the site rehabilitated. Works undertaken during decommissioning will not exceed the intensity associated with construction works."

Effectively then, the developer provides no details of the decommissioning of the BESS. The developer does not know what will happen at the end of the operational life of the BESS. What does it cost to decommission a BESS? What happens to the waste? How are the toxic and hazardous materials disposed of? What are the impacts for the local area of the waste disposal? Is there a proposal for a bond in relation to decommissioning costs? What is the extent of the workforce required for the decommissioning? All of these, and other matters, should be addressed.

If one examines BESS development proposals from overseas where there have been increasing BESS installations, the developer attaches a Decommissioning Plan. The Plan examines specifically the expected lifetime of the project and potential triggering events. It outlines the decommissioning sequence. It isolates the project components and the specific decommissioning activities. It also provides detailed decommissioning costs summaries. I looked at a BESS of similar size with a similar commencement date. I attach a copy to this submission. The total estimated decommissioning cost is nearly \$(US) 11 million.

As the EIS stands, this BESS will be built with no detail and no matters addressed in relation to it's decommissioning. This is cowboy stuff. If the development is approved on this basis, it is tantamount to ignoring any requirement to be responsible for decommissioning.

Visual

8. The visual impact assessment is required to address the likely visual impacts (including night lighting) of all components of the project (including, transmission lines and any other ancillary infrastructure) on surrounding residences, scenic or significant vistas and road corridors in the public domain.

It could be expected that the historic local town of Gulgong would accordingly be included in the visual impact assessment. Not so.

This project should be rejected. The EIS is patently deficient. The potential of two hours of storage in no way justifies the significant negative impacts and the cumulative impacts which the project will have.

Margaret Conn Yarrabin NSW

Edgewater BESS Project Appendix N – Decommissioning Plan

WISCONSIN POWER AND LIGHT COMPANY Docket No. 6680-CE-184

PSC REF#:458362 Public Service Commission of Wisconsin

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Decommissioning Plan Edgewater Battery Energy Storage System Project Sheboygan, Wisconsin

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Prepared by: Stantec Consulting Services Inc. 1165 Scheuring Road De Pere, Wisconsin 54115

Project No: 193709357 January 05, 2023

DECOMMISSIONING PLAN EDGEWATER BATTERY ENERGY STORAGE SYSTEM PROJECT, SHEBOYGAN, WISCONSIN

This document entitled Decommissioning Plan – Edgewater Battery Energy Storage System Project, Sheboygan County, Wisconsin, was prepared by Stantec Consulting Services Inc. ("Stantec") for the use of Wisconsin Power and Light Company (the "Client"), and the applicable regulatory agencies. Any reliance on this document by any other third party is strictly prohibited. The material in this document reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in this document are based on conditions and information existing at the time this document was published and do not take into account any subsequent changes.

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DECOMMISSIONING PLAN EDGEWATER BATTERY ENERGY STORAGE SYSTEM PROJECT, SHEBOYGAN, WISCONSIN

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DECOMMISSIONING PLAN EDGEWATER BATTERY ENERGY STORAGE SYSTEM PROJECT, SHEBOYGAN, WISCONSIN

1.0 INTRODUCTION

Wisconsin Power and Light Company (WPL) is proposing to construct the Edgewater Battery Energy Storage System Project (the Project) in the City of Sheboygan, Sheboygan County, Wisconsin.

The proposed Project is located adjacent to the Edgewater Generating Station in the City of Sheboygan, Wisconsin. The Project facilities encompass approximately 5.5 acres of land within perimeter fencing. The rated power capacity of the Project will be 99 megawatts (MW) alternating current [AC], with a 396 MW-Hour (MWh) energy storage capacity. Major components of the Project include battery energy storage systems, inverter/transformer power conversion systems, fire suppression systems, and associated structures and foundations.

The Edgewater BESS has a projected Commercial Operation Date in of 2025. This Decommissioning Plan (Plan) provides a description of the decommissioning and restoration phase of the Project. The decommissioning phase is assumed to include the removal of Project facilities as listed in Section 1.1 and shown in Figure 1.

This Plan provides an overview of the primary decommissioning Project activities, including the dismantling and removal of facilities, and subsequent restoration of land. A summary of estimated costs associated with decommissioning the Project is provided in Section 4.0. Summary statistics and estimated costs are provided assuming a 99-MW_[AC], 396 MWh Project design.

1.1 BATTERY STORAGE FACILITY COMPONENTS

The main components of the Project include:

1.2

• • • • • • •

Battery energy storage system (BESS) Inverter and transformer stations Site and internal access areas Foundation pads and footings for equipment Electrical cabling and conduits

Perimeter fencing Permanent stormwater basin

TRIGGERING EVENTS AND EXPECTED LIFETIME OF PROJECT

Project decommissioning may be triggered by an event such as the end of a contract or power purchase agreement. Typically, a Project will be considered to be abandoned if the Project is non-operational for a period of twelve (12) consecutive months. If properly maintained, the expected lifetime of a utility-scale BESS project is 15-20 years or greater with an opportunity for an extended project lifetime with equipment replacement or augmentation.

The battery units will be shipped to a recycling facility, as described further in Section 2.2. Other components of the BESS facility with resale value may be sold in the wholesale market.

Components with no wholesale value will be salvaged and sold as scrap for recycling or disposed of at an approved offsite

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licensed solid waste disposal facility (landfill). Decommissioning activities will include removal of the BESS and associated components as listed in Section 1.1 and described in Section 2.

1.3 DECOMMISSIONING SEQUENCE

Decommissioning activities of BESS projects typically begin within 12 months of the project ceasing operation and are anticipated to be completed within 6 months of start of decommissioning. Monitoring and site restoration may extend beyond this period to ensure successful revegetation and rehabilitation. WPL will be the responsible party for Project decommissioning. The anticipated sequence of decommissioning and removal is described below; however, overlap of activities is expected and will be determined by the chosen decommissioning contractor.

- Reinforce access and internal areas, if needed, and prepare site for component removal
- Install temporary fencing and best management practices (BMPs) to protect sensitive resources

and control erosion during decommissioning activities

- De-energize BESS
- Remove integrated battery storage units
- Remove power conversion systems (inverter/transformer stations)
- Remove support piers and foundations
- Remove electrical cables and conduits (less than three feet in depth)
- Remove perimeter fencing
- Fill stormwater basins and remove associated infrastructure
- Remove external and internal access areas and grade site
- De-compact subsoils (if required), restore and revegetate disturbed land to preconstruction land use to the extent practicable

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2.0 PROJECT COMPONENTS AND DECOMMISSIONING ACTIVITIES

The BESS facility components and decommissioning activities necessary to restore the Project area, as near as practicable, to allow pre-construction land use, are described within this section.

2.1 OVERVIEW OF BATTERY ENERGY STORAGE FACILITY SYSTEM

WPL anticipates utilizing approximately 1,184 self-contained battery storage units with a total energy storage capacity of approximately 396 MWh. The foundations include area for

additional future augmentation of 224 battery storage units. The Project area, including the permanent stormwater basins, encompasses approximately 5.5 acres. Prior to construction, land use within the BESS area was predominantly open grassland. Statistics and estimates provided in this Plan are based on the Golden Sigma battery storage units manufactured by SYL Battery.

Collection cabling will be installed below the surface at an approximate depth of 36 to 48 inches (three to four feet). Foundations, electric cabling, and conduit below the soil surface will be removed to a minimum depth of 36 inches. Public roads damaged or modified during the decommissioning and reclamation process will be repaired upon completion of the decommissioning phase.

Estimated quantities of materials to be removed and salvaged or disposed of are included in this section. Some of the materials described will have salvage value; although there are also some components that will likely have none at the time of decommissioning. All materials will be salvaged or recycled to the extent possible. All other waste materials will be disposed of in accordance with state and federal law at a licensed solid waste facility. If decommissioned prior to the end of their useful life, the battery packs may have value in a resale market, depending on their condition.

Table 1 presents a summary of the primary components of the Project included in this decommissioning plan.

Component		Unit of Measure
Golden Sigma Battery Storage Units with Integrated Ventilation and Fire Suppression	1,184	Each
BESS Blocks and Foundations	64	Units
Power Conversion Stations (Inverter/Transformers)	32	Each
Electrical Cables and Conduits (below ground cabling greater than 36 inches in depth will be abandoned)	6,292	Lineal Foot (estimated)
Gravel pad (aggregate base-fill within fenceline)	5.5	Acres (approximate)
Perimeter Fencing	2,940	Lineal Foot (approximate)
Permanent Stormwater Basins (totaling approximately 0.5 acres)	2	Each

Table 1 Primary Components of BESS Facility to be Decommissioned

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DECOMMISSIONING PLAN EDGEWATER BATTERY ENERGY STORAGE SYSTEM PROJECT, SHEBOYGAN, WISCONSIN

2.2 BESS BATTERY UNITS AND SUPPORT STRUCTURES

The Project includes 1,184 battery energy storage units, each with integrated fire suppression and ventilation. The system will provide 99 MW_[AC] of rated power capacity and 396 MWh of energy storage capacity. Statistics and estimates provided in this Plan are based on a SYL Battery's (SYL) 340.48 kWh Golden Sigma Battery Energy Storage System. Eighteen (18) to nineteen (19) battery units will be grouped together on each concrete pad foundation. Each foundation will include areas for three to four additional battery units (augmentation bays). The units are mainly comprised of materials such as Lithium-ion (Li-ion) batteries, steel, copper, plastic, and epoxies. If decommissioned prior to the end of their useful life, the battery packs will likely have value in a resale market, depending on their condition. Thirty-two (32) power conversion systems (inverter and transformer units) will be located adjacent to the BESS container units on skid assemblies mounted on steel reinforced concrete foundations or piles. The inverter/transformer stations and associated equipment will be deactivated, disassembled, and removed at decommissioning. Depending on condition, the inverter/transformer systems may be sold for refurbishment and re-use. Collection cabling will be installed below the surface at a depth of 36 inches (three feet) or greater. All above ground facilities and subsurface materials located less than three feet in depth will be removed and salvaged or disposed of in accordance with state and federal law at a licensed solid waste facility.

At the time of decommissioning the BESS and container units will be completely removed from the Project site. Unlike some BESS manufacturers, SYL does not currently have a program that accepts the responsibility of battery system disposal and recycling. Therefore, the cost of battery recycling, in addition to removal and shipping costs of the batteries, will be borne by the Project.

Battery packs may have value for reuse if decommissioned during the early stages of Project operation; however, the resale or salvage value is difficult to predict and will be dependent on the age of the batteries at that time. Recovery programs to extract valuable materials such as nickel, cobalt, copper, aluminum, steel, and lithium from the systems are expanding and improving at a rapid rate. A conservative cost to cover shipping and recycling of the used batteries is included in the BESS decommissioning cost estimate (Table 2).

The BESS concrete foundations and gravel pad will be removed and recycled or properly disposed of. The BESS site will be graded and restored to pre-construction condition, to the extent practicable.

2.3 ELECTRICAL CABLING AND CONDUITS

The Project's underground electrical collection system will be placed at a depth of 36 to 48 inches (three to four feet). The Plan assumes that electrical cabling located below the ground surface at 36 inches or deeper will be abandoned in place.

2.4 PERMANENT STORMWATER BASIN

The Project includes two permanent stormwater detention basins adjacent to the BESS facilities. The detention basins will total approximately 0.5 acre in size and will be removed at the end of the Project operational period. The basins will be filled with clean fill, finished with topsoil, and graded to restore pre- construction drainage patterns to the extent practicable.

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2.5 PERIMETER FENCING, SITE ACCESS AND INTERNAL ROADS

The Project will include a security fence around the perimeter of BESS area. The perimeter fence will be completely removed from the Project site during decommissioning. The BESS area contains aggregate fill approximately eight inches in depth, with the exception of the concrete foundations. An external access drive will provide direct access to the BESS facility from a public road. The gravel pad within the facility will provide access to the internal equipment.

Decommissioning activities include the removal and stockpiling of aggregate materials onsite for salvage preparation. Underlying geotextile fabric, where present, will also be removed during the decommissioning process. Fabric that is easily separated from the aggregate during excavation will be disposed of in an approved solid waste disposal facility. Fabric that remains with the aggregate will be sorted out at the processing site and properly disposed of. Following removal of aggregate and geotextile fabric, the disturbed areas will be graded, de-compacted, back-filled with native subsoil and topsoil, as needed, and land use restored as near as practicable to preconstruction conditions.

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DECOMMISSIONING PLAN EDGEWATER BATTERY ENERGY STORAGE SYSTEM PROJECT, SHEBOYGAN, WISCONSIN

1. 3.0 LAND USE AND ENVIRONMENT

2. 3.1 SOILS AND PREVIOUS LAND USE

The proposed solar facility is located on land currently vacant utilized for industrial purposes. Land disturbed by Project facilities will be restored in such a way as to be used in a reasonably similar manner to its original intended use as it existed prior to Project construction.

3.2 RESTORATION AND REVEGETATION

Project sites that have been excavated and backfilled will be graded as previously described to restore land as required by the regulatory commitments. Soils compacted during decommissioning activities will be de- compacted, as necessary, to restore the land to preconstruction land use. Topsoil will be placed on disturbed areas, as needed, and seeded with appropriate vegetation. Work will be completed to comply with the conditions agreed upon by WPL and the City of Sheboygan, or as directed by other federal, state, and local regulations in effect at the time of decommissioning

3.3 SURFACE WATER DRAINAGE AND CONTROL

Surface water conditions at the Project site will be reassessed prior to the decommissioning phase. WPL will obtain the required water quality permits, if needed, before decommissioning of the Project. Construction stormwater permits will also be obtained, and an Erosion Control and Stormwater Management Plan will be prepared describing the protection needed to reflect conditions present at that time. BMPs may include: construction entrances, temporary seeding, permanent seeding, mulching (in non- agricultural areas), erosion control matting, silt fence, filter berms, and filter socks.

3.4 MAJOR EQUIPMENT REQUIRED FOR DECOMMISSIONING

The activities involved in decommissioning the Project include removal of the above and below-ground components of the Project and restoration as described in Sections 2 and 3.2.

Equipment required for the decommissioning activities is similar to what is needed to construct the BESS facility and may include, but is not limited to: small cranes, low ground pressure (LGP) track mounted excavators, backhoes, LGP track bulldozers, LGP off-road end-dump trucks, front-end loaders, water trucks, disc plows and/or tractors, and ancillary equipment. Standard dump trucks may be used to transport material removed from the site to disposal facilities.

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DECOMMISSIONING PLAN EDGEWATER BATTERY ENERGY STORAGE SYSTEM PROJECT, SHEBOYGAN, WISCONSIN

4.0 DECOMMISSIONING COST ESTIMATE SUMMARY

Expenses associated with decommissioning the Project will be dependent on labor costs at the time of decommissioning. For the purposes of this report, approximate 2022 average market values were used to estimate labor expenses. Fluctuation and inflation of the labor costs were not factored into the estimates.

4.1 DECOMMISSIONING EXPENSES

Project decommissioning will incur costs associated with removal of facilities and disposal of components not recycled or sold for salvage, including materials which will be disposed of at a licensed facility, as required. Decommissioning costs also include backfilling, grading and restoration of the proposed Project site as described in Section 2. Table 2 summarizes the estimates for activities associated with the major components of the Project.

Table 2 Estimated Decommissioning Expenses

Activity	Unit	Quantity	Cost per Unit	Total
Overhead and management	Lump Sum	1	\$114,000	\$114,000
Battery pack and container removal	Each	1,184	\$382	\$452,288
Battery pack foundation removal	Each	64	\$5,126	\$328,064
Inverter/transformer stations with foundations	Each	32	\$2,430	\$77,760
Permanent stormwater basin removal	Lump Sum	1	\$38,605	\$38,605
Perimeter fence removal	Linear Feet	2,940	\$3.90	\$11,466
BESS yard removal	Lump Sum	1	\$81,750	\$81,750
Site restoration (remove fill, grading and revegetation)	Lump Sum	1	\$146,100	\$146,100
Total estimated cost for removal BESS facilities ar	nd site reste	oration		\$1,250,033
Total estimated cost for packaging and shipping batteries to recycling facilities				
Total estimated cost to recycle batteries				
Total estimated cost to decommission and recycle BESS facilities				\$10,701,733

4.2 DECOMMISSIONING REVENUES

Depending on market conditions and the age and condition of the facilities at time of decommissioning, there may be resale or salvage value in the components. No revenue from decommissioning the Project has been considered in this Plan.

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DECOMMISSIONING PLAN EDGEWATER BATTERY ENERGY STORAGE SYSTEM PROJECT, SHEBOYGAN, WISCONSIN

4.3 DECOMMISSIONING COST SUMMARY

Table 3 provides a summary of the estimated cost to decommission the Project, using the information detailed in Sections 4.1. Estimates are based on 2022 prices, with no resale or salvage revenue, market fluctuations or inflation considered.

Table 3 Decommissioning Cost Summary

Description	Cost
Decommissioning Expenses for Facility Removal and Restoration	\$1,250,033
Handling and Transportation Cost of Battery Pack Units to Recycling Facility	\$2,562,100
Recycling Cost of BESS Battery Components	\$6,889,600
Total Decommissioning Cost Including Transportation and Battery	\$10,701,733

Recycling Charges