

E: Nicola.Kennedy@gov.scot

Chris Calvert
Pegasus Group
By email only

By email only to: Chris.Calvert@pegasusgroup.co.uk

Our ref: ECU00004870

11th September 2023

Dear Chris Calvert,

ELECTRICITY ACT 1989

THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017

SCREENING OPINION OF THE SCOTTISH MINISTERS

IN RESPECT OF THE PROPOSED APPLICATION FOR CONSENT UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 TO CONSTRUCT AND OPERATE THE PROPOSED COCKENZIE BATTERY ENERGY STORAGE SYSTEM AT INGLIS FARM, COCKENZIE, EAST LOTHIAN, EH32 0JT.

Thank you for your request dated 19th July 2023 requesting a screening opinion in respect of a proposed application under section 36 of the Electricity Act 1989 (“the Electricity Act”) to construct and operate a battery energy storage system, comprising of battery-based electricity storage containers, associated power control infrastructure and ancillary development including transformers, substations and a temporary construction compound.

Background

The proposed development as described briefly above is entirely within the planning authority area of East Lothian Council (“the Planning Authority”).

The proposal requires to be screened by the Scottish Ministers in accordance with regulation 7 of the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (“the Regulations”). Following a request for a screening opinion made under regulation 8(1), Scottish Ministers are required to adopt an opinion as to whether the proposed development is or is not EIA development.

The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017

The Regulations set out at 8(2) the information that must accompany a request to the Scottish Ministers to adopt a screening opinion. Scottish Ministers consider that the information included in the screening request and documents supporting the request is sufficient to meet the requirements set out in regulation 8(2), and that the submitted information has been compiled taking into account the selection criteria in schedule 3 of the Regulations.

Statutory Consultation

Under regulation 8(5) of the Regulations, Scottish Ministers are required to consult the Planning Authority within whose land the proposed development is situated. The Planning Authority was consulted on 25th July 2023 and responded on 22nd August 2023 advising that, in their view, the proposed development does not constitute EIA development and therefore any application for construction and operation of the development described in the screening request does not need to be accompanied by an EIA report. A copy of the Planning Authority's response is annexed to this screening opinion (**Annex A**).

Scottish Ministers' Considerations

EIA development is defined in the Regulations, in respect of an application, as a proposed development, which is either Schedule 1 development, or Schedule 2 development likely to have significant effects on the environment by virtue of factors such as its nature, size or location. The proposed development constitutes Schedule 2 development in terms of the Regulations.

In adopting a screening opinion as to whether Schedule 2 development is EIA development, the Scottish Ministers must in all cases take into account such of the selection criteria in Schedule 3 of the Regulations as are relevant to the proposed development, and the available results of any relevant assessment.

Scottish Ministers have taken the selection criteria in Schedule 3 and all the information submitted in respect of the screening request in account and taken account of the views of the Planning Authority. Scottish Ministers adopt the opinion that **the proposal does not constitute EIA development and that the application submitted for this development does not require to be accompanied by an EIA report.**

In accordance with regulation 7(2), this opinion is accompanied by the following written statement with reference to the relevant selection criteria within Schedule 3 of the Regulations. In accordance with the Regulations, a copy of the screening opinion has been sent to the Planning Authority.

Written Statement

Characteristics of Development

The development covers an area of 8.9 hectares. The preliminary, indicative design layout provided is typical of electricity infrastructure development of this type and at this scale. It is anticipated that the battery components will be approximately 3.1 metres high, and there are some elements of a proposed substation which would be approximately 8.2 metres high.

The development would be in close proximity to an existing electricity substation. The site is crossed by existing electricity transmission infrastructure, and planning permission in principle

has been granted for additional transmission infrastructure in the immediate vicinity. Some natural resources would be used in the construction of the development which would be typical for a development of this nature, although it is noted that the development would be on prime agricultural soil. Some construction waste is expected, but there would be little operational waste, and some of the infrastructure would be suitable for recycling at end of life. There is the potential for pollution and nuisance associated with construction, including noise, run-off into the water environment and air quality impacts from vehicles, equipment, plant and machinery.. There are low risks of accidents or disasters or to human health which is typical for these types of development.

Location of Development

The land is currently used for agricultural purposes and constitutes high quality prime land. At 8.9 ha, this is not abundant relative to the amount of such land available and could be returned to its current use at the end of operation of the proposed development. The site is not within a sensitive area, although the Firth of Forth SPA is 600m to the North. The site is not considered to be rich in natural resources and is not close to wetlands, riparian areas, river mouths, coastal zones, mountain or forest areas. The development is close to residential areas in Prestonpans and Cockenzie, is close to an area designated as a Special Landscape Area (SLA), and lies within the area designated for the Battle of Prestonpans.

Characteristics of the Potential Impact

Visibility of the development is not predicted to extend widely, and any landscape and visual impacts will be screened by topography and perimeter landscape planting. The proposed screening will also provide biodiversity opportunities. Given its scale, location and proximity to existing infrastructure, effects on the SLA and on the heritage site, or on the SPA, are not considered to be likely to be significantly adverse. There are no likely significant effects predicted in relation to biodiversity, the landscape, cultural heritage, or material assets, taking into account the nature and scale of the development relative to its surroundings, and its location relative to any potential receptors. There are no significant effects considered to be likely on land, soil, water, air, or climate; effects on land and soil are considered to be of low to medium intensity given the nature of the development, with good potential for reversibility. It is considered given the low level of impacts expected and the context of the surrounding environment, that significant cumulative effects with other existing or approved development are unlikely.

Features of the proposed development and measures proposed to avoid or prevent significant effects:

No significant adverse effects are predicted. It is expected that any forthcoming application will provide appropriate assessments in relation to non-significant environmental effects.

This screening opinion does not constitute pre-application advice and is provided without prejudice to the assessment of any future application under section 36 of the Electricity Act 1989.

Yours sincerely

Nicola Kennedy

A member of the staff of the Scottish Government
(Cc: East Lothian Council)

Annex A



Our ref: CONS/GOV/2023 Cockenzie

Your Ref: ECU00004870

Date: 21 August 2023

Monica Patterson
EXECUTIVE DIRECTOR
(SERVICES FOR COMMUNITIES)

John Muir House
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East Lothian
EH41 3HA
Tel 01620 827827
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Sent via email to Econsents_Admin@gov.scot
Cc Carolanne Brown Carolanne.Brown@gov.scot

Dear Sirs,

I refer to your request received on the 25th of July 2023 for this Council's views on an EIA Screening Request for a battery energy storage system (BESS) facility in excess of 50MW, transformers, substations, associated infrastructure on land south of Inglis Farm, Cockenzie. I understand that you are considering this project as a generating station under Schedule 2 (1) of The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017. According to the Chief Planners letter of 27 August 2020, such works are to be considered electricity generating stations and therefore fall to be determined under the Electricity Act 1989. The works would therefore I assume also be considered as a generating station under the above EIA regulations and require Screening under Schedule 2(1), rather than the Schedule 2 (3A) of the The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017.

Please find our comments annexed below. Our comments are made solely for the purposes of helping you to prepare a Screening Opinion in response to a Screening Request submitted by the applicant. Our comments are given without prejudice to any comments or position the Council may take on any application that is made in relation to this proposal, under the Electricity Acts or otherwise.

Should you wish to discuss any of the above in more detail please contact the Policy and Strategy Team within the Planning Service via email to policy&projects@eastlothian.gov.uk .

Yours sincerely,

REDACTED

Keith Dingwall
Planning Service Manager
Development
Communities



Former Cockenzie Power Plant (land west of Inglis Farm Battery Storage – Screening Response

Description of the development

The Proposal is for a battery energy storage system (BESS) facility in excess of 50 MW, transformers, substations, associated infrastructure on land south of Inglis Farm, Cockenzie. The site area is approximately 8.9 hectares and is situated approximately 70-80 metres to the south of Cockenzie (The Chimneys and Inglis Farm), at its closest point.

The 'characteristics of the development'

The size of the development: The site covers 8.9ha in size, with the development including the following:

- Battery storage units – battery units arranged in rows around 7m in length, around 2.8m wide and around 3.1m in height;
- Switchgear containers – around 20m in length, around 3.5m wide and around 4.1m in height;
- Inverters and transformers local to the batteries will be around 3m in height;
- 3 substations and substation equipment, with some elements being in the region of 14m in height. Further details are as follows:

Substation 1 (132kV)

- Control room – around 6.5m in length, around 3.9m wide and 3m in height;
- 132kV transformer – around 6m in length, around 3.5m wide and around 3.8m in height;
- Removable panels;
- 132kV switch house enclosure around 8.1m in length, around 6m wide, and around 6.3m in height;
- Auxiliary transformer around 2.6m in length, 2.4m wide and around 3m in height; and
- Acoustic fence around 4m in height.

Substation 2 (132kV)

- Control room/auxiliary room – around 11m in length, around 4m wide and around 3m in height;
- 2no. 132kV transformers around 11m in length, around 9m wide and around 5.7m in height;
- Fire wall to south and in-between the 2no. 132kV transformers, around 6.1m in height;
- Acoustic fence around 4m in height;
- 132kV switch house enclosure around 15m in length, around 11m wide and around 8.2m in height;
- Auxiliary transformer around 2.6m in length, 2.4m wide and around 3m in height.

Substation 3

- Auxiliary transformer around 2.6m in length, 2.4m wide and round 3m in height;
- Customer control room around 11.4m in height; 3.3m wide and 2.5m in height.

Other Details

- Landscaped bunds;
- Landscape features around the site will include trees and hedgerow planting;
- Site fencing, access gate and CCTV – around 2.4m high security mesh fence with access gates, CCTV and light poles to be around 5m high; and
- Wires to existing pylons.

The proposed development would be on prime agricultural land (the highest class 1).

The site is within an area designated as EGT1 (Land at Former Cockenzie Power Station) Local Development Plan, adopted 27th September 2018).

The site falls within the boundary of the Battle of Prestonpans as shown on the Inventory of Historic Battlefields (21 September 1745). The closest residential receptors are circa 70 metres to the north, and north east of the site.

Comments on Schedule 3 Criteria.

The Schedule 3 Screening Criteria are set out below. Our comments are in *italics*.

Characteristics of development

1. The characteristics of development must be considered having regard, in particular, to—

(a) the size and design of the development

The proposal site is 8.9ha and is located approximately 70m to the south of Cockenzie and 170m north east of Prestonpans, at its closest points. The battery containers transformers, substations, associated infrastructure is estimated to occupy approx. 3ha of the entire site which is 8.9ha in size. The proposed battery containers, transformers, substations, associated infrastructure will be visible from a number of locations on the B1348 and from the proposed Linked Road that will connect the B1348 and the B6271 Road. The site will be visible from a number public rights of way and a number of points within the residential areas in Cockenzie.

(b) cumulation with other existing development and/or approved development

East Lothian hosts a significant amount of electricity generation and transmission infrastructure. This includes the power station at Torness, windfarms at Crystal Rig and Aikengall, and high voltage transmission infrastructure associated with this and the former Cockenzie Power Station. There are a number of proposals for electricity transmission infrastructure coming forward within East Lothian, including connections to offshore windfarms and upgrading of the electricity grid to allow transmission between Scotland and England. This includes a number of sites that are adjacent or very close to the proposed site (Seagreen 1A - planning reference 21/00290/PPM; Cockenzie Link Road - planning reference 22/00440/P; proposed onshore transmission works associated with the Inch Cape Offshore Wind Farm – planning reference 21/01474/PPM)

There are cumulative effects with this development which include significant cumulative loss of agricultural land including prime agricultural land; significant cumulative impacts on landscape and visual amenity in Cockenzie, Prestonpans and beyond.

(c) the use of natural resources, in particular land, soil, water and biodiversity

The proposal will use a considerable amount of land, and it is not clear if this will be returned to baseline condition when the proposal is decommissioned. The land is mapped by the John Hutton Institute as being Class 1 agricultural land, which is considered prime.

(d) the production of waste

The production of waste: *There would be very little waste associated with the operation of the development, with much of the apparatus suitable for recycling at the end of its life.*

The Screening Report states that there would be very little waste associated with the operation of the development, with much of the apparatus suitable for recycling at the end of its life. It does not

appear that there would be significant amounts of waste in construction or operation however the amount of material used and which is therefore potentially waste at the end of the life of the proposal is large and may be hazardous.

(e) pollution and nuisances

The proximity of the development to existing or proposed sensitive receptors to noise is unclear from the information provided. Adverse effects of noise during construction would be limited to a temporary period of time, the duration and extent of which would be typically secured by limited working hours set out in appropriately worded planning conditions, and within a CEMP. During the operational phase of the Development, low levels of noise can be generated by the electrical systems such as the coolers for the battery storage modules, inverters, transformers and substation. It is not clear if the separation distances to sensitive receptors or existing background noise sources from the existing Electricity Distribution Site at Cockenzie will be sufficiently high to mitigate against any noise arising from the operation of the development.

As such a Noise Assessment will be required and submitted with the Section 36 application to inform on potential effects. This should involve a background noise survey at up to three Noise Sensitive Receptor locations for 24 hours to determine background noise levels and modelling of noise due to the Development, in order to provide an analysis and assessment to BS 4142:2014 standards. Should significant noise impacts be identified, design input and further mitigation should be provided to ensure the Rating Level, LArTr, of noise associated with the operation of the proposed facility when measured at least 3.5m from the façade of any neighbouring residential property in freefield conditions, shall be no more than 5dB (A) above the background noise level, LA90,T. All measurements to be made in accordance with BS 4142: 2014+A1:2019 "Methods for Rating and Assessing Industrial and Commercial Sound".

The construction and any future decommissioning of the BESS would lead to an increase in traffic on the roads adjacent to the site. However, it is not consider that this increase would be significant in terms of transport and access impacts and would also be short lived. The operational phase would generate extremely low levels of traffic that would not lead to significant transport and access impacts.

(f) the risk of major accidents and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge

The proposed battery storage may play a significant part in tackling the impacts of climate change and in adopting renewable energy systems. An energy storage system of this scale may have significant positive impact. Ideally, we would have an understanding of embodied emissions of the battery storage and associated emissions from constructing the storage. From these measures we

could potentially identify when emissions are likely to peak, followed by supporting negative carbon emissions since the storage will help replace fossil fuels.

In addition, some consideration of minerals used for the batteries and depletion of resources would be interesting. What is the expected life time and how will the material be looked after, after its lifetime to support circular economy?

(g) the risks to human health (for example due to water contamination or air pollution)

From a contaminated land perspective there is the possibility that localised areas of contamination may exist associated with nearby areas of the former Cockenzie Power Station.

Location of development

2. The environmental sensitivity of geographical areas likely to be affected by development must be considered having regard, in particular, to—

(a) the existing and approved land use

The land is currently used for arable agriculture.

(b) the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground

The IPCC has reported recently on Climate Change and Land. See <https://www.ipcc.ch/srccl/chapter/chapter-5/> Chapter 5 on Food Security. This report notes that current food system feeds the majority of the world's population. Climate and non-climatic stressors impact food security. Climate change is already affecting food security through increasing temperatures and changing precipitation, as well as greater frequency of extreme events, and is predicted to further affect food security. Many practices can be scaled up to adapt to this. The UK imports 46% of the food it consumes (see Official Statistics UK Food Security Report 2021 <https://www.gov.uk/government/statistics/united-kingdom-food-security-report-2021/united-kingdom-food-security-report-2021-theme-2-uk-food-supply-sources>). The availability and suitability of land is noted as a factor affecting domestic production. Loss of prime agricultural land in particular cumulatively could therefore be considered significant.

(c) the absorption capacity of the natural environment, paying particular attention to the following areas—

(i) wetlands, riparian areas, river mouths

Solutions should be put in place to ensure the proposal does not add to surface flooding within and outwith the site boundary.

(ii) coastal zones and the marine environment

The proposal is unlikely to affect the coastal zone or marine environment

(iii) mountain and forest areas

Mountain and forest areas are unlikely to be affected.

(iv) nature reserves and parks

The proposal will not affect nature reserves or parks.

(v) European sites and other areas classified or protected under national legislation

The proposal is within 5 km of the Firth of Forth SPA (600m at its closest point).

(vi) areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure

SEPA will comment on water quality standards.

(vii) densely populated areas

The proposal is located close to the Edinburgh agglomeration, which is a densely populated area. The western area of East Lothian contained around 25% of its population in 2018.

(viii) landscapes and sites of historical, cultural or archaeological significance

The site is close to a designated Special Landscape area (SLA) 32 Prestonpans Coast.

In terms of the Historic Environment the proposed site lies within the area designated for the Battle of Prestonpans.

Although there may be a requirement for archaeological mitigation this will be best dealt with through the normal planning process. The need for and scope of any work will be dependent upon things like level of ground disturbance caused by the proposals, amount of previous ground disturbance etc.

Characteristics of the potential impact

3. The likely significant effects of the development on the environment must be considered in relation to criteria set out in paragraphs 1 and 2 above, with regard to the impact of the development on the factors specified in regulation 4(3), taking into account—

(a) the magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected)

The site is 8.9ha in size and due to its location and topography of the surrounding area the proposal will have visual impact beyond its boundaries. It should be noted that the screening request confirms

that the forthcoming planning application will comprise a detailed planning statement supported by, amongst others, Landscape and Visual Impact Assessment.

(b) the nature of the impact

There will be is an impact on loss of prime agricultural land which will be at least long term. There is likely to be a short term negative impact on greenhouse gas emissions however over the longer term the project will help avoid emissions for a given amount of electricity use, by helping to store electricity from intermittent sources of generation which tend to be renewable capacity.

There will be a cumulative visual impact on local landscape.

There may be an impact on the birds which are a qualifying interest of the Firth of Forth SPA and this should be considered through the Habitat Regulations Appraisal process.

For noise, number of sensitive receptors is low and mitigation will likely be possible to address any noise issues that may arise.

(c) the transboundary nature of the impact

Along with many other plans and projects, there is likely to be a very small impact on climate which is a global receptor. However, this does not appear on its own to impact the achievement of Scottish and UK government's targets to meet international commitments, and is therefore not significant.

(d) the intensity and complexity of the impact

The impacts appear to be in general not intense and not complex. If the storage were to fail for whatever reason, it is perhaps possible that there could be consequential impacts on the electricity grid. This is a system that is complex to balance and which is critical infrastructure. The Council does not have the expertise to comment on this.

It appears that the proposed development will lead to adverse landscape and visual in combination cumulative impact with other industrial structures including Scottish Power, Inch Cape , Seagreen 1A substations, Cockenzie link road and the existing pylons and power lines. It appears that the impacts of the development will be localised, with views being experienced by dog walkers, users of the adjacent play park, residential properties that back onto the site and car users on Cockenzie link road.

(e) the probability of the impact

Loss of prime agricultural land is certain to occur. We would consider a significant impact on qualifying species of the Firth of Forth SPA unlikely to occur but expect the advice of NatureScot will be taken on this. The likelihood of significant landscape and visual impact is difficult to determine on the information available.

(f) the expected onset, duration, frequency and reversibility of the impact

Impacts on prime agricultural land will start with construction. They may end on decommissioning though it is not clear from the information given. Impacts on landscape will start with construction and end with decommissioning. If planting is used to screen the proposal, this is likely to take time to mature so the landscape and visual impact of the proposal is likely to be greatest at construction and then lessen as landscaping matures. Impacts on farmland birds are likely to start at construction and remain for the life of the proposal.

(g) the cumulation of the impact with the impact of other existing and/or approved development

See 1b above

(h) the possibility of effectively reducing the impact

It is likely to be possible to partially screen views of the development from the existing residential areas in Cockenzie and Prestonpans as well as from the B1348 and the B6271 Road.

It should be emphasised that proposed development would be on prime agricultural land and any excavation works affecting subsoil should be kept to minimum.