REFERENCE DOCUMENTS for PROPOSED LARGER TURBINES AND MET MASTS AT UPPERCHURCH WINDFARM for EIAR 2021 and AA 2021

REFERENCE DOCUMENT 4 of 36

This document contains the following:

Amendments to Upperchurch Electrical Substation (LA Ref. 20/1048)

- Substation Amendments Grant of Permission with Conditions 2020
- Substation Amendments Planning Report 2020
- 2020 Substation Amendments Screening for EIA
- 2020 Substation Amendments Screening for Appropriate Assessment Report



Comhairle Contae Thiobraid Árann, Oifigí Cathartha, Cluain Meala, Co. Thiobraid Árann

Tipperary County Council, Civic Offices, Clonmel, Co. Tipperary Comhairle Contae Thiobraid Árann, Oifigí Cathartha, An tAonach, Co. Thiobraid Árann

Tipperary County Council, Civic Offices, Nenagh, Co. Tipperary t 0761 06 5000 e customerservice @tipperarycoco.ie

tipperarycoco.ie

TO: Pat Brett c/o Ecopower Developments Ltd

Zetec House

Purcellsinch IDA Business Park

Dublin Road Kilkenny **REF NO**: 20/1048

PLANNING & DEVELOPMENT ACT 2000 (as amended)
PLANNING & DEVELOPMENT REGULATIONS 2001 (as amended)
NOTIFICATION OF A GRANT OF PERMISSION
SUBJECT TO CONDITIONS

<u>DEVELOPMENT:</u> amendments to Upperchurch Windfarm Electrical Substation, authorised under An Bord Pleanala Ref No PL.22.243040; Tipperary County Council REF: NO. 13/510003. The amendments consist of: (a) Increase in size of the Substation compound yard; (b) Change to the layout of Electrical equipment in the substation compound yard; (c) Change in size, deisgn and increase in height of the two Control Buildings and (d) ancillary works. The application is accompanied by an Appropriate Assessment Report (Stage 1 - Screening) and Screening for Environmental Impact Assessment (EIA) Report

LOCATION: Knockcurraghbola Commons Co. Tipperary

PERMISSION was granted on 10/12/2020 for the development described above subject to the Notification of Decision to grant PERMISSION made on 05/11/2020

You are hereby advised that unless the development described is carried out by 11/08/2024, this permission will cease to have effect.

SIGNED ON BEHALF OF DIRECTOR OF SERVICES

Ar. Reyford

PLEASE RETAIN THIS DOCUMENT CAREFULLY AS COPIES COST A FEE OF €5.00

TIPPERARY COUNTY COUNCIL

PLANNING AND DEVELOPMENT ACT 2000, (as amended)

NOTIFICATION OF DECISION TO GRANT PERMISSION WITH CONDITIONS

TO:

Pat Brett, C/o Ecopower Developments Ltd

Ref No. 201048

Zetec House

Purcellsinch IDA Business Park

Dublin Road Kilkenny Application Received: 16/09/2020

In pursuance of the powers conferred upon them by the above mentioned Acts, Tipperary County Council has by Order dated 5/11/2020 decided to grant you PERMISSION for development of land namely:- amendments to Upperchurch Windfarm Electrical Substation, authorised under An Bord Pleanala Ref No PL.22.243040; Tipperary County Council REF: NO. 13/510003. The amendments consist of: (a) Increase in size of the Substation compound yard; (b) Change to the layout of Electrical equipment in the substation compound yard; (c) Change in size, deisgn and increase in height of the two Control Buildings and (d) ancillary works. The application is accompanied by an Appropriate Assessment Report (Stage 1 - Screening) and Screening for Environmental Impact Assessment (EIA) Report at Knockcurraghbola Commons Co. Tipperary.

FOR THE REASON(S) STATED IN SCHEDULE 1 AND SUBJECT TO THE CONDITION(S) STATED ON SCHEDULE 2 (1 TO 2, PAGES 1 TO 1)

If there is no appeal against the said decision, a Grant of PERMISSION in accordance with the Decision will be issued after the expiration of the period within which an appeal may be made to An Bord Pleanala. (See Footnote).

It should be noted that until a Grant of a Permission has been issued the development in question is NOT AUTHORISED.

The applicant is advised that unless the development described above is carried out within five (5) years from the date of Grant of PERMISSION, planning permission will cease to have effect. See Section 40 of the Planning and Development Act, 2000.

FOOTNOTE: An appeal against a decision of a Planning Authority under the Planning and Development Acts 2000 - 2010 may be made to An Bord Pleanala, 64 Marlborough Street, Dublin 1 (Tel. (01) 8588100). All Appeals either by the applicant or a third party must be received by An Bord Pleanala within four weeks beginning on the date of the making of the Decision by the Planning Authority. Appeals posted within the permitted period but received after the latest date will be invalid. (Note: Where the latest date for receipt of an Appeal falls on a day when the offices of the Board are closed (Week-Ends, Public Holidays, etc.), the latest date for receipt will be the next day on which the offices are open).

An appeal must be made in writing and be accompanied by (a) the name and address of the applicant, (b) the subject matter of the Appeal, (c) the full grounds of appeal and the reasons, considerations and arguments on which they are based, (d) the appropriate fee as set out on attached schedule, and (e) in the case of a third party appeal, the acknowledgement from this Planning Authority of receipt of submissions/observations made by the third party. Any appeal which does not meet all the legal requirements will be invalid and cannot be considered by the Board. Further details are available on the Board's Website www.pleanala.ie

A commercial development means development for the purposes of any professional, commercial or industrial undertaking, development in connection with the provision for reward of services to persons

Tipperary County Council

Schedule of Conditions - File Reference Number 201048

SCHEDULE ONE

It is considered that the development complies with the policies and objectives of the North Tipperary County Development Plan 2010, as varied and that the development does not have an adverse impact upon the character of the area or the amenities of adjoining properties.

SCHEDULE TWO

1. Save where modified by the following conditions, the proposed development shall be carried out and completed in accordance with the permission granted under PL Ref. 13/510003 (ABP Ref. PL.22.243040) save as modified by the drawings and documentation submitted with the planning application on 16/09/2020.

REASON: To clarify the terms of the permission.

 During development works, the developer shall ensure that material from the site is not spread or deposited on the public roadway and shall maintain the roadway in a clean, tidy and safe condition. In addition, appropriate advance warning signs shall be erected, in accordance with proposals, which shall have the prior written consent of the Planning Authority.

REASON: To prevent any traffic hazard or nuisance from such material.

TIPPERARY COUNTY COUNCIL

Planning Report

Planning & Development Acts 2000 as amended Planning & Development Regulations 2001 as amended

Planning Ref.:

Pl. Ref. No. 20/1048

Applicant:

Pat Brett c/o Ecopower Development Ltd

Application Type:

Permission

Development Address:

Knockcurraghbola, Commons, Co. Tipperary

Proposed Development:

Amendments to Upperchurch Windfarm Electrical Substation, authorised under An Bord Pleanala ref no PL.22.243040; Tipperary County Council REF: NO. 13/510003. The amendments consist of: a) Increase in size of the Substation compound yard; b) Change to the layout of Electrical equipment in the substation compound yard; c) Change in size, design and increase in height of the two Control Buildings and d) Ancillary works. The application is accompanied by an Appropriate Assessment Report (Stage 1 - screening) and screening for Environmental

ses only

Impact Assessment (EIA) Report

Date of Site Visit:

8th October 2020

Site Notice:

Adequately displayed

SITE LOCATION & DESCRIPTION:

The site is located in the townland of Knockcurraghbola approximately 3.8km south west of Upperchurch. The site is accessed via a private laneway off the local road L61881.

2. PROPOSED DEVELOPMENT:

The applicant has proposed amendment to the Upperchurch Windfarm Electrical substation as follows:

- a) Increase in size of the Substation compound yard;
- b) Change to the layout of Electrical equipment in the substation compound yard;
- c) Change in size, design and increase in height of the two Control Buildings and
- d) Ancillary works.

The application is accompanied by an Appropriate Assessment Report (Stage 1 - screening) and screening for Environmental Impact Assessment (EIA) Report

3. RELEVENT PLANNING HISTORY:

On site: None

Adjoining Lands:

18/600913 (ABP PL303634-19) Under appeal, permission refused for UWF related works. The development will facilitate the construction and operation of the already consented (but not built) Upperchurch Windfarm (UWF) Planning Ref 13/510003. Which will consist of a) 17.9km of Internal Windfarm Cabling; b) 13 no. Haul Route Works, to facilitate the haulage of turbine components to the Upperchurch Windfarm site; c) 1 no Telecom Relay Pole, measuring 18m in height, with telecoms relay equipment attached; d) 3 no Realigned Windfarm Roads, to realign two lengths of consented Upperchurch Windfarm (UWF) Roads and to provide access to the telecoms Relay Pole; e) 1 no Change of use of an existing 'Agricultural' entrance to 'Agricultural and Forestry' entrance; and f) Ancillary Works. This application is for a 10 year permission, under Section 41 of the Planning and Development Act, 2000, as amended. An Environmental Impact Assessment Report and Natura Impact Statement (Stage 2 Appropriate Assessment) have been prepared in respect of this application.

13/510003 (ABP ref. PL.22.243040) Permission granted for erect 22 no. wind turbines, overall height up to 126.6meters, 2 no. meteorological masts up to 80m in height with wind measuring equip attached, access roads, electrical substation compound & control buildings & ancillary site works. This application is for a 10 year permission. Application is accompanied by an EIS, which includes an Appropriate Assessment (Natura Impact Statement)

Enforcement: None

Pre-Planning:

PP6962 A pre-planning meeting was held with Carmel Daly

4. INTERNAL & PRESCRIBED BODIES REFERRALS

The file was referred to the following:

- Environment Section
- HSE
- Arts Council
- An Taisce
- Southern Regional Assembly
- Commission for Energy Regulation

A response was received from the HSE on 13th October 2020 and is summarised below:

- No proposed change to the location of the substation
- No material changes to the proposed use of natural resources, volumes of excavated materials, volumes of imported material etc
- The proposed substation will no involve additional storage of use, storage or transport of harmful substances, wastes etc
- No direct emissions to ground water of any foul waste water, all foul water shall be trapped and tested
- Buildings will appear as similar height
- All drinking water points on site to be protected

Contents of internal reports and report received from the prescribed bodies are noted.

5. OTHER OBSERVATIONS/SUBMISSIONS

4 no. Submissions received from the following:

- Edel and Paul Grace
- James and Tanya Embleton

CD

- Emer O' Siochru and Toal O' Muire
- Ned and Carmel Buckley

The issues are summarised as follows:

- Project Splitting
- Applicant should provide evidence of for the justification for the proposed development
- AA information submitted relies on assessments with An Bord Pleanala
- The permission granted relied on policies/plans which were not subject to correct SEA
- Applications relies heavily on previously submitted AA/EIA information
- Impact on Human Health and community
- Proposed development shall not be granted with pending applications with An Bord Pleanala
- Impact on Hen Harrier

The contents of all observations/submissions received have been considered in the assessment of this planning application as set out under Section 8 below.

6. REPRESENTATIONS

None received.

7. PLANNING POLICY OVERVIEW

North Tipperary County Development Plan 2010, as varied:

Policy DM1: Development Standards

It is the policy of the Council to require proposed development to comply with the relevant standards identified in Chapter 10 Development Management Standards.

Policy LH6: Natura 2000 Sites and Protected Species

It is the policy of the Council to ensure the protection, integrity and conservation of existing and candidate Natura 2000 sites and Annex I and II species listed in EU Directives. Where it is determined that a development may independently, or cumulatively, impact on the conservation values of Natura 2000 sites, the Council will require planning applications to be accompanied by a Natura Impact Statement in accordance with 'Appropriate Assessment of Plans and Projects, Guidelines for Planning Authorities', (DEHLG 2009) or any amendment thereof.

Policy LH2: Protection of Visual Amenity and Character of Primary and Secondary Amenity Areas

It is the policy of the Council to ensure the protection of the visual amenity, landscape quality and character of designated Primary and Secondary Amenity Areas. Developments which would have an adverse material impact on the visual amenities of the area will not be permitted. New development shall have regard to the following:

- a) Developments should avoid visually prominent locations and be designed to use existing topography to minimise adverse visual impact on the character of primary and secondary amenity areas.
- b) Buildings and structures shall ensure that the development integrates with the landscape through careful use of scale, form, finishes and colour.
- c) Existing landscape features, including trees, hedgerows and distinctive boundary treatment shall be protected and integrated into the design proposal.
- d) Developments shall comply with the development standards set out in Chapter 10 and, as appropriate, the Rural Housing Design Guidelines contained in Appendix 5.

8. PLANNING APPRAISAL

a) Policy Compliance

I am satisfied the proposed development complies with the policies and objectives of the North Tipperary County Development Plan 2010, as varied and is therefore acceptable in principle.

b) Design/Layout

The applicant has proposed to amend the layout and size of the previously permitted control building. It is proposed to increase the size of the substation compound from 2176sqm to 3107sqm. One of the control buildings will be increased in size from 99sqm to 176sqm and the two control buildings will be increased in height from 6.4m to 7m and 8.3m respectively. The buildings will be constructed on different levels so when viewed they will appear as similar height. I am satisfied the proposed design and layout is acceptable in principle.

c) Services:

Roads: Entrance permitted under wind farm application

Water Supply: rainwater harvesting system

Waste Water Treatment: On site treatment system

Surface Water: Drainage system permitted under Wind farm application

- d) Part V: Part V is not applicable. Section 97 Exemption Cert submitted No.
- e) Environmental Impact Assessment (EIA):

The proposed development is for a substation and is not a type of development included for under Schedule 5 of the Planning and Development Regulations 2001, as amended. The applicant has submitted an Environmental Impact Assessment Screening Report.

The substation was permitted under PL ref. 13/510003 (ABP ref. PL.22.243040) and the subject application relates to an amendment to the size and layout of the proposed control buildings. The proposed development is not considered to fall into a mandatory threshold for EIA as set out under Schedule 5, Part 1 and Part 2 of the Planning & Development Regulations, 2001 (as amended) and is not considered sub-threshold development. The application relates to an amendment of the substation as previously permitted and therefore on this basis I am satisfied there is no likelihood of significant effects on the environment arising from the development and EIA is not required.

f) Appropriate Assessment (AA):

The proposed development has been screened as to the requirement for AA and it has been determined that AA is not required. See Screening Report attached.

g) Flood Risk:

None identified on site.

9. **DEVELOPMENT CONTRIBUTIONS**

Development Contributions will be levied in accordance with Class 4 of the Tipperary County Council Development Contribution Scheme 2020.

Contributions will be applied on the increased floor area of 112.54sqm.

10. CONCLUSIONS/RECOMMENDATION

Having examined the plans and particulars submitted with the planning application and the foregoing matters, it is recommended that;

Permission be Granted subject to conditions as set out below:

SCHEDULE:

SCHEDULE A

It is considered that the development complies with the policies and objectives of the North Tipperary County Development Plan 2010, as varied and that the development does not have an adverse impact upon the character of the area or the amenities of adjoining properties.

SCHEDULE B

1. Save where modified by the following conditions, the proposed development shall be carried out and completed in accordance with the permission granted under PL ref. 13/510003 (ABP ref. PL.22.243040) save as modified by the drawings and documentation submitted with the planning application on 16/09/20.

Reason: To clarify the terms of the permission

 During development works, the developer shall ensure that material from the site is not spread or deposited on the public roadway and shall maintain the roadway in a clean, tidy and safe condition. In addition, appropriate advance warning signs shall be erected, in accordance with proposals, which shall have the prior written consent of the Planning Authority.

Reason: To prevent any traffic hazard or nuisance from such material.

District Planner:

Date: 2nd November 2020

Senior Executive Planner:

Tipperary Planning Authority. Viewing Purposes Only

CD Page 6

	Prelimina	ry Examination	
Planning Reference:	nning Reference: 20/1048		
Site location: Knoo		ckcurraghbola, Commons, Co. Tipperary	
	authorised und Tipperary Co amendments of compound yard in the substation increase in heil works. The a	der An Bord Pleanala bunty Council REF: consist of: a) Increase id; b) Change to the layor on compound yard; c) Change to the two Control Enplication is accompar	rm Electrical Substation, ref no PL.22.243040; NO. 13/510003. The n size of the Substation at of Electrical equipment range in size, design and Buildings and d) Ancillary nied by an Appropriate ening) and screening for
Proposed Development:		Impact Assessment (EIA	
	Exa	amination	S
		Yes / No/ Uncertain	Comment
Is the size of the development context of the existing environment of the existing env		No	Bn.
Is the proposed development located on, in, adjoining, or have the potential to impact on a sensitive site or location?		No No)
Will the development result in the production of any significant waste, or result in emissions or pollutants?		No	
	Con	clusions	
Based on a preliminary exam likelihood of significant effect:	ination of the nature,	size or location of the deve	elopment, is there a real
There is no real likelihood of on the environment		EIAR not required	V
There is significant and realistic doubt in regard to the likelihood of significant effects on the environment		Screening Determination Required	
		Schedule 7A information required?	
There is a real likelihood of sthe environment	ignificant effects on	EIAR is required	
Name:	Carmel Da	aly	Date: 02/11/20
CONTRACTOR NO. VO. VOICE			

HABITATS DIRECTIVE ASSESSMENT SCREENING REPORT FOR PLANNING APPLICATIONS

Planning Application Ref. No.: 20/1048

(A) DESCRIPTION O	F PROJECT AND LOCAL SITE:
Site location:	Knockcurraghbola, Commons, Co. Tipperary
Proposed development:	Amendments to Upperchurch Windfarm Electrical Substation, authorised under An Bord Pleanala ref no PL.22.243040; Tipperary County Council REF: NO. 13/510003. The amendments consist of: a) Increase in size of the Substation compound yard; b) Change to the layout of Electrical equipment in the substation compound yard; c) Change in size, design and increase in height of the two Control Buildings and d) Ancillary works. The application is accompanied by an Appropriate Assessment Report (Stage 1 - screening) and screening for Environmental Impact Assessment (EIA) Report
Site size:	1.4ha
Floor Area of Proposed Development:	275.4sqm
Is the application accompanied by EIS	No
	OF THE RELEVANT NATURA 2000 SITE(S):
Natura 2000 site(s) within 15km and distance to same:	SPA 004165 SLIEVEFELIM TO SILVERMINES MOUNTAINS SAC 000939 Silvermine Mountains SAC 002165 Lower River Shannon SAC 001197 Keeper Hill SAC 002258 Silvermines Mountains West SAC 002137 Lower River Suir SAC 002125 Anglesey Road
Sites within the zone of influence:	SAC 002124 Bolingbrook Hill SPA 004165 SLIEVEFELIM TO SILVERMINES MOUNTAINS SAC 002137 Lower River Suir
S. C.	SAC 002137 Lower River Suir SAC 002165 Lower River Shannon
Conservation objectives/qualifying interests of the site and the factors that	This section is to be completed with respect to the Natura 2000 site within the zone of influence
contributes to the	SPA 004165 SLIEVEFELIM TO SILVERMINES MOUNTAINS

conservation value of the site: (which are taken from the Natura 2000 site synopses and, if applicable, a Conservation Management Plan: (all available at www.npws.ie) (ATTACH INFO if necessary)

Hen harrier – To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA

Key Environmental conditions to support site integrity.

Favourable conservation status of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing, and
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

	sider the potential for direct impacts on habitats sider proposed developments within 200m of the SAC/SPA	Y/N and Comment
1.1	Could the proposed project give rise to direct loss of habitats for which the SAC/SPA is designated, or other habitats occurring within the SAC/SPA?	N
1.2	Could the proposed project give rise to increased human usage/access to the site, which could potentially cause deterioration of certain habitat types eg woodlands, wetlands or riverbanks. Consider proposals for development of a large scale within 1km of sensitive woodlands eg large scale residential development or hotels. Consider proposals for the development of paths or cycleways along the river.	N
1.3	Does the proposed project involve development of drainage systems? If yes, could this cause drying out of wetland or woodland habitats within the SAC/SPA?	N
the Con	sider the potential for impacts on water quality within SAC/SPA sider all proposed developments within the catchment of the C/SPA	Y/N and Comment
2.1	Are there any rivers, streams or drains connecting the	N

	proposed development site and the SAC/SPA? If yes, consider whether there is potential for construction related impacts on water quality.		
2.2	Would the proposed project result in surface water or other discharges to rivers, streams or drains directly connected to the SAC/SPA? If yes, consider whether the discharges could give rise to increased eutrophication or other pollution risk within the cSAC/SPA. Consider whether increased surface water discharge could give rise to increased risk of downstream storm water surges.		
2.3	Would the proposed project require an industrial waste water discharge license? If yes, consider the potential impacts of the discharge on water quality in the SAC/SPA.		
2.4	Is the proposed project located within a flood zone? If yes, consider whether there is potential for construction or operational related impacts on water quality in the SAC/SPA; consider whether the proposed project increases flood risk elsewhere in the catchment and particularly the cSAC/SPA; or increases the risk of stormwater surges downstream.	N PUID	
2.5	Are the proposals for waste water treatment in compliance with EPA requirements?	N/A	
2.6	Could the proposed project contribute to cumulative negative impacts on water quality? Consider the current status of the freshwater system (see www.wfdireland.ie).	N	
2.7	Would the proposed project involve dredging (construction or ongoing maintenance related)?	N	
	ider potential for impact on species	Y/N and Comment	
	water Pearl Mussel		
3.1	Protection of this species will be achieved by the protection of water quality (see section 2 above), by the protection of river habitats (see section 1 above), and by the maintenance of free passage for fish.	Y	
	water Crayfish		
3.2	Protection of this species will be achieved by the protection of river habitats (see section 1 above).	Υ	
	species including Salmon, Lamprey spp. and Twaite Shad	.,	
3.3 Otter	Protection of these species will be achieved by the protection of water quality (see section 2 above), by the protection of river habitats (see section 1 above), and by the maintenance of free passage for fish.	Y	
3.4	Would the proposed project result in any interference with river banks within the SAC/SPA?	N	
3.5	Would the proposed project result in increased levels of disturbance to the habitat of the Otter?	N	
Bats			

3.6	Would the proposed project involve the removal of trees, hedgerow or woodland?	N
3.7	Does the proposed project involve the repointing of old bridges or the restoration or demolition of old buildings or other structures?	N

D) NPWS ADVICE:	
Summary of advice received from NPWS:	N/A

With Or He	concludes that : (Tick $[\ \ \]$ the appropriate Assessment is not required be cessary to the nature conservation materials.)	ecause the project is directly connected		
B) No po required.	with or necessary to the nature conservation management of the site. B) No potential for significant effects therefore Appropriate Assessment is not required.			
Impact Sta	cant effects are certain, likely or unc atement under Section 177T(5) of the eject if too potentially damaging or in			
Name:	Carmel Daly	11/9		
Position:	District Planner	Date: 02/11/	/20	
	Planning			





Site notices in place

Screening for EIA

-

Proposed Amendments to Upperchurch Windfarm Electrical Substation

1. <u>Introduction to EIA Screening Report</u>

Screening is the initial stage in the Environmental Impact Assessment (EIA) process and examines whether a development proposal is likely to cause significant effects on the environment and, as such, whether or not EIA is required.

This Report is being submitted with a planning application for a Proposed Amendments to Upperchurch Windfarm Electrical Substation (*Proposed Amended Substation*), in order to facilitate Tipperary County Council in the examination of whether <u>there is or there is not</u> a real likelihood of significant effects on the environment, which then determines the requirement for EIA.

This Screening for EIA Report has been prepared Julie Brett Lead EIA Report Coordinator (Dip. EIA), Ecopower Limited. The following sources of information¹ were used for the receiving environment and potential impacts and impact pathways;

- Upperchurch Windfarm (UWF) 2014 Grant and An Bord Pleanála Inspector's Report (including Inspector's EIA and AA) ABP Ref. PL22.243040
- Upperchurch Windfarm 2013 EIS and 2013 Response to RFI

The Report has regard to the criteria set out in Schedule 7 to the Planning & Development Regulations 2001. The Guidance documents used for this EIA Screening exercise are:

- Guidelines for Planning Authorities and An Bord Pleanála on carrying out EIA (DHPLG, August 2018);
- Guidance on Screening (EU, 2017).

The EIA Screening Report below is based on the Screening Checklist supplied in Part C of Guidance on Screening (EU, 2017). The EIA Screening Report comprises a preliminary examination of the nature, size and location of the Proposed Amended Substation and is based on previous assessments and the Promotor's professional expertise and experience of the site.

1.1 Consideration of the Passage of Time

The environmental surveys and assessments for the original (2013) planning application for the now authorised Upperchurch Windfarm date back a number of years (2012 to 2014). However, in order to take into account relevant changes in the baseline environment that may have occurred due to the passage of time, the results of environmental surveys for planning applications relating to the other related elements of the whole Upperchurch Windfarm project, namely UWF Related Works and UWF Grid Connection which took place during 2016 to 2019, are taken into consideration herein.

1

http://upperchurchwindfarmgridconnection.ie/environment/volume-f-reference-documents-for-other-elements-of-the-whole-uwf-project/

2. <u>EIA Screening Report</u>

2.1 Description of Authorised Substation and Proposed Amended Substation

The Upperchurch Windfarm Electrical Substation (**Authorised Substation**) is part of Upperchurch Windfarm, which was authorised in 2014 but is not yet constructed. The authorised Upperchurch Windfarm is part of a larger whole Upperchurch Windfarm project, which also includes UWF Grid Connection, UWF Related Works, UWF Replacement Forestry, and UWF Other Activities.

The Authorised Substation consists of a hardcore compound yard, surrounded by palisade fencing, with 2 No. control buildings, electrical equipment and apparatus within. It is proposed to increase the size of the hardcore compound yard by extending the perimeter palisade fencing. This is to accommodate a change to the layout of electrical equipment in the compound yard and a change in size and design of the two control buildings (Proposed Amended Substation). There will be no increase in the authorised hardcore area, because the extended yard can be accommodated on the windfarm road area, outside of the substation fencing.

<u>Description of the Authorised Substation</u>: The Authorised Substation consists of a hardcore compound yard 2176m² in area (59.24m x 36.73m), surrounded by palisade fencing (2.6m in height) with 2 No. entrance gates. Inside the palisade fence, in the hardcore compound yard, are 2 No. control buildings, 99.06m² (15.65m x 6.33m) and 99.67m² (15.74m x 6.33m), both with an overall height of 6.4m; electrical equipment and apparatus; a lightening protection monopole; and underground and overhead cabling. The area of hardcore is authorised to extend 6m outside the palisade fencing, as part of the windfarm road areas.

Description of Proposed Amended Substation: It is proposed to increase the size of the hardcore compound yard from 2176m² to 3107m² in area (68.64m x 45.27m), by extending out the perimeter palisade fencing. This is to accommodate a change to the layout of electrical equipment in the compound yard, and a change in size and design of the two control buildings. It is proposed to increase one of the control buildings from 99.67m² to 176.8m² (17m x 10.4m), with welfare facilities to be installed. Both control buildings will increase in height from 6.4m to 7.05m and 8.36m. There will be no increase in the authorised hardcore area, because the extended yard can be accommodated on the windfarm road area outside the substation fencing. The hardcore drainage system, which includes a settlement pond, will remain as authorised. Also, to reduce excavations, under the new design layout only part of the hardcore area will be excavated to the authorised ground level. The amended control buildings will be built on different levels, with the taller of the two buildings on the lower level (2m below). This will result in the amended control buildings presenting to the viewer, as of similar height.

There is no change to the location of the substation, the Proposed Amended Substation is within the authorised hard cored area at the Authorised Substation. The substation compound is located in a grassland field, adjacent to a forestry plantation, sited adjacent to a private paved road which is accessed from a public local road (L6188-0, to the north).

See figures over

SEIA Figure 1: Site Location of the Proposed Amendments to Upperchurch Windfarm Electrical Substation

SEIA Figure 2: Layout of the Proposed Amended Substation compared to the Authorised Substation

SEIA Figure 3: Elevation of the Proposed Amended Substation compared to the Authorised Substation

<u>Purpose of the Proposed Changes:</u> The Proposed Amended Substation are required because of updates to ESB Networks specifications for 110kV substations, which specify larger spacing between electrical equipment, larger control buildings and the provision of welfare facilities within. The welfare facilities proposed, comprise a rainwater harvesting system and an underground tank for waste water collection which will be emptied by a suitably licensed waste contractor.

<u>Separation Distance from Sensitive Sites:</u> There will be no changes to the separation distance from the nearest residences (0.35km North); the nearest waymarked trail, Ormonde Way (0.8km East) and the nearest village, Upperchurch Village (3.8km East), due to the Proposed Amended Substation.

There will be no changes to the separation distances from protected areas due to the Proposed Amended Substation:

- The nearest SAC is the Anglesey Road SAC, 4.3km to the South;
- The Lower River Suir SAC, 14.3 river kilometres downstream,
- The nearest SPA is Slievefelim to Silvermines Mountains SPA, 2.2km to the West;
- The nearest NHA is Mauherslieve Bog NHA, 6.7km to the West;
- The nearest pNHA is Nenagh River Gorge pNHA, 7.2km to the Northwest; and
- The nearest RMP is a Megalithic tomb unclassified (TN039-050) 0.2km to the South.

There are no wetlands, no watercourses, underground waterbodies or other waterbodies on or around the Authorised Substation. The area is not a coastal zone, not mountainous and there is no native woodland.

With regard to important or sensitive species, while hen harrier nest within the nearby (2.2km) SPA, vantage point surveys carried out for Upperchurch Windfarm (2011 to 2012), UWF Related Works (2018, 2019) and UWF Grid Connection (2019, 2020), show that the windfarm site is infrequently used by foraging hen harrier, and not used at all by nesting harrier, The closest hen harrier breeding activity recorded during the 2020 breeding season was at a traditional nest site > 5km from the closest turbine. Bats were recorded roosting in farm buildings 140m East of the Authorised Substation in 2012, surveys carried out in 2016 and 2017, show that these buildings continue to support roosting populations. There are no other protected, important or sensitive species of fauna or flora within or in close proximity of the Authorised Substation location.

<u>Summary of Receiving Environment:</u> The Authorised Substation is not located within or around an area which contains important, high quality or scarce resources. The Authorised Substation is located in an improved grassland field, adjacent to a commercial forestry plantation. No areas within or around the site are subject to pollution or environmental damage. The existing land uses in the area are commercial forestry and agriculture, with wind farming in the wider area.

The Authorised Substation, is sited adjacent to a private paved road which is accessed from a public local road (L6188-0, to the north). There are 11 houses between 350m and 800m to the north of the Authorised Substation, however the substation is screened from all but two of these houses, due to landform. The Authorised Substation site is intermittently visible along a 1km stretch of local road, L4139-0, to the east, this road is a lightly trafficked local rural road.

The nearest industry, commerce, recreation, public open space, community facilities is 3.8km east at Upperchurch village, the nearest school, places of worship, community facilities being within the environs of Upperchurch village. The nearest town is Thurles, 17km to the east. The nearest quarry is 3.1km to the southeast.

The site of the Authorised Substation is not susceptible to earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions. The construction and operation of the Authorised Substation (or Proposed Substation if permitted), will be carried out as per the Health and Safety Guidelines for the Onshore Windfarm Industry.

<u>Summary Impact on Resources:</u> No material changes are required to the use of natural resources, nor to the volumes of excavations, nor to the volumes of imported materials, nor to levels or durations of construction or operational works and activities beyond that already authorised for Upperchurch Windfarm Substation. The construction of the Proposed Amended Substation will not involve the additional use, storage, transport, handling or production of potentially harmful substances or materials or increase the volumes of solid wastes.

See Application Drawings Pack for:

Drawing Number	Drawing Title
Drg. No. UWF AS 01	Site Location – Wider Area
Drg. No. UWF AS 02	Site Location Map
Drg. No. UWF AS 03	Site Layout
Drg. No. UWF AS 04	Site Layout

Drg. No. 05655-DR-201 Site Layout Plan

Drg. No. 05655-DR-202 Site Elevations

Drg. No. 05655-DR-203 Site Sections

Drg. No. 05655-DR-204 IPP Control Building Plan & Elevations

Drg. No. 05655-DR-205 ESB Control Building Plan & Elevations

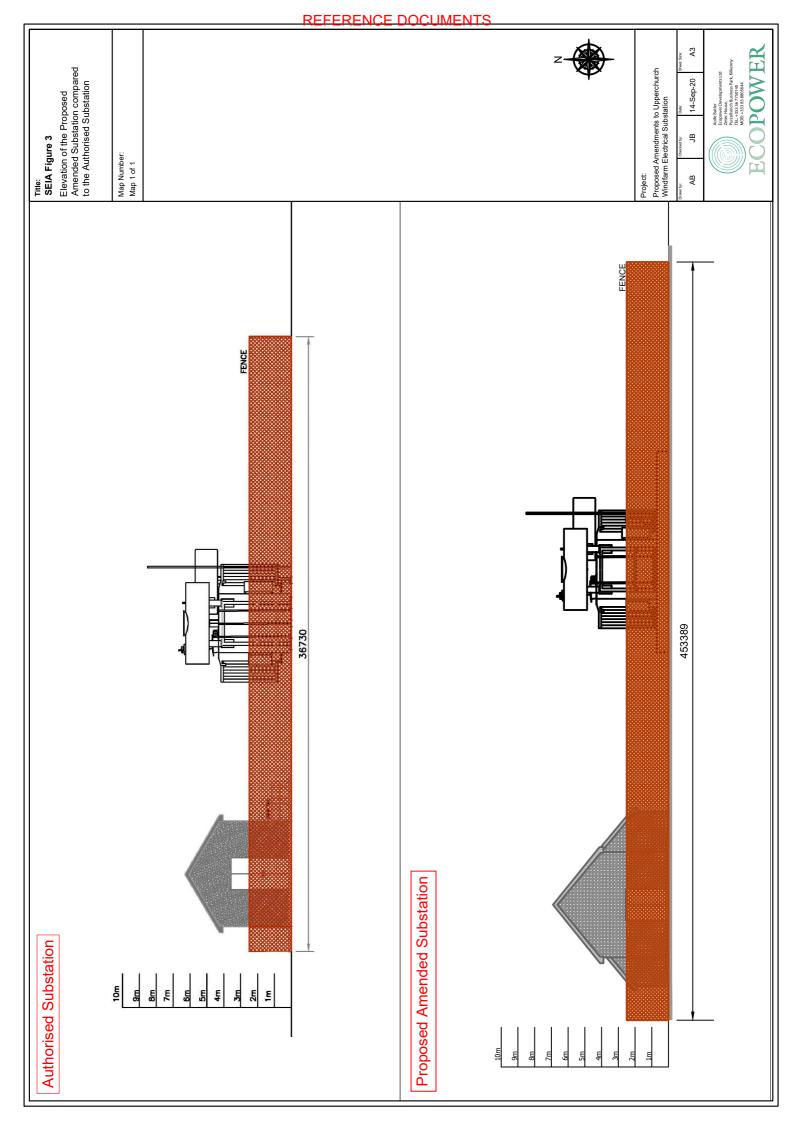
Drg. No. 05655-DR-206 Gate & Fence Details

Drg. No. 05655-DR-207 Drainage Details

Drg. No. 05655-DR-208 Lightning Monopole Foundation Details-12.5m & 15m Masts

Drg. No. 05655-DR-209 Cable Duct Details

Drg. No. 05655-DR-210 Site Compound Details



2.2 Screening for EIA Report for Proposed Amendments to Upperchurch WIndfarm Electrical Substation

	QUESTIONS TO BE CONSIDERED	Answer: Yes/No/? - Briefly Describe	Is this likely to result in a significant impact? Why?
1	WILL CONSTRUCTION, OPERATION, DECOMMISSIONING OR DEMOLITION WORKS OF THE PROJECT INVOLVE ACTIONS THAT WILL CAUSE PHYSICAL CHANGES IN THE LOCALITY (TOPOGRAPHY, LAND USE, CHANGES IN WATERBODIES, ETC.)?	surrounded by palisade fencing, with 2 No. control buildings, electrical equipment and apparatus within. The construction of the Proposed Amended Substation will involve increasing the size of the control buildings and the hardcore compound yard. However, The larger control buildings and extended yard can	authorised hardcore area and therefore no additional excavations resulting in changes to topography and land use beyond that authorised. There is no additional drainage required. Construction and Operation and Decommissioning of the Proposed Substation will be the same as for the Authorised Substation and therefore there is no potential for significant impacts to topography, land use or waterbodies as a result of the Proposed Amendments to the Upperchurch Windfarm Electrical
2	WILL CONSTRUCTION OR THE OPERATION OF THE PROJECT USE NATURAL RESOURCES SUCH AS LAND, WATER, MATERIALS OR ENERGY, ESPECIALLY ANY RESOURCES WHICH ARE NON-RENEWABLE OR ARE IN SHORT SUPPLY?	NO – Because the Proposed Amended Substation can be accommodated within the hardcore footprint of the Authorised Substation, there will be no requirement for any additional land, no additional excavations of soils, and the construction of the Proposed Amended Substation will not require additional natural material such as rock. YES – Small volumes of water will be required for the Proposed Amended Substation as welfare facilities are required in one of the Proposed Substation control buildings, the water required for the welfare facilities will be sourced from rainwater harvested on site, the volumes required will be minimal and the use of a rainwater harvesting system avoids any requirement for an on-site well, spring or public water supply.	Substation will not cause any increase in the use of natural resources (except rainwater) beyond that already authorised. The small volumes of rainwater which will be used for welfare facilities will be collected using a rainwater harvesting system. There is no potential for significant impacts on Natural Resources as a result of the Proposed Amendments to

	QUESTIONS TO BE	Answer: Yes/No/? - Briefly Describe	Is this likely to result in a significant impact? Why?
3	WILL THE PROJECT INVOLVE THE USE, STORAGE, TRANSPORT, HANDLING OR PRODUCTION OF SUBSTANCES OR MATERIALS WHICH COULD BE HARMFUL TO HUMAN HEALTH, TO THE ENVIRONMENT OR RAISE CONCERNS ABOUT ACTUAL OR PERCEIVED RISKS TO HUMAN HEALTH?	production of potentially harmful substances or materials (such as fuels, oils, excavated soils). YES – It is proposed to provide welfare facilities within the control buildings of the Proposed Substation. Waste water from the new welfare facilities will be stored in underground tanks, instead of an on-site septic tank and percolation area. This waste water will be collected regularly by a suitably licensed waste operator for treatment in a licensed waste water treatment facility. The volumes of waste water will be negligible	the Upperchurch WIndfarm Electrical Substation will not cause any increase in the use, storage, transport, handling or production of substances or materials (such as fuels, oils, excavated soils) beyond that already authorised. NO—The production of waste water will be negligible, with waste water removed off-site for treatment. There is no potential for significant impacts due to the use of harmful
		due to the very low usage of the substation during its operation.	substances as a result of the Proposed Amendments to the Upperchurch WIndfarm Electrical Substation.
4	WILL THE PROJECT PRODUCE SOLID WASTES DURING CONSTRUCTION OR OPERATION OR DECOMMISSIONING?	NO – The construction and operation of the Authorised Substation involves very small quantities of solid waste, such as packaging, excess ducting, cable and electrical plant materials. The Proposed Amended Substation will not increase the volumes of solid wastes, beyond those already authorised.	will not increase, beyond that already authorised, there is no potential for significant impacts for the production of solid wastes, as a result of the Proposed Amendments to the
5	WILL THE PROJECT RELEASE POLLUTANTS OR ANY HAZARDOUS, TOXIC OR NOXIOUS SUBSTANCES TO AIR OR LEAD TO EXCEEDING AMBIENT AIR QUALITY STANDARDS IN DIRECTIVES 2008/50/EC AND 2004/107/EC)?	Authorised Substation. The Proposed	impact on air quality will be temporary in nature and confined to the immediate construction area. Outside of the construction phase residual

	QUESTIONS TO BE CONSIDERED	Answer: Yes/No/? - Briefly Describe	Is this likely to result in a significant impact? Why?
			air pollutants will not increase, beyond that already authorised, there is no potential for significant impacts from the release of pollutants to air, as a result of the Proposed Amendments to the Upperchurch WIndfarm Electrical Substation.
6	WILL THE PROJECT CAUSE NOISE AND VIBRATION OR THE RELEASING OF LIGHT, HEAT ENERGY OR ELECTROMAGNETIC RADIATION?	NO – The Authorised Substation will emit noise during construction and operation, vibration emissions from groundworks will be negligible, while sensor controlled security lighting will be in place during construction and operation. While the operational Authorised Substation will be a source of electromagnetic radiation, the levels of vibration and electromagnetic radiation is well below guideline levels outside the Authorised Substation compound yard fencing. There will be no release of heat energy or light from the Authorised Substation. The Proposed Amended Substation will not result in larger noise or vibration emissions, or the release of more light or electromagnetic radiation.	not release significant levels of noise, vibration, light or electromagnetic radiation. The Proposed Amended Substation will not cause any increase in the emission of noise, vibration, light, heat energy or electromagnetic radiation, beyond that already authorised. There is no potential for significant impacts from nuisance emissions to air, as a result of the Proposed Amendments to the Upperchurch WIndfarm Electrical Substation.
7	WILL THE PROJECT LEAD TO RISKS OF CONTAMINATION OF LAND OR WATER FROM RELEASES OF POLLUTANTS ONTO THE GROUND OR INTO SURFACE WATERS, GROUNDWATER, COASTAL WASTERS OR THE SEA?	retain the same drainage layout as that already authorised. The site is inland and therefore no risk to coastal waters or the sea. The welfare facilities proposed in the amended substation, comprise a	not lead to risks of contamination of land or water. The Proposed Amended Substation will retain the same drainage layout, and the same works and use of materials as the Authorised Substation, and therefore will not increase the risk of contamination to land or water, beyond that already authorised. The waste from the proposed welfare facilities at the amended substation will

	QUESTIONS TO BE	Answer: Yes/No/? - Briefly Describe	Is this likely to result in a significant impact? Why?
			negligible due to the very low usage of the substation during its operation. There is no potential for significant impacts to land or water from the release of pollutants, as a result of the Proposed Amendments to the Upperchurch Windfarm Electrical Substation.
8	WILL THERE BE ANY RISK OF ACCIDENTS DURING CONSTRUCTION OR OPERATION OF THE PROJECT THAT COULD AFFECT HUMAN HEALTH OR THE ENVIRONMENT	NO – The construction and operation of the Authorised Substation will be carried out as per the Health and Safety Guidelines for the Onshore Windfarm Industry. There is no difference in construction or operational activities associated with the Proposed Amended Substation.	accidents due to the construction of the Proposed Amended Substation, that could affect human health or the environment beyond those already
9	WILL THE PROJECT RESULT IN ENVIRONMENTALLY RELATED SOCIAL CHANGES, FOR EXAMPLE, IN DEMOGRAPHY, TRADITIONAL LIFESTYLES, EMPLOYMENT?	NO – neither the Authorised Substation nor the whole Upperchurch Windfarm project will result in environmentally related social changes. The nearest residence is 350m North, the nearest waymarked trail is 800m East, and the nearest village is 3.8km East from the Authorised Substation. The location of the Proposed Amended Substation does not change from that authorised and construction and operational activities and employment remain the same, as for the Authorised Substation.	not result in environmentally related social changes. The Proposed Amended Substation remains in the same location and will involve the same level of activity and materials as the authorised substation, and therefore will not impact on environmentally related social changes beyond those already authorised. There is no potential for significant
10	ARE THERE ANY OTHER FACTORS THAT SHOULD BE CONSIDERED SUCH AS CONSEQUENTIAL	NO – The construction and operation of the Proposed Amended Substation will be the same as for the Authorised Substation. The Proposed Amended Substation will not result in	Substation will not cause further consequential development or

	QUESTIONS TO BE	Answer: Yes/No/? - Briefly Describe	Is this likely to result in a significant impact? Why?
	DEVELOPMENT WHICH COULD LEAD TO ENVIRONMENTAL IMPACTS OR THE POTENTIAL FOR CUMULATIVE IMPACTS WITH OTHER EXISTING OR PLANNED ACTIVITIES IN THE LOCALITY?	consequential development which could lead to environmental impacts or the potential for cumulative impacts with other existing or planned activities.	cumulative impacts with
11	IS THE PROJECT LOCATED WITHIN OR CLOSE TO ANY AREAS WHICH ARE PROTECTED UNDER INTERNATIONAL, EU, OR NATIONAL OR LOCAL LEGISLATION FOR THEIR ECOLOGICAL, LANDSCAPE, CULTURAL OR OTHER VALUE, WHICH COULD BE AFFECTED BY THE PROJECT?	 NO – The Authorised Substation is not located within or close to any areas which are protected under international, EU, national or local legislation. The distances to the nearest protected areas are as follows: The nearest SAC is the Anglesey Road SAC, 4.3km to the South; The nearest hydrological connected SAC is the Lower River Suir SAC, 14.3 river kilometres downstream; The nearest SPA is Slievefelim to Silvermines Mountains SPA, 2.2km to the West. The nearest NHA is Mauherslieve Bog NHA, 6.7km to the West The nearest pNHA is Nenagh River Gorge pNHA, 7.2km to the Northwest. The nearest RMP is a Megalithic tomb unclassified (TN039-050) 205m south. The nearest waymarked trail is Ormond Way 0.8km to the Southeast. The location of the Proposed Amended Substation does not change from that of the Authorised Substation. 	Substation remains in the same location and with similar works and levels of activity as the Authorised Substation, and will not result in any additional impacts to protected areas beyond those already authorised. There is no potential for significant impacts on protected areas as a result of the Proposed Amendments to the Upperchurch WIndfarm Electrical Substation.

	QUESTIONS TO BE	Answer: Yes/No/? - Briefly Describe	Is this likely to result in a significant impact? Why?
12	ARE THERE ANY OTHER AREAS ON OR AROUND THE LOCATION THAT ARE IMPORTANT OR SENSITIVE FOR REASONS OF THEIR ECOLOGY E.G. WETLANDS, WATERCOURSES OR OTHER WATERBODIES, THE COASTAL ZONE, MOUNTAINS, FORESTS OR WOODLANDS THAT COULD BE AFFECTED BY THE PROJECT?	woodland. While the location is upland, the substation location is not considered mountainous. The Authorised Substation is not located in a coastal area. There are no watercourses or other waterbodies on or around the Authorised Substation location. There is a forestry drain north of the Authorised Substation, however the drainage system around the Authorised Substation will direct water runoff into a settlement pond. The location of the Proposed Amended Substation does not change from the Authorised Substation and the Proposed Amended Substation extended yard can be accommodated within the authorised hardcore area. The Proposed Amendments will retain the same	Substation is in the same location within the authorised hardcore footprint of the windfarm, therefore the Proposed Amended Substation will not result in increased impacts to important or sensitive areas beyond those already authorised. There is no potential for significant impacts on ecologically important or sensitive areas as a result of the Proposed Amendments to the Upperchurch WIndfarm Electrical Substation.
13	ARE THERE ANY AREAS ON OR AROUND THE LOCATION THAT ARE USED BY PROTECTED, IMPORTANT OR SENSITIVE SPECIES OF FAUNA OR FLORA E.G. FOR BREEDING, NESTING, FORAGING, RESTING, OVERWINTERING, MIGRATION, WHICH COULD BE AFFECTED BY THE PROJECT?	drainage layout as that already authorised. YES – There are Bat roosts in farm buildings 140m East of the Authorised Substation. NO – there are no other protected, important or sensitive species of fauna or flora associated with the location of the Authorised Substation. The location of the Proposed Amended Substation does not change from the Authorised Substation and the Proposed Substation extended yard can be accommodated within the authorised hardcore area.	NO – The Proposed Amended Substation will not result in any increased land take or increased works or activities, and therefore will not result in any increased impact on protected, important or sensitive flora or fauna species, beyond that already authorised. There is no potential for significant impacts to protected, important or sensitive species of fauna or flora as a

	QUESTIONS TO BE	Answer: Yes/No/? - Briefly Describe	Is this likely to result in a significant impact? Why?
14	ARE THERE ANY INLAND, COASTAL, MARINE OR UNDERGROUND WATERS (OR FEATURES OF THE MARINE ENVIRONMENT) ON OR AROUND THE LOCATION THAT COULD BE AFFECTED BY THE PROJECT?	NO – There are no coastal or marine water that could be affected by the Authorised Substation. In relation to groundwater, the Authorised Substation excavations will be shallow in nature. With regard to inland waters, the Authorised Substation includes a drainage system and settlement pond, for the collection and treatment of water run-off, prior to discharge. The Proposed Amended Substation remains in the same location and will retain the same drainage layout as that already authorised.	Substation will remain in the same location and retain the same drainage layout as that already authorised and therefore will not increase the risk of contamination to waters. There is no potential for significant impacts to inland, underground, coastal or marine waters, as a result of the Proposed Amended Substation.
15	ARE THERE ANY AREAS OR FEATURES OF HIGH LANDSCAPE OR SCENIC VALUE ON OR AROUND THE LOCATION WHICH COULD BE AFFECTED BY THE PROJECT?	NO – The Authorised Substation is within Landscape Character Area 17 (LCA17), Upperchurch, Kilcommon & Hollyford Mountain Mosaic'. Within LCA17 there is a relatively tranquil upland rural landscape character of low intensity land uses including pastoral farming and forestry with a sparse and dispersed population. The Upperchurch area is extensively managed upland rural landscape of farmland and forestry. Neither the upland nor lowland agricultural landscape within the study area is particularly rare or distinctive in a national or regional context. The location of the Proposed Amended Substation does not change from that authorised. The amended control buildings will be built on different levels, with the taller of the two buildings on the lower level (2m below). This will result in the amended control buildings presenting to the viewer, as of similar height to the authorised buildings. The change in plan and elevation of the Authorised Substation will be negligible in the broader landscape context.	Substation will remain in the same location as the Authorised Substation, and will not result in any increased landtake or intensification of development in the area, beyond that already authorised. The change to the layout of electrical equipment in the compound yard and the proposed increase in the height (0.65m and 1.96m) of the control buildings will be negligible.

	QUESTIONS TO BE	Answer: Yes/No/? - Briefly Describe	Is this likely to result in a significant impact? Why?
16	ARE THERE ANY ROUTES OR FACILITIES ON OR AROUND THE LOCATION WHICH ARE USED BY THE PUBLIC FOR ACCESS TO RECREATION OR OTHER FACILITIES, WHICH COULD BE AFFECTED BY THE PROJECT?	NO – From the Authorised Substation the nearest recreational facility is the Ormonde Way walking route, which is 800m east. The Authorised Substation site does not provide access to this walk. The site of the Authorised Substation is adjacent to a private paved road which is not used by members of the public. The location of the Proposed Amended Substation does not change from that authorised.	Substation does not provide access to the public for recreation or other facilities. There is no potential for significant impacts on public access as a result of the Proposed Amendments to the
17	ARE THERE ANY TRANSPORT ROUTES ON OR AROUND THE LOCATION THAT ARE SUSCEPTIBLE TO CONGESTION OR WHICH CAUSE ENVIRONMENTAL PROBLEMS, WHICH COULD BE AFFECTED BY THE PROJECT?	NO – The Authorised Substation is sited adjacent to a private paved road, which is accessed via a public local road, L6188-0, to the north. The L6188-0 is a lightly trafficked rural local road. The location of the Proposed Amended Substation does not change from that authorised, and will not result in any increases in road traffic associated with the substation.	Substation will not increase the construction activity or increase traffic volumes associated with the Authorised Substation. There is no potential for significant impacts on Transport Routes as a result of the Proposed Amendments to
18	IS THE PROJECT IN A LOCATION IN WHICH IT IS LIKELY TO BE HIGHLY VISIBLE TO MANY PEOPLE?	Substation, in addition, the development is screened from all but two of these houses due to landform. The substation site is intermittently visible along a 1km stretch of local road, L4139-0, to the east, however this road is a lightly trafficked rural local road. The location of the Proposed Amended Substation does not change from that authorised, the size of the Proposed Amended Substation does not extend beyond the authorised hardcore	generally visible from neighbouring houses. The increase in compound size for the Proposed Amended Substation will not be noticeable because there is no increase in the authorised hardcore area. The increase in control building size and height will not be noticeable in the context of the compact design of the equipment and buildings contained in an electrical substation compound and the different levels at which the buildings are positioned. There is no potential for significant visual impacts as a result of the

	QUESTIONS TO BE	Answer: Yes/No/? - Briefly Describe	Is this likely to result in a significant impact? Why?
		noticeable increase in the height of control buildings.	
19	ARE THERE ANY AREAS OR FEATURES OF HISTORIC OR CULTURAL IMPORTANCE ON OR AROUND THE LOCATION THAT COULD BE AFFECTED BY THE PROJECT?	NO – The nearest RMP is a Megalithic tomb unclassified (TN039-050), which is 205m south of the Authorised Substation. The location of the Proposed Amended Substation does not change from the Authorised Substation. There is no potential for additional impacts to subsurface features as the Proposed Amended Substation extended yard can be accommodated within the authorised hardcore area.	Substation will not have any additional impacts to features of historic or cultural importance on or around the location beyond that already authorised and will not affect the implementation of mitigation measures, because the extended yard can be accommodated within the authorised hardcore area.
20	IS THE PROJECT LOCATED IN A PREVIOUSLY UNDEVELOPED AREA WHERE THERE WILL BE LOSS OF GREENFIELD LAND?	NO – The location of the Proposed Amended Substation is a greenfield site at present but it is subject to permission for an electrical substation i.e the Authorised Substation (which is not yet constructed). LA Planning Ref. 13/510003 & ABP Ref: PL22.243040 The location of the Proposed Amended Substation does not change from that authorised. The Proposed Amended Substation extended yard can be accommodated within the authorised hardcore area.	previously authorised electrical substation compound and previously authorised windfarm road. The Proposed Amended Substation remains within the footprint of the authorised development, and will not result in any additional landtake or loss of greenfield land.
21	ARE THERE EXISTING LAND USES WITHIN OR AROUND THE LOCATION E.G. HOMES, GARDENS, OTHER PRIVATE PROPERTY, INDUSTRY,	NO – the existing land uses in and around the Authorised Substation are commercial forestry and agricultural grassland. This land use is subject to planning permission for an electrical substation.	Substation will not result in any additional land-take, with the extended compound yard being accommodated

	QUESTIONS TO BE CONSIDERED	Answer: Yes/No/? - Briefly Describe	Is this likely to result in a significant impact? Why?
	COMMERCE, RECREATION, PUBLIC OPEN SPACE, COMMUNITY FACILITIES, AGRICULTURE, FORESTRY, TOURISM, MINING OR QUARRYING THAT COULD BE AFFECTED BY THE PROJECT?	NO – The nearest resident is 350m to the north. The nearest industry, commerce, recreation, public open space, community facilities is 3.8km east at Upperchurch village. The nearest quarry is 3.1km to the southeast. There are no mines in the vicinity. The location of the Proposed Amended Substation does not change from the Authorised Substation.	beyond those already authorised. There is no potential for significant impacts on land use, as a result of the Proposed Amendments to the Upperchurch Windfarm Electrical Substation.
22	ARE THERE ANY PLANS FOR FUTURE LAND USES WITHIN OR AROUND THE LOCATION THAT COULD BE AFFECTED BY THE PROJECT?	NO – the existing land uses in and around the Authorised Substation are commercial forestry, agriculture and the authorised but not yet constructed Upperchurch WIndfarm (which includes the Authorised Substation). The location of the Proposed Amended Substation does not change from the Authorised Substation and the Proposed Amended Substation extended yard can be accommodated within the authorised hardcore area.	compatible with future authorised land use in the area (substation & wind turbines). The Proposed Amended Substation will not have an impact on land use beyond the already authorised development. There is no potential for significant
23	ARE THERE AREAS WITHIN OR AROUND THE LOCATION WHICH ARE DENSELY POPULATED OR BUILT-UP, THAT COULD BE AFFECTED BY THE PROJECT?	NO – the surrounding area is not densely populated. The closest built up area from the Authorised Substation is Upperchurch village, 3.8km to the East. The location of the Proposed Amended Substation does not change from the Authorised Substation.	impact on densely populated or built- up areas due to the separation distances from any urban area. The Proposed Amended Substation will not have an impact beyond those
24	ARE THERE ANY AREAS WITHIN OR AROUND THE LOCATION WHICH ARE OCCUPIED BY SENSITIVE	NO – no sensitive community land uses close to the Authorised Substation, the nearest school, places of worship, community facilities being within the	impact on sensitive community land uses due to the separation distances

	QUESTIONS TO BE CONSIDERED	Answer: Yes/No/? - Briefly Describe	Is this likely to result in a significant impact? Why?
	LAND USES E.G. HOSPITALS, SCHOOLS, PLACES OF WORSHIP, COMMUNITY FACILITIES THAT COULD BE AFFECTED BY THE PROJECT?	environs of Upperchurch village, 3.8km to the East. The nearest town is Thurles, 17km to the east. The location of the Proposed Amended Substation does not change from the Authorised Substation.	not have an impact beyond those already authorised. There is no potential for significant
25	ARE THERE ANY AREAS WITHIN OR AROUND THE LOCATION WHICH CONTAIN IMPORTANT, HIGH QUALITY OR SCARCE RESOURCES E.G. GROUNDWATER, SURFACE WATERS, FORESTRY, AGRICULTURE, FISHERIES, TOURISM, MINERALS, THAT COULD BE AFFECTED BY THE PROJECT?	NO – The Authorised Substation is not located within or around an area which contains important, high quality or scarce resources. The Authorised Substation is located in a grassland field, adjacent to a forestry plantation. Neither land use would be considered a high quality or scarce resource in the context of the surrounding area and are both common land uses in the area. The nearest water is a forestry drain to the north which would not be considered sensitive. There are no fisheries, tourism products or minerals nearby. The groundworks for the substation compound will be shallow and therefore will no affect groundwater. The Proposed Amended Substation will be located on the lands associated with the Authorised Substation and authorised windfarm road area.	adjacent to important, high quality or scarce resources. The Authorised Substation is located in a grassland field, beside a forestry plantation. The Proposed Amended Substation will not have an impact beyond those already authorised. There is no potential for significant impacts on important, high quality or scarce resources, as a result of the Proposed Amendments to the Upperchurch Windfarm Electrical
26	ARE THERE ANY AREAS WITHIN OR AROUND THE LOCATION WHICH ARE ALREADY SUBJECT TO POLLUTION OR ENVIRONMENTAL DAMAGE E.G. WHERE EXISTING LEGAL ENVIRONMENTAL STANDARDS ARE EXCEEDED THAT COULD BE AFFECTED BY THE PROJECT?	NO – The Authorised Substation is located in a grassland field, no areas within or around the site are subject to pollution or environmental damage. The Proposed Amended Substation will be located on the lands associated with the Authorised Substation and authorised windfarm road area.	· '

QUESTIONS TO BE CONSIDERED	Answer: Yes/No/? - Briefly Describe	Is this likely to result in a significant impact? Why?
		Upperchurch Windfarm Electrical Substation.
IS THE PROJECT LOCATION SUSCEPTIBLE TO EARTHQUAKES, SUBSIDENCE, LANDSLIDES, EROSION, FLOODING OR EXTREME OR ADVERSE CLIMATIC CONDITIONS E.G. TEMPERATURE INVERSIONS, FOGS, SEVERE WINDS, WHICH COULD CAUSE THE PROJECT TO PRESENT ENVIRONMENTAL PROBLEMS?	NO – The location of the Authorised Substation is not susceptible to earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions. The Proposed Amended Substation will be located within the footprint of the Authorised Substation and authorised windfarm road area.	Substation is not located in a vulnerable area and the construction and operation of the Substation will not contribute to the vulnerability of the area. There is no potential for the Proposed

3. Results of the EIA Screening for the Proposed Amendments to Upperchurch Windfarm Electrical Substation

A preliminary examination of the nature, size and location of the Proposed Amendments to Upperchurch Windfarm Electrical Substation has been undertaken above, and the summary conclusion is that:

- The Proposed Amended Substation will be located on the lands associated with the Authorised Substation. The substation site is not in a sensitive location being away from houses, people and sensitive, designated or important sites; the construction of the substation will not involve works in, or close to, any watercourse. The substation location is not susceptible to major adverse natural events.
- The EIA previously carried out by An Bord Pleanála for Upperchurch Windfarm, assessed that the windfarm (which includes the authorised substation), will not give rise to significant adverse effects on the environment or human health and that ongoing impacts are limited in terms of scale and significance and can be remediated. The AA carried out by An Bord Pleanála assesses that Upperchurch Windfarm and Substation will not adversely affect the integrity of a European site having regard to its conservation objectives.
- The Proposed Amendments to the Upperchurch WIndfarm Electrical Substation will not give rise to further impacts on the environment or human health, beyond that already authorised for Upperchurch Windfarm Electrical Substation.

Because the Proposed Amendments to Upperchurch Windfarm Electrical Substation either alone or cumulatively with other projects, is not likely to cause significant effects on the environment or human health, beyond that already authorised for Upperchurch Windfarm Electrical Substation, it is considered that an EIA Report is not required.

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SCREENING FOR APPROPRIATE ASSESSMENT REPORT

Screening for Appropriate Assessment Report for the

Proposed Amendments to Upperchurch Windfarm Electrical Substation

September 2020



Proposed Amendments to Upperchurch Windfarm Electrical Substation—Screening for Appropriate Assessment Report

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1 INTRODUCTION

This Screening for Appropriate Assessment Report has been prepared by Karen Dylan Shevlin (MSc Biodiversity and Conservation), Lead Ecologist with Ecopower, and contains objective scientific information in order to facilitate the Competent Authority to determine whether the Proposed Amended Substation at Upperchurch Windfarm requires Appropriate Assessment, or whether the potential for significant effects on any designated European Site can be excluded.

The preparation of this Screening for Appropriate Assessment Report has had regard to;

- EU Habitats Directive (92/43/EEC),
- EU Birds Directive (Council Directive (2009/147/EC)
- the Part XAB of the Planning and Development Act 2000,
- European Communities (Birds and Natural Habitats) Regulations 2011,
- Assessment of Plans and Projects significantly affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, European Commission 2001,
- Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government (2010).
- Managing Natura 2000 Sites: The Provisions of Article 6 of the 'Habitats Directive' 92/43/EEC, European Commission, 2018.

1.1 Appropriate Assessment Process

Under Article 6(3) of the Habitats Directive, an Appropriate Assessment of the implications of any plan or project on a European Site is required before a project is approved. This must include all the aspects of the plan or project which can, either individually or in combination with other plans or projects, affect the conservation objectives of that European Site, in the light of the best scientific knowledge in the field. The competent national authorities are to authorise a plan, project or activity only if they have made certain that it will not adversely affect the integrity of any European Site.

This current document comprises a Screening to determine whether Appropriate Assessment is required. The Screening must identify whether the project, alone or in combination with other plans and projects, is likely to have significant effects on any European Site in view of the qualifying interests and conservation objectives of these sites; or whether the potential for such significant effects can be excluded. This test is completed with cognisance of emerging case law.

1.1.1 Stages of the Appropriate Assessment Process

Appropriate Assessment involves a number of steps and tests that are applied using a stage-by-stage approach. Each step or stage in the assessment process precedes and provides a basis for other steps. The four stages in an Appropriate Assessment (AA), as outlined in EC Guidance on Assessment of Projects¹ are illustrated in the following flow chart (over).

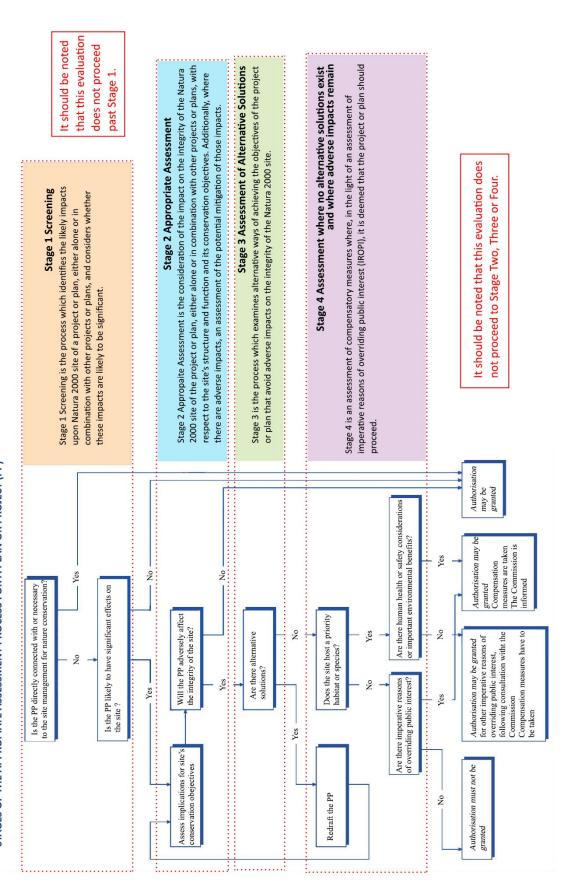
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¹ Assessment of Plans and Projects significantly affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, European Commission 2001

STAGES OF THE APPROPIATE ASSESSMENT PROCESS FOR A PLAN OR PROJECT (PP)

Proposed Amendments to Upperchurch Windfarm Electrical Substation—Screening for Appropriate Assessment Report

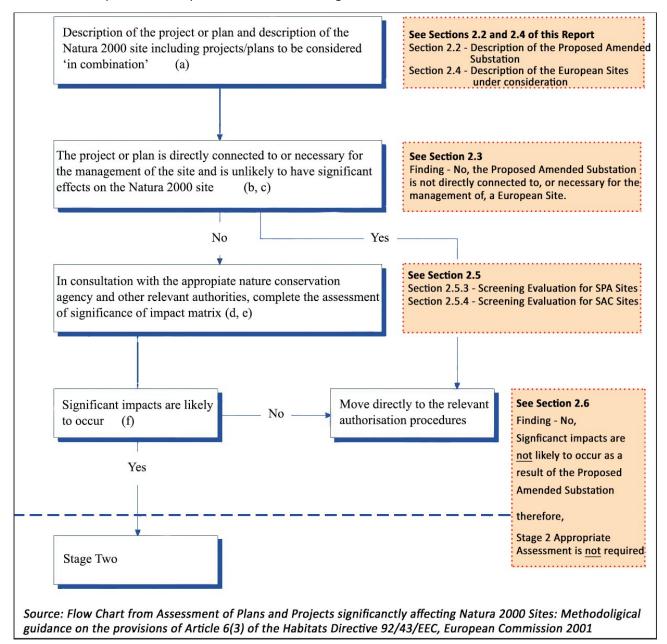


Source: Flow Chart and Description Notes from Assessment of Plans and Projects significantly affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, European Commission 2001

2 Stage 1: Screening

2.1 Screening Evaluation Process

The Screening process examines the likely effects of the Proposed Amended Substation at the authorised Upperchurch Windfarm either alone or in combination with other projects or plans, upon any European Site and considers whether it can be objectively concluded that these effects will not be significant. The Screening evaluation comprises four steps, as outlined in the diagram below:



2.2 Description of the Proposed Amendments to the Electrical Substation

2.2.1 Description of the Authorised Upperchurch Windfarm

The Upperchurch Windfarm Substation (Authorised Substation) is part of Upperchurch Windfarm, which was authorised in 2014 but is not yet constructed. The Authorised Upperchurch Windfarm is located on the eastern foothills of the Silvermine Mountain range in County Tipperary.

The authorised Upperchurch Windfarm is part of a larger whole Upperchurch Windfarm project, which also includes UWF Grid Connection, UWF Related Works, UWF Replacement Forestry, and UWF Other Activities.

2.2.1.1 Description of the Authorised Substation

The Authorised Substation consists of a hardcore compound yard 2176m² in area (59.245m x 36.73m), surrounded by palisade fencing (2.6m in height) with 2 No. entrance gates. In the interest of clarity for this screening; the term "hardcore" footprint refers to the area of the authorised substation compound, and the authorised windfarm access road, which surrounds the authorised substation compound. This hardcore footprint will be excavated and backfilled with aggregate, as authorised under the Upperchurch Windfarm planning permission.) Inside the palisade fence, in the hardcore compound yard, are 2 No. control buildings, 99.06m² (15.65m x 6.33m) and 99.67m² (15.745m x 6.33m), both with an overall height of 6.4m; electrical equipment and apparatus; a lightening protection monopole; and underground and overhead cabling. The area of hardcore is authorised to extend 6m outside the palisade fencing, as part of the windfarm road areas.

See AA Figure 1: Site Location of the Proposed Amendments to Upperchurch Windfarm Electrical Substation

2.2.2 Purpose of the Proposed Amendments to Upperchurch Windfarm Electrical Substation

The Proposed Amended Substation is required because of updates to ESB Networks specifications for 110kV substations, which specify larger spacing between electrical equipment, larger control buildings and the provision of welfare facilities within.

2.2.3 Description of Proposed Amendments to Upperchurch Windfarm Electrical Substation

It is proposed to increase the size of the hardcore compound yard from 2176m² to 3107m² in area (68.64m x 45.27m), by extending out the perimeter palisade fencing. This is to accommodate a change to the layout of electrical equipment in the compound yard, and a change in size and design of the two control buildings. It is proposed to increase one of the control buildings from 99.67m² to 176.8m² (17m x 10.4m), with welfare facilities to be installed. Both control buildings will increase in height from 6.4m to 7.05m and 8.36m. There will be no increase in the authorised hardcore area, because the extended yard can be accommodated on the windfarm road area outside the substation fencing. The hardcore drainage system, which includes a settlement pond, will remain as authorised. Also, to reduce excavations, under the new design layout only part of the hardcore area will be excavated to the authorised ground level. The amended control buildings will be built on different levels, with the taller of the two buildings on the lower level (2m below). This will result in the amended control buildings presenting to the viewer, as of similar height.

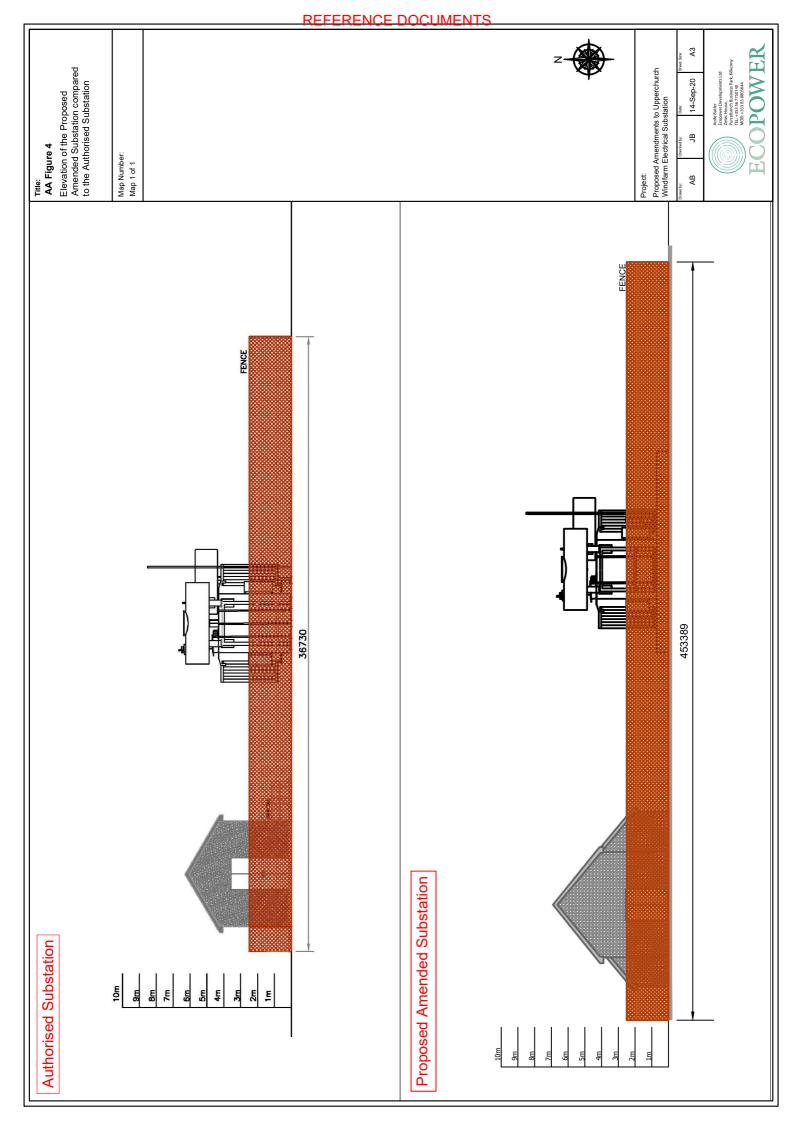
There is no change to the location of the substation, the Proposed Amended Substation is within the authorised hard cored area at the Authorised Substation. The substation compound is located in a grassland field, adjacent to a forestry plantation, sited adjacent to a private paved road which is accessed from a public local road (L6188-0, to the north).

See AA Figure 2: Layout of the Proposed Amendments to the Electrical Substation

See AA Figure 3: Layout of the Proposed Amended Substation compared to the Authorised Substation

See AA Figure 4: Elevation of the Proposed Amended Substation compared to the Authorised Substation





2.2.4 Summary of Changed and Unchanged parts of the Authorised Electrical Substation

Proposed Changes to the Authorised Electrical Substation comprise:

- to increase the size of the hardcore compound yard by extending out the perimeter palisade fencing into the adjacent authorised hardcore area,
- change to the layout of electrical equipment in the compound yard,
- change in size and design of the two control buildings, including the provision of welfare facilities and associated underground wastewater collection tank and rainwater harvesting system, and a marginal increase (0.65m and 1.96m) in height of the 2 control buildings.

There will be no change to the following aspects of the Authorised Substation:

- No change to the substation location;
- No changes to the hardcore footprint of the Authorised Substation or to the Authorised Upperchurch Windfarm – the larger compound yard can be accommodated within the authorised hardcore area at the substation location.
- No changes are required to the use of natural resources, nor to the volumes of excavations, nor to the number of loads of materials imported to the site, nor to levels or durations of construction or operational works and activities beyond that already authorised for Upperchurch Windfarm Substation.
- No change in the use, storage, transport, handling or production of potentially harmful substances or materials or increase the volumes of solid wastes.

<u>The Proposed Amended Substation will be not result in any changes to any other aspects of the Authorised Upperchurch Windfarm</u>

Similarly, The Proposed Amended Substation will be not result in any changes to the other elements of the Whole Upperchurch Windfarm Project – i.e. no change to the UWF Grid Connection or UWF Related Works or UWF Replacement Forestry or UWF Other Activities.

2.2.5 Application of Protection Measures in the Screening Evaluation

The range of construction and operation stage mitigation measures for the authorised Upperchurch Windfarm as set out in the Environmental Impact Statement, the Natura Impact Statement, further documents submitted to Tipperary County Council in 2013, including the Ecological Management Plan and the conditions attached to the windfarms planning permission are considered, in this Screening evaluation, to form part of the authorised windfarm.

However, this Screening evaluation to inform the AA process is **carried out in the absence of any additional protective measures for the Proposed Amended Substation** which may be required or prescribed to avoid or reduce harmful effects on designated European Sites.

2.2.6 Description of Other Projects

The Other Projects which were included in the Appropriate Assessment reports for Upperchurch Windfarm (NIS 2013), UWF Grid Connection (NIS 2019), UWF Related Works (Revised NIS 2019) and UWF Replacement Forestry (NIS 2018) are considered in this Screening Evaluation. This projects are listed below:

- other windfarms² (now all existing/operational) Knockastanna Windfarm in County Limerick, and Garracummer, Hollyford, Glencarbry, Glenough, Cappagh White, Curraghgraigue, and Knockmeale Windfarms in County Tipperary;
- existing Milestone Windfarm;
- existing Rear Cross Quarry;
- consented Newport Town Park (currently under construction);
- consented Castlewaller Windfarm (and potential grid connection),
- potential Bunkimalta Windfarm (and consented grid connection),
- General Agriculture and Forestry operations, and turf-cutting

No new projects or plans have occurred, or have been planned or proposed, in the zone of influence of the Proposed Amended Substation.

Note: a planning application for a quarry at Curraghduff, Co Tipperary (Ref: 19600317), which was included in the UWF Grid Connection AA Report 2019, has since been withdrawn from the planning process (June 2020).

² The Mienvee and Falleennafinoga windfarms, identified individually in the 2013 report, now form part of Garracummer Windfarm.

2.3 Screening Evaluation: Is the Project Directly Connected to or Necessary for Management of a European Site?

For a project or plan to be 'directly connected with or necessary to the management of the site', the 'management' component must refer to management measures that are for conservation purposes, and the 'directly' element refers to measures that are solely conceived for the conservation management of a site and <u>not</u> direct or indirect consequences of other activities.

<u>Finding:</u> No, the Proposed Amended Substation project is not directly connected to or necessary for the management of a European Site.

2.4 European Sites under consideration

2.4.1 Distance of the Project to European Sites

For the Proposed Amended Substation, a limited zone of potential impact is predicted due to the relatively small changes proposed to the Authorised Substation.

Nevertheless, a precautionary approach was taken for the current assessment. In addition to the European Sites that were previously assessed for the now authorised Upperchurch Windfarm³, the zone of evaluation of European Sites for this screening was extended to include all European Sites previously evaluated in the Appropriate Assessment reports for the other elements of the Whole Upperchurch Windfarm Project⁴. This extended study area includes all European Sites within 15km of construction works areas or activity locations relating to any part of the Whole Upperchurch Windfarm Project.. The European Sites which occur within this extended study area are listed in Table 1, and identified on AA Figure 5.

There are **23 European Sites** within the extended study area. The locations of these European Sites are illustrated in **AA Figure 5: European Sites within the extended study area for the Proposed Amended Substation**, with the distances from the Proposed Amended Substation provided in **Table 1**.

Table 1: Proximity of the Proposed Amended Substation to European Sites

	e 1. Proximity of the Proposed Amended Substation to European Sites	Distance from the
	European Site	Proposed Amended Substation
1	Slievefelim to Silvermines Mountain SPA (004165)	2.2 km
2	Lower River Shannon SAC (002165)	4.9 km
3	Lower River Suir SAC (002137)	4.4 km
4	Anglesey Road SAC (002125)	4.3 km
5	Bolingbrook Hill SAC (002124)	9.1 km
6	Keeper Hill SAC (001197)	13.0 km
7	Silvermine Mountain SAC (000939)	13.5 km
8	Silvermine Mountain West SAC (002258)	14.6 km
9	Philipston Marsh SAC (001847)	15.5 km
10	Kilduff, Devilsbit Mountain SAC (000934)	16.9 km
11	Clare Glen SAC (000930)	20.4 km
12	Glenstal Wood SAC (001432)	20.5 km
13	Slieve Bernagh Bog SAC (002312)	30.4 km
14	Lough Derg, North-East Shore SAC (002241)	30.6 km
15	Glenomra Wood SAC (001013)	34.1 km
16	Tory Hill SAC (000439)	44.0 km
17	Ratty River Cave SAC (002316)	47.5 km
18	Askeaton Fen Complex SAC (002279)	52.3 km
19	Barrigone SAC (000432)	65.3 km
20	Curraghchase Woods SAC (000174)	54.1 km
21	Lough Derg (Shannon) SPA (004058)	26.5 km
22	River Shannon and River Fergus Estuaries SPA (004077)	37.9 km
23	Stack's to Mullaghareirk Mountains, West Limerick Hills & Mount Eagle SPA (004161)	70.9 km

³ Appropriate Assessments (An Bord Pleanála, 2014) and Revised Upperchurch Windfarm NIS (Malachy Walsh & Partners, 2012) for the now authorised Upperchurch Windfarm

⁴ Appropriate Assessment Report for Upperchurch Windfarm Grid Connection (Inis Environmental, 2019), Revised Appropriate Assessment Report for UWF Related Works (Inis Environmental, 2019)

2.4.2 Description of European Sites under consideration

A brief descriptoin of the 23 no. European Sites within the extended study is provided in Table 2 below. The Site Synopsis and Conservation Objectives for each site are available in full on the National Parks & Wildlife Service website at https://www.npws.ie/protected-sites

Table 2: Description of European Sites within the study area for UWF Related Works

	European Site Name and Code	Qualifying Interest /Special Conservation Interest and Code *denotes a priority habitat	Summary Description (from Site Synopsis)	Data Source Last accessed online 06/08/2020
1	Slievefelim to Silvermine s SPA (004165)	Hen Harrier (<i>Circus cyaneus</i>) (A082)	This SPA is an upland site located in Counties Tipperary and Limerick. It includes the peaks Keeper Hill, Slieve Felim, Knockstanna, Knockappul, Mother Mountain, Knockteige, Cooneen Hill and Silvermine Mountain. The site is underlain mainly by sandstones of Silurian age. Several important rivers rise within the site, including the Mulkear, Bilboa and Clare. The Slievefelim to Silvermines SPA is of ornithological importance because it provides nesting and foraging habitat for breeding Hen Harrier. The annex I species Merlin and Peregrine have also been recorded on site.	Sourced from NPWS Conservation objectives for Slievefelim to Silvermines Mountains SPA [004165]. Generic Version 6.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. [Version dated 07/04/2020]
2	Lower River Shannon SAC (002165)	Alluvial Forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)* (91E0) Coastal Lagoons* (1150) Sandbanks which are slightly covered by sea water all the time (1110) Estuaries (1130) Mudflats and sand flats not covered by seawater at low tide (1140) Large shallow inlets and bays (1160) Reefs (1170) Perennial Vegetation of stony banks (1220) Vegetated sea cliffs of the Atlantic and Baltic coasts (1230) Salicornia and other annuals colonizing mud and sand (1310) Atlantic salt meadows (Glauco-Puccinellietalia maritimae) (1330)	This very large site stretches along the Shannon valley from Killaloe in Co. Clare to Loop Head/ Kerry Head. The site encompasses the Shannon, Feale, Mulkear and Fergus estuaries, the freshwater lower reaches of the River Shannon (between Killaloe and Limerick), the freshwater stretches of much of the Feale and Mulkear catchments and the marine area between Loop Head and Kerry Head. Rivers within the sub-catchment of the Feale include the Galey, Smearlagh, Oolagh, Allaughaun, Owveg, Clydagh, Caher, Breanagh and Glenacarney. Rivers within the sub-catchment of the Mulkear include the Killeenagarriff, Annagh, Newport, the Dead River, the Bilboa, Glashacloonaraveela, Gortnageragh and Cahernahallia. This site contains the only known resident population of Bottle-nosed Dolphin in Ireland and all three Irish lamprey species. This site supports more wintering wildfowl and waders than any other site in the country and supports a large number of migratory birds.	Sourced from NPWS Conservation Objectives: Lower River Shannon SAC 002165. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht. [Version dated 07/08/2012]

	European Site Name and Code	Qualifying Interest /Special Conservation Interest and Code *denotes a priority habitat	Summary Description (from Site Synopsis)	Data Source Last accessed online 06/08/2020
		Mediterranean salt meadows (Juncetalia maritimi) (1410) Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation (3260) Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) (6410) Annex II Species: Freshwater Pearl-Mussel (Margaritifera margaritifera)(1029) Atlantic Salmon (Salmo salar) ((only in fresh water) (1106) Sea Lamprey (Petromyzon marinus) (1095) Brook Lamprey (Lampetra planeri) (1096) River Lamprey (Lampetra fluviatilis) (1099) Bottlenose Dolphin (Tursiops truncates) (1349) Otter (Lutra lutra) (1355)		
3	Lower River Suir SAC (002137)	Alluvial Forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)* (91E0) Yew Woodlands Taxus baccata woods of the British Isles* (91J0) Atlantic salt meadows (Glauco-Puccinellietalia maritimae) (1330) Mediterranean salt meadows (Juncetalia maritimi) (1410) Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation (3260)	This SAC consists of the freshwater stretches of the River Suir immediately south of Thurles, the tidal stretches as far as the confluence with the Barrow/Nore immediately east of Cheekpoint in Co. Waterford, and many tributaries including the Clodiagh in Co. Waterford, the Lingaun, Anner, Nier, Tar, Aherlow, Multeen and Clodiagh in Co. Tipperary. The Suir and its tributaries flow through the counties of Tipperary, Kilkenny and Waterford. The presence of two legally protected plants (Flora (Protection) Order, 1999) and the ornithological importance of the site adds to the ecological interest and importance of the site.	Regional, Rural and Gaeltacht Affairs.

	European Site Name and Code	Qualifying Interest /Special Conservation Interest and Code *denotes a priority habitat	Summary Description (from Site Synopsis)	Data Source Last accessed online 06/08/2020
		Hydrophilous tall herb fringe communities of plains and of the montane (6430) Old sessile oak woods with Ilex and Blechnum in the British Isles (91A0) Freshwater Pearl-Mussel (Margaritifera margaritifera) (1029) White-clawed Crayfish (Austropotamobius pallipes)(1092) Sea Lamprey (Petromyzon marinus) (1095) Brook Lamprey (Lampetra planeri) (1096) River Lamprey (Lampetra fluviatilis) (1099) Twaite Shad (Alosa fallax fallax) (1103) Salmon (Salmo salar) (1106) Otter (Lutra lutra) (1355)		
4	Anglesey Road SAC (002125)	Species-rich Nardus Grassland on siliceous substrates in mountain areas (and submountain areas, in Continental Europe)* (6230)	Anglesey Road is a steep-sided valley which extends approximately 1.8 km along the Multeen River to the north of Hollyford village, Co. Tipperary. It contains a range of habitats and species. It is of particular importance for the good quality examples of species rich, unimproved, upland grassland found.	Sourced from NPWS Conservation objectives for Anglesey Road SAC [002125]. Generic Version 6.0 Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. [Version dated 07/04/2020]
5	Bolingbroo k Hill SAC (002124)	Species-rich Nardus Grassland on siliceous substrates in mountain areas (and submountain areas, in Continental Europe)* (6230) Northern Atlantic Wet Heath with Erica tetralix (4010) European Dry Heaths (4030)	This upland SAC is approximately 6 km south-east of Silvermines village in Co. Tipperary. It comprises Bolingbrook Hill and the nearby eastern slopes of Silvermine Mountains in Curryquin and Mucklin townlands. Good quality examples of species-rich, unimproved upland grassland are present within this site	Sourced from NPWS Conservation objectives for Bolingbrook Hill SAC [002124]. Generic Version 6.0.Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. [Version dated 05/07/2018]

	European Site Name and Code	Qualifying Interest /Special Conservation Interest and Code *denotes a priority habitat	Summary Description (from Site Synopsis)	Data Source Last accessed online 06/08/2020
6	Keeper Hill SAC (001197)	Blanket Bogs (* if active bog) (7130) Northern Atlantic Wet Heath with <i>Erica tetralix</i> (4010)	This SAC is situated between the Silvermines and Slieve Felim Mountains, 13 km south of Nenagh in Co. Tipperaray. Consisting of a steep peak of Old Red Sandstone is notably higher than any of the surrounding upland areas. The site includes the summit and slopes above 250 m which have not yet been afforested. Peregrine Falcon, an Annex I species breeds within the site. Red Grouse occur amongst the tall heather east of the summit	Sourced from NPWS Conservation Objectives: Keeper Hill SAC 001197. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht. [Version dated 17/10/2017]
7	Silvermine Mountain SAC (000939)	Species-rich Nardus Grassland on siliceous substrates in mountain areas (and submountain areas, in Continental Europe)* (6230) Northern Atlantic Wet Heath with Erica tetralix (4010)	This small site is situated on the northern slopes of the Silvermine Mountains, 1 km south-east of Silvermines village in Co. Tipperary. The geology of the area is sandstone of different ages - older Silurian on the central part of the mountain, while the outer parts are composed of yellowish and red sandstones of Devonian age. The rare Small-white Orchid is also present on site and adds significantly to the value of the site.	Sourced from NPWS Conservation objectives for Silvermine Mountains SAC [000939]. Generic Version 6.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. [Version dated 05/07/2018]
8	Silvermine Mountain West SAC (002258)	Northern Atlantic Wet Heath with <i>Erica tetralix</i> (4010) European Dry Heath (4030) Calaminarian grasslands of the Violetalia calaminariae (6130)	This SAC is situated to the north of Keeper Hill, about 10 km south of Nenagh in Co. Tipperary. A ridge composed of Old Red Sandstone is visibly very prominent in the landscape when viewed from the Nenagh to Limerick road. The site is of conservation importance for its heath and grassland vegetation, and as a foraging area for Hen Harrier, and is one of the only extensive unplanted uplands remaining in north Tipperary.	Sourced from NPWS Conservation objectives for Silvermines Mountains West SAC [002258]. Version 1 Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. [Version dated 10/11/2017]
9	Philipston Marsh SAC (001847)	Transition mires and quaking bogs (7140)	This site is a small wetland and represents one of only two examples of calcareous fen and mire vegetation in the Mulkear River catchment.	Sourced from NPWS Conservation objectives for Philipston Marsh SAC [001847]. Version 1. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. [Version dated 12/01/2018]
10	Kilduff, Devilsbit Mountain SAC (000934)	Species-rich Nardus Grassland on siliceous substrates in mountain areas (and submountain	This upland site is situated approximately 6 km north-west of Templemore in Co. Tipperary. It comprises the summit of Devilsbit Mountain and much of the eastern side of the ridge which extends	Sourced from NPWS Conservation objectives for Kilduff, Devilsbit Mountain SAC [000934]. Generic

	European Site Name and Code	Qualifying Interest /Special Conservation Interest and Code *denotes a priority habitat	Summary Description (from Site Synopsis)	Data Source Last accessed online 06/08/2020
		areas, in Continental Europe)* (6230) European Dry Heaths (4030)	northwards to Kilduff Mountain. The rare and protected Small-white Orchid is also present on site and adds significantly to the value of the site.	Version 6.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. [Version dated 05/07/2018]
11	Clare Glen SAC (000930)	(Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles (91A0) (1421) Killarney Fern (<i>Trichomanes speciosum</i>)	This SAC lies on the Limerick - Tipperary border, in the western foothills of the Slievefelim Mountains, about 10 km northwest of Cappamore. The glen was formed by the action of the Clare River cutting into the Old Red Sandstone. The site comprises the wooded river valley. The woodland, although planted with many exotic trees, is mature and conforms to a type listed on Annex II of the E.U. Habitats Directive. The presence of a number of rare and scarce species including bryophytes and fungi adds further to its importance.	Sourced from NPWS (2016) Site Synopsis for Clare Glen SAC [000930]. Generic Version 1. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. [Version dated 16/05/2018]
12	Glenstal Wood SAC (001432)	Killarney Fern (<i>Trichomanes speciosum</i>) (1421)	This SAC lies in the western foothills of the Slievefelim Mountains, about 8 km northwest of Cappamore, Co. Limerick. The glen has been cut into Old Red Sandstone and runs in a north-easterly direction for about 2 km, eventually becoming a steep-sided rocky ravine	Sourced from NPWS Conservation objectives for Glenstal Wood SAC [001432]. Version 1. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. [Version dated 15/05/2018]
13	Slieve Bernagh Bog SAC (002312)	Blanket Bogs (* if active bog) (7130) Northern Atlantic Wet Heath with <i>Erica tetralix</i> (4010) European Dry Heath (4030)	The Slieve Bernagh Bog is situated to the west of Lough Derg, Co. Clare. The site comprises the Slieve Bernagh mountain range, with the highest peaks at Moylussa (532 m) and Cragnamurragh (526 m), and the surrounding peatlands that flank its northern slopes.	Sourced from NPWS Conservation Objectives: Slieve Bernagh Bog SAC 002312. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. [Version dated 18/08/2016]
14	Lough Derg, North-East Shore SAC (002241)	Calcareous fens with Cladium mariscus and species of the Caricion davallianae* (7210) Limestone Pavement* (8240)	Lough Derg, the lowest order lake on the River Shannon, is one of the largest bodies of freshwater in Ireland. The site includes the northern shore of the lake from the mouth of the Cappagh River in the northwest to just below Black Lough at the	Sourced from NPWS (2016) Conservation objectives for Lough Derg, North-east Shore SAC [002241]. Generic Version 60. Department of Arts,

	European Site Name and Code	Qualifying Interest /Special Conservation Interest and Code *denotes a priority habitat	Summary Description (from Site Synopsis)	Data Source Last accessed online 06/08/2020
		Alluvial Forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)* (91E0) Yew Woodlands Taxus baccata woods of the British Isles* (91J0) Alkaline Fens (7230) Juniper Scrub - Juniperus communis formations on heaths or calcareous grasslands (5130)	north-eastern shore. The greater part of this site lies on Carboniferous limestone.	Heritage, Regional, Rural and Gaeltacht Affairs. [[Version dated 24/04/2019]
15	Glenomra Wood SAC (001013)	Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles (91A0)	Glenomra Wood is a deciduous seminatural woodland located in south-east Co. Clare. The dominant tree is Downy Birch (Betula pubescens). This is mixed with Sessile Oak (Quercus petraea), Ash (Fraxinus excelsior) and Beech (Fagus sylvatica) throughout.	Sourced from NPWS Conservation objectives for Glenomra Wood SAC [001013]. Generic Version 6.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. [Version dated 16/06/2018]
16	Tory Hill SAC (000439)	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) (6210) Cladium Fens - Calcareous fens with Cladium mariscus and species of the Caricion davallianae* (7210) Alkaline Fens (7230)	Tory Hill is an isolated, wooded limestone hill situated about 2 km north-east of Croom, Co. Limerick. It is a prime example of a limestone hill set amongst a region of volcanic intrusions. The hill is of geomorphological interest for the endmoraine and for icemarks visible on the solid rock. The site includes Lough Nagirra and its associated wetland vegetation, located to the north and north-east of Tory Hill.	Sourced from NPWS Conservation objectives for Tory Hill SAC [000439]. Generic Version 6.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. [Version dated 03/08/2018]
17	Ratty River Cave SAC (002316)	Caves not open to the public (8310) Lesser Horseshoe Bat (Rhinolophus hipposideros) (1303)	This site includes a cave that is an annex I habitat and provides winter hibernation conditions for an internationally important number of Lesser Horseshoe Bat. There is also a summer roost for Lesser Horseshoe bats within this site.	Sourced from NPWS (2016) Conservation objectives for Ratty River Cave SAC [002316]. Generic Version 6.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. [Version dated 30/07/2018]

	European Site Name and Code	Qualifying Interest /Special Conservation Interest and Code *denotes a priority habitat	Summary Description (from Site Synopsis)	Data Source Last accessed online 06/08/2020
18	Askeaton Fen Complex SAC (002279)	Cladium Fens - Calcareous fens with Cladium mariscus species of the Caricion davallianae * (7210) Alkaline Fens (7230)	Askeaton Fen Complex consists of a number of small fen areas to the east and southeast of Askeaton in Co. Limerick. This area has a number of undulating hills underlain by Lower Carboniferous Limestone. At the base of the hills a series of fens/reedbeds/loughs can be found, often in association with marl or peat deposits. At the south-east of Askeaton, both Cappagh and Ballymorisheen fens are surrounded by large cliff-like rocky limestone outcrops.	Sourced from NPWS Conservation objectives for Askeaton Fen Complex SAC [002279]. Version 1. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. [Version dated 18/05/2018]
19	Barrigone SAC (000432)	Orchid-rich Calcareous Grassland - Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)* (6210) Limestone Pavement* (8240) Juniper Scrub- Juniperus communis formations on heaths or calcareous grasslands (5130) (1065) Marsh Fritillary (Euphydryas aurinia)	This SAC is situated approximately 5 km west of Askeaton, Co. Limerick. The site comprises an area of dry, species-rich, calcareous grassland. The underlying limestone outcrops occasionally, and the proximity of the site to the Shannon Estuary adds a maritime influence. A range of scrub types are present including Juniper Scrub. A number of factors, including substrate, bedrock, microclimate and maritime influence, contribute to the floristic richness at Barrigone. The presence of rare species of plant and invertebrate highlight the site's conservation value.	Sourced from NPWS Conservation objectives for Barrigone SAC [000432]. Generic Version 6.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. [Version dated 15/02/2019]
20	Curragh- chase Woods SAC (000174)	Alluvial Forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)* (91E0) Yew Woodlands Taxus baccata woods of the British Isles* (91J0) Lesser Horseshoe Bat Rhinolophus hipposideros (1303) Desmoulin's Whorl Snail Vertigo moulinsiana (1016)	This site is situated approximately 7 km east of Askeaton in Co. Limerick. The area is characterised by glacial drift deposits over Carboniferous limestone. The site consists of mixed woodland and a series of wetlands. The site provides hibernation opportunities and foraging habitat for Lesser Horseshoe bat.	Sourced from NPWS Conservation objectives for Curraghchase Woods SAC [000174]. Generic Version 6.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. [Version dated 30/07/2018]
21	Lough Derg (Shannon) SPA (004058)	Cormorant (Phalacrocorax carbo) (A017) Tufted Duck (Aythya fuligula) (A061) Goldeneye (Bucephala clangula) (A067)	Lough Derg lies within counties Tipperary, Galway and Clare and is the largest of the River Shannon Lakes. The greater part of the lake lies on Carboniferous limestone while the narrow southern section is underlain by Silurian strata. The site is of high ornithological importance as it	Sourced from NPWS Conservation objectives for Lough Derg (Shannon) SPA [004058]. Generic Version 6.0. Department of Arts,

	European Site Name and Code	Qualifying Interest /Special Conservation Interest and Code *denotes a priority habitat	Summary Description (from Site Synopsis)	Data Source Last accessed online 06/08/2020
		Common Tern (Sterna hirundo) (A193) Wetland and Waterbirds	supports nationally important breeding populations of Cormorant and Common Tern. In winter, it has nationally important populations of Tufted Duck and Goldeneye. The annex I species Whooper Swan, Greenland White-fronted Goose, Hen Harrier and Common Tern have also been recorded on site.	Heritage, Regional, Rural and Gaeltacht Affairs. [Version dated 07/04/2020]
22	River Shannon and River Fergus Estuaries SPA (004077)	Cormorant (Phalacrocorax carbo) (A017) Whooper Swan (Cygnus cygnus) (A038) Light-bellied Brent Goose (Branta bernicla hrota) (A046) Shelduck (Tadorna tadorna) (A048) Wigeon (Anas penelope) (A050) Teal (Anas crecca) (A052) Pintail (Anas acuta) (A054) Shoveler (Anas clypeata) (A056) Scaup (Aythya marila) (A062) Ringed Plover (Charadrius hiaticula) (A137) Golden Plover (Pluvialis apricaria) (A140) Grey Plover (Pluvialis squatarola) (A141) Lapwing (Vanellus vanellus) (A142) Knot (Calidris canutus) (A143) Dunlin (Calidris alpina) (A149) Black-tailed Godwit (Limosa limosa) (A156) Bar-tailed Godwit (Limosa lapponica) (A157) Curlew (Numenius arquata) (A160) Redshank (Tringa totanus) (A162) Greenshank (Tringa nebularia) (A164)	The estuaries of the River Shannon and River Fergus form the largest estuarine complex in Ireland. The site comprises the entire estuarine habitat from Limerick City westwards as far as Doonaha in Co. Clare and Dooneen Point in Co. Kerry. This site is an internationally important site that supports an assemblage of over 20,000 wintering waterbirds. It holds internationally important populations of four species; Light-bellied Brent Goose, Dunlin, Black-tailed Godwit and Redshank. Furthermore 17 species have wintering populations of national importance. The site holds a nationally important breeding population of Cormorant. Three annex I species are listed regularly; Whooper Swan, Golden Plover and Bar-tailed Godwit. Parts of the River Shannon and River Fergus Estuaries SPA are Wildfowl Sanctuaries.	Sourced from NPWS Conservation Objectives: River Shannon and River Fergus Estuaries SPA 004077. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht. [Version dated 17/09/2012]

	European Site Name and Code	Qualifying Interest /Special Conservation Interest and Code *denotes a priority habitat	Summary Description (from Site Synopsis)	Data Source Last accessed online 06/08/2020
		Black-headed Gull (Chroicocephalus ridibundus) (A179) Wetland and Waterbirds (A999)		
23	Stack's to Mullaghar eirk Mountains , West Limerick Hills and Mount Eagle SPA (004161)	Hen Harrier (<i>Circus</i> cyaneus) (A082)	This is a very large site centred on the borders between the counties of Cork, Kerry and Limerick. The mountains; Knockfeha, Mount Eagle, Knockanefune, Garraunbaun, Taur, Rock Hill, Knockacummer, Mullaghamuish, Knight's Mt, Ballincollig Hill, Beennageeha Mt, Sugar Hill, Knockanimpuba and Knockathea, amongst others are included in this site. Many rivers rise within the site, notably the Blackwater, Owentaraglin, Owenkeal, Glenlara, Feale, Clydagh, Allaghaun, Allow, Oolagh, Galey and Smerlagh. The site is of ornithological importance because it provides nesting and foraging habitat for breeding Hen Harrier. The annex I species Merlin and Short-eared Owl have also been recorded on site.	Sourced from NPWS Conservation objectives for Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA [004161]. Generic Version 6.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. [Version dated 07/04/2020]

2.5 Screening Evaluation

The Authorised Substation as part of the Authorised Upperchurch Windfarm was already subject to Appropriate Assessment whereby in 2014 the competent authority, An Bord Pleanála, assessed that the windfarm would not adversely affect the integrity of a European Site in light of the site's conservation objectives (Board Direction for PL22 .243040, An Bord Pleanála 2014).

Proposed Amendments to Upperchurch Windfarm Electrical Substation—Screening for Appropriate Assessment Report

This Screening evaluation is based on the conceptual site model method which identifies potential impactsource pathways between the Proposed Amended Substation and European Sites. This allows for an evaluation of any potential for significant effects on the Qualifying Interests and Special Conservation Interests and their respective Conservation Objectives, where the potential for changes to the already authorised impacts from the Upperchurch Windfarm Substation exists.

The European Sites which are included in this Screening Evaluation are listed in Section 2.4 and illustrated on AA Figure 5, which is presented in Section 2.4.

2.5.1 **Overview of the Proposed Amended Substation**

The Proposed Amended Substation will be developed at the Authorised Substation location, within the hardcore footprint of the authorised Upperchurch Windfarm. The hardcore footprint is illustrated on AA Figure 2, presented in Section 2.2.

As described in Section 2.2, the changes associated with the Proposed Amended Substation relate to the fenced extents of the substation yard, the layout of electrical plant and equipment within the extended yard, the widening of one of the control buildings, and the installation of welfare facilities in this building – including the installation of an underground wastewater collection tank⁵ and rainwater harvesting system⁶ on the control building, and a marginal increase in height (0.65m and 1.96m) of both control buildings. The changes associated with the Proposed Amended Substation are illustrated on AA Figure 3 and AA Figure 4, which are presented in Section 2.2.

As outlined in Section 2.2.4, no changes to the authorised windfarm are required in relation to the hardcore footprint, nor to the site's drainage network, nor to the use of natural resources, nor to the volumes of excavations, nor to the number of loads of materials imported to the site, nor to levels or traffic or site activity, durations of construction or operational works and activities, beyond that already authorised for Upperchurch Windfarm Substation. The Proposed Amended Substation will also not cause any changes to any other aspects of the Authorised Windfarm or to any of the other elements of the Whole Upperchurch Windfarm Project.

⁵ The wastewater collection tank relates to waste water from a canteen sink and washroom sink, and the wastewater from the single toilet which will be installed at the substation.

⁶ The rainwater harvesting system will collect water for toilet flushing and hand washing.

2.5.2 Sources of Information

The sources of information that were consulted for the purpose of this Screening evaluation are:

- Conservations Objectives, Site Synopses and Site boundary information for all relevant European Sites;
- Location and layout mapping for the Authorised Substation, the Proposed Amended Substation and the Authorised Upperchurch Windfarm;
- Appropriate Assessments (An Bord Pleanála, 2014) and Revised Upperchurch Windfarm NIS (Malachy Walsh & Partners, 2013) for the now authorised Upperchurch Windfarm;
- Appropriate Assessment Reporting for the other elements of the Whole Upperchurch Windfarm Project;
 - Appropriate Assessment Reporting for UWF Grid Connection (Inis Environmental, 2019)
 - Revised Appropriate Assessment Reporting for UWF Related Works (Inis Environmental, 2019)
 - Appropriate Assessment Reporting for UWF Replacement Forestry (Inis Environmental, 2018)
- Consultation with Carmel Daly, Planner, Tipperary County Council, June 2020.
- Summary of Hen harrier survey findings at the Upperchurch Windfarm, undertaken during the 2020 breeding season, see Appendix A2: INIS Environmental Consultants Note - Breeding season 2020 - Hen harrier activity proximal to Upperchurch Windfarm.

2.5.3 Screening Evaluation for SPA Sites

The Proposed Amended Substation is not located within, or on/adjacent the boundary of any SPA. The following four SPA Sites are the subject of this Screening Evaluation as they lie within the extended study area for this AA screening (see AA Figure 5):

- Slievefelim to Silvermines Mountain SPA (004165);
- Stack's to Mullaghareirk Mountains, West Limerick Hills & Mount Eagle SPA (004161);
- Lough Derg (Shannon) SPA (004058);
- River Shannon and River Fergus Estuaries SPA (004077).

The full screening evaluation for the Proposed Amended Substation relative to SPAs is detailed in Table 3. The connectivity of the Proposed Amended Substation with the above listed SPAs is summarised in text below. The passage of time since the original application for Upperchurch Windfarm (2014) is discussed also.

2.5.3.1 <u>Locational Context</u>

The Proposed Amended Substation is not located within, or on/adjacent the boundary of any SPA. The closest SPA to the Proposed Amended Substation site is the Slievefelim to Silvermines Mountain SPA; 2.2km to the west (Table 1, AA Figure 5). This site is designated for the hen harrier (*Circus cyanus*), listed on Annex I of the Birds Directive (Directive 2009/147/EC). The Stack's to Mullaghareirk Mountains, West Limerick Hills & Mount Eagle SPA is also designated for the hen harrier, but is situated a substantial distance from the Proposed Amended Substation (70.9km see Table 1, AA Figure 5).

The Proposed Amended Substation is not hydrologically connected (either via surface water or groundwater bodies) with Lough Derg (Shannon) SPA or the River Shannon and River Fergus Estuaries SPA or the Stack's to Mullaghareirk Mountains, West Limerick Hills & Mount Eagle SPA. While the Proposed Amended Substation is located in the same hydrometric area (Suir) and groundwater body (Templemore A) as the Slievefelim to Silvermines Mountain SPA, the SPA is not located within the local water body (Clodiagh (Tipperary)_010) associated with the substation and therefore hydrological connectivity is not expected to occur.

2.5.3.2 **Previous Appropriate Assessments**

The Appropriate Assessments carried out by An Bord Pleanála in 2014 concluded that the Upperchurch Windfarm will not adversely affect the integrity of any Special Protection Area European Sites in light of the site's conservation objectives.

2.5.3.3 Passage of Time

The passage of time was considered for SPA sites, particularly for the Slievefelim to Silvermines Mountain SPA and its Special Conservation Interest, Hen Harrier.

Trends: At a national level, 5-year interval trends from 2000 to 2015 show that the Hen Harrier population in Ireland is in decline⁶. However, at the local level, the population in Slievefelim to Silvermines Mountains SPA varies from stable to increasing between the same period⁷. In relation to the authorised Upperchurch Windfarm site, the makeup of suitable habitat for Hen Harrier within the authorised Upperchurch Windfarm site has not materially changed since 2012/2013 and will not change as a result of the proposed changes to the Upperchurch Windfarm Substation (section 2.2.4 above), beyond what has already been authorised for the Upperchurch Windfarm.

⁷ The 2015 National Survey of Breeding Hen Harrier in Ireland (NPWS, 2016)

Hen harrier breeding and activity surveys: An examination of the distance from likely centres of foraging activity by Hen Harrier during the breeding season has recorded low utilisation of the Upperchurch Windfarm site (which includes the Authorised Substation footprint) by hen harrier.

Surveys for hen harrier undertaken in the years 2012/2013 and 2019/2020 have consistently shown that this species does not nest within the authorised Upperchurch Windfarm site, and exhibits low usage of the immediate landscape surrounding the site⁸ i.e. the hen harrier does not demonstrate dependency by individuals which are either breeding within t6he SPA, or breeding/foraging upon lands outside the SPA where the consented Upperchurch Windfarm is to be located.

Based on previous assessment of hen harrier activity at the Upperchurch Windfarm site, it can be concluded that the authorised Upperchurch Windfarm site, including and the location of the Proposed Amended Substation, is generally unsuitable for nesting hen harrier.

2.5.3.4 Screening Evaluation for Special Protection Area Sites

Table 3: Screening Evaluation for Special Protection Area (SPA) Sites

Impact	Connectivity	Will the Proposed Amended Substation result in any changes to Impact sources or pathways? Yes/No
Impact Indirect effects to Special Conservation Interest Species within or ex-situ an SPA (i.e. Secondary effects on suitable habitat via habitat loss, degradation, fragmentation or loss/reduction in connectivity, reductions in prey item species. Impact Source(s) • Land cover change • vegetation clearance, earthworks • movement of material • movement of machinery movement of personnel Pathway(s) • land cover • surface water • flowpaths • transport vehicles	 Habitat loss of suitable (positively selected) nesting or foraging habitat ex-situ to an SPA may reduce species numbers within an SPA through reduced nest success (in respect of a reduction in utilised foraging habitat) or reductions in supporting source populations outside the SPA. Habitat loss or degradation may reduce the availability of prey items for Special Conservation Interest species. Indirect habitat effects to Special Conservation Interest species via reductions in water quality has potential to occur downstream within hydrologically connected SPAs Habitat effects via the spread of invasive species has potential to occur downstream within a catchment, and via machinery/vehicle movements along transport routes. 	No – The Proposed Amended Substation will not result in any change in the impact sources or pathways associated with the Authorised Windfarm. There will be: • no change to the authorised hardcore footprint • no change in vegetation clearance, • no change in volumes of excavations • no change in the movement of materials • no change in the volumes of traffic or to haul routes for delivery traffic • no change in the number of personnel or works locations • no change in the operational activities for the substation • no change to any other aspect of the authorised windfarm or to the other elements of the Whole Upperchurch Windfarm project • the substation site is not hydrologically connected to the SPAs

⁸ Appendix A2 : - INIS Environmental Consultants Note - Breeding season 2020 - Hen harrier activity proximal to Upperchurch Windfarm

Impact

Indirect effects to Special Conservation Interest Species within or ex-situ an SPA (i.e. Secondary effects through disturbance or mortality effects to Special Conservation Interest bird species outside their respective SPA).

Impact Source(s)

- Noise and visual intrusion;
- operating machinery;
- presence of construction personnel

Pathway(s)

- visibility,
- air,
- direct contact

Disturbance effects to Special Conservation Interest species (such as when foraging or migrating) outside SPA's may affect in turn breeding success or general survival rates for these species once within SPA Sites.

Indirect effects via mortality of Special Conservation Interest species outside of an SPA could occur where works/ground clearance occurs in suitable nesting, roosting or foraging habitat or inadvertently through contact with moving vehicles or traffic.

No – The Proposed Amended Substation will not result in any change in the impact sources or pathways associated with the Authorised Windfarm.

There will be:

- No change to the authorised hardcore footprint
- no change in vegetation clearance,
- no change in works locations,
- no change in the number of personnel
- no change in construction activity levels,
- no change in the use of machinery
- no change in the operational activities for the substation,
- no change to any other aspect of the authorised windfarm or to the other elements of the Whole Upperchurch Windfarm project.

Impact

Indirect mortality effects to Special Conservation Interest species ex-situ an SPA as a result of collision with above ground structures

Impact Source(s)

 Structures and buildings at the substation compound

Pathway(s)

• Direct contact

Mortality effects to Special Conservation Interest Species as a result of collision with above ground structures at the Upperchurch Windfarm substation.

All structures at the substation will be stationary, of relatively low elevation (<7m in height) and contained within a fenced compound. It is therefore considered that the above-ground structures at the authorised substation do not present a collision risk to the Special Conservation Interest species.

With regard to the Slievefelim to Silvermines Mountain SPA, there is low usage of the Upperchurch Windfarm site (including the Authorised Substation location) by Hen Harrier, and surveys at the windfarm demonstrate that there is not any dependency by birds, breeding within the SPA, upon lands outside the SPA at the authorised Upperchurch Windfarm.

No – The Proposed Amended Substation will not result in any change in the impact sources or pathways associated with the Authorised Windfarm. In addition it is considered that that the change to the layout of the compound and to the size and height of the control buildings will not cause any material increase in collision risk.

There will be:

- no change to the location of the substation, or to the extent of the hardcore footprint (see AA Figure 2, in Section 2.2),
- negligible change in the height of structures at the substation compound, with the two control buildings increasing in height by 0.65m and 1.96m (see AA Figure 3, in Section 2.2),
- no change to the height of palisade fence or to the electrical equipment in the yard,
- no change to the type of above ground structures at the substation – i.e. structures remain stationary,
- the change in size (width) of the larger control building or the change to the internal layout of the substation compound will not increase collision risk.

2.5.3.5 Conclusion of Screening Evaluation for SPA Sites

As evaluated in the Revised Natura Impact Statement (2013) and assessed by An Bord Pleanála (2014), the Upperchurch Windfarm (consented in 2014), is not likely to cause significant adverse effects to any European Site and will not adversely affect the integrity of any Special Protection Area European Sites in light of the site's conservation objectives.

The Proposed Amended Substation will remain in the same location as previously authorised. It will not result in any changes to the footprint of the authorised windfarm, extent of groundworks, vegetation clearance or excavations, number of loads of concrete, use of machinery, oils of fuels, or to the levels of site activity. The Proposed Amended Substation will also not result in changes to any other aspect of the authorised windfarm or to other elements of the Whole Upperchurch Windfarm Project, including to haul routes associated with the whole project.

It is evaluated in Section 2.5.3 above, that the Proposed Amended Substation will not result in any changes to sources of loss, degradation, fragmentation or loss/reduction in connectivity of suitable habitat for Special Conservation Interests, neither will the Proposed Amended Substation cause any further reductions in prey item species or result in any changes to disturbance or displacement effects to Species of Conservation Interest associated with the authorised Upperchurch Windfarm. Furthermore, it is evaluated that the Proposed Amended Substation does not present an increase in collision risk.

Therefore, it is concluded that the Proposed Amended Substation, has no potential to increase the magnitude of impacts associated with the Authorised Upperchurch Windfarm, and therefore the impact of the authorised Upperchurch Windfarm to Special Areas of Conservation sites will not change – i.e. Upperchurch Windfarm, including the Proposed Amended Substation, either alone or in-combination with the other elements and other projects, is not likely to cause significant adverse effects to any European Site and will not adversely affect the integrity of any Special Protection Area European Sites in light of the site's conservation objectives.

2.5.4 Screening Evaluation for SAC Sites

The Proposed Amended Substation is not located within, or on/adjacent the boundary of any SAC site. The following SAC Sites are subject of this Screening Evaluation as they lie within the extended study area for this AA screening (see AA Figure 5):

- Lower River Suir SAC (002137)
- Anglesey Road SAC (002125)
- Lower River Shannon SAC (002165)
- Bolingbrook Hill SAC (002124), Keeper Hill SAC (001197)
- Silvermine Mountain SAC (000939)
- Silvermine Mountain West SAC (002258)
- Philipston Marsh SAC (001847)
- Kilduff, Devilsbit Mountain SAC (000934)
- Clare Glen SAC (000930)
- Glenstal Wood SAC (001432)
- Slieve Bernagh Bog SAC (002312)
- Lough Derg, North-East Shore SAC (002241)
- Glenomra Wood SAC (001013)
- Tory Hill SAC (000439)
- Ratty River Cave SAC (002316)
- Askeaton Fen Complex SAC (002279)
- Barrigone SAC (000432)
- Curraghchase Woods SAC (000174

The full screening evaluation for the Proposed Amended Substation relative to SACs is detailed in Table 4. The connectivity of the Proposed Amended Substation with the above listed SACs is summarised in text below. The passage of time since the original application for Upperchurch Windfarm (2013) is discussed also.

2.5.4.1 Locational Context

The Proposed Amended Substation is not located within, or on/adjacent the boundary of any SAC site. The closest SAC to the Proposed Amended Substation site is the Anglesey Road SAC; 4.3km to the south. While the Lower River Suir SAC (002137), Anglesey Road SAC (002125), and Kilduff, Devilsbit Mountain SAC are located in the same hydrometric area (Suir) and groundwater body (Templemore A) as the Proposed Amended Substation, only the Lower River Suir SAC is hydrologically connected with the site of the Proposed Largest Substation. This is due to the location of the Proposed Amended Substation within the Clodiagh (Tipperary)_010 local surface water body which is only connected with the Lower River Suir SAC. No other SAC sites are hydrologically connected (via surface water bodies or groundwater bodies) with the location of the Proposed Amended Substation. In addition, there are no instream works or bridge crossing works associated with the Proposed Amended Substation.

2.5.4.2 **Previous Appropriate Assessments**

The Appropriate Assessments carried out by An Bord Pleanála in 2014 concluded that the Upperchurch Windfarm will not adversely affect the integrity of any Special Area of Conservation European Site in light of the site's conservation objectives.

2.5.4.3 Passage of Time

The passage of time was considered for SAC sites, particularly for the Lower River Suir SAC.

Trends: Reporting on trends with regard to protected habitats and species under the EU Habitats Directive is provided to the EU under Article 17 of said directive. The most recently available trend information in respect of individual habitats and species was published in 2019⁹. These trends show that most Irish habitats listed on the Habitats Directive are in Unfavourable status and almost half are demonstrating ongoing declines. The majority of species listed on the Habitats Directive are, however, in Favourable status in Ireland, and stable, although a small number are considered to be in Bad status and continue to require concerted efforts to protect and restore them.

The Clodiagh River catchment was classified as 'catch and release' by IFI in 2019 (Salmon Angling Regulations: Management of the Wild Salmon Fishery 2019) for the conservation of Atlantic Salmon stocks, indicating the ongoing pressures on the salmon populations in this catchment. There is an ongoing and persistent decline in Atlantic Salmon stocks in Irish freshwaters overall, pertaining specifically to the European Sites which list this species as a qualifying interest (NPWS, 2013). Pressures and threats affecting the freshwater habitat of salmon correlate directly to those pressures affecting other aquatic ecological interests including lamprey species, aquatic invertebrates and other salmonids (siltation; channelization; drainage maintenance; invasive species and disease vectors; and direct/diffuse pollution from agriculture, forestry and direct discharges). It is noted that morphological pressures such as barriers to movement or channelisation may have varying adverse significance on different species; for example, affecting salmon differently to lamprey species. The Water Framework Directive status of the Clodiagh (Tipperary)_010 is reported to be At Risk of not meeting the Water Framework Directive objectives, due to morphological and forestry related effects such as suspended sediment and eutrophication. It is noted that the status and risk characterisations have not been updated in the current RBMP (2018-2021), thus characterisation and water quality status are cited as indicative¹⁰.

2.5.4.4 Screening Evaluation for Special Area of Conservation Sites

Table 4: Screening Evaluation for Special Area of Conservation (SAC) Sites

Impact	Connectivity	Will the Proposed Amended Substation result in any changes to Impact sources or pathways? Yes/No
Impact Indirect Effects to Qualifying Interest via reductions in water quality or spread of invasive species within or ex- situ the SAC	to occur within or ex-situ the Lower River Suir SAC downstream of the Proposed Amended Substation. not result in any change i or pathways associated Windfarm.	No – The Proposed Amended Substation will not result in any change in the impact sources or pathways associated with the Authorised Windfarm. There will be:
 Impact Source(s) Groundworks, excavations; use of hydrocarbons & cement-based compounds; reinstatement works 	Invasive species can also be spread downstream or upstream within a catchment, and via machinery/vehicle movements along transport routes, with potential to affect habitats within SAC sites.	 No change to the extent of groundworks or reinstatement works - no change to the authorised hardcore footprint no change in volumes of excavations; no change to the movement of materials or machinery,

Weblink: https://www.npws.ie/sites/default/files/publications/pdf/NPWS_2019_Vol1_Summary_Article17.pdf

⁹ The Status of EU Protected Habitats and Species in Ireland.

¹⁰ Appropriate Assessment Reporting for UWF Grid Connection (Inis Environmental, 2019)

movement of soils and		no change in the volumes of construction	
<pre>machinery Pathway(s) • soils, • surface water, water</pre>		 traffic or haul routes for delivery traffic, no change to the number of loads of concrete or construction materials for the substation no change to the use of hydrocarbons, no change in the operational activities for the substation, and no change to any other aspect of the 	
flowpaths, movement of soils and machinery		authorised windfarm or to the other elements of the Whole Upperchurch Windfarm project.	
Impact Indirect effects to Qualifying Interest species within or exsitu an SAC through disturbance or mortality effects outside their respective SAC Impact Source(s)	Species of Qualifying Interest, or supporting species of Qualifying Interests, present within close proximity to construction works have potential to be disturbed/displaced by the	No – The Proposed Amended Substation will not result in any change in the impact sources or pathways associated with the Authorised Windfarm. There will be: No change to the work locations, no change in the number of personnel no change in construction activity levels	
 Noise and visual intrusion; operating machinery; presence of construction personnel 	works and presence of construction personnel. Mortality could occur ex-situ an SAC site through contact with operational machinery or traffic	 no change in the use of machinery no change in the operational activities for the substation. No instream works or bridge/culvert works for the Proposed Amended Substation, and no change to any other aspect of the authorised windfarm or to the other elements of the Whole Upperchurch Windfarm project. No – The Proposed Amended Substation will not result in any change in the impact sources or pathways associated with the Authorised Windfarm. In addition it is considered that the change to the layout of the compound and to the size and height of the control buildings will not cause any increase in collision risk. There will be: no change to the location of the substation, or to the extent of the hardcore footprint (see AA Figures 1 to 4 in Section 2.2), no change to the type of above ground structures at the substation – i.e. structures remain stationary, negligible change in the height of structures at the substation compound, with the two control buildings increasing in height by (0.65m and 1.96m), no change to the height of palisade fence or to the electrical equipment in the yard, the change in size (width) of the larger control building or the change to the internal layout of the substation compound will not increase collision risk. 	
Pathway(s)visibility,air,direct contact			
Impact Indirect mortality effects to Qualifying Interest species (Lesser Horseshoe Bat, Marsh Fritillary) ex-situ an SAC as a result of collision with above ground structures Impact Source(s) • Structures and buildings at the substation compound	Mortality effects to Qualifying Interest species as a result of collision with above ground structures at the Upperchurch Windfarm substation. The potential for effects relates to Lesser Horseshoe bat species for Ratty River Cave SAC and Curraghchase Woods SAC, and Marsh Fritillary butterfly for Barringone SAC.		
Pathway(s)	However, all structures at the substation will be stationary, of relatively low elevation		
Direct contact	(<7m in height) and contained within a fenced compound. It is therefore considered that the above-ground structures at the authorised substation do not present a collision risk to these Qualifying Interest		

2.5.4.5 Conclusion of Screening Evaluation for SAC Sites

As evaluated in the Revised Natura Impact Statement (2013) and assessed by An Bord Pleanála (2014), the Upperchurch Windfarm (consented in 2014), is not likely to cause significant adverse effects to any European Site and will not adversely affect the integrity of any Special Protection Area European Sites in light of the site's conservation objectives.

The Proposed Amended Substation will remain in the same location as previously authorised. It will not result in any changes to the footprint of the authorised windfarm, extent of groundworks, vegetation clearance or excavations, number of loads of concrete, use of machinery, oils of fuels, or to the levels of site activity. The Proposed Amended Substation will also not result in changes to any other aspect of the authorised windfarm or to other elements of the Whole Upperchurch Windfarm Project, including to haul routes associated with the whole project.

It is evaluated in Section 2.5.4 above, that the Proposed Amended Substation will not result in any changes to sources of loss, degradation, fragmentation or loss/reduction in connectivity of Qualifying Interest habitats or plant species or to suitable habitat for Qualify Interest animal species, and will not result in any changes to sources of disturbance, displacement or mortality of Qualifying Interest species, neither will the Proposed Amended Substation present an increase in collision risk to non-volant Qualifying Interest species such as Lesser Horseshoe bat or Marsh Fritillary butterfly.

Therefore, it is concluded that the Proposed Amended Substation has no potential to increase the magnitude of impacts associated with the Authorised Upperchurch Windfarm to Special Areas of Conservation sites, and therefore the impact of the authorised Upperchurch Windfarm will not change – i.e. Upperchurch Windfarm, including the Proposed Amended Substation, either alone or in-combination with the other elements and other projects, is not likely to cause significant adverse effects to any European Site and will not adversely affect the integrity of any Special Areas of Conservation European Sites in light of the site's conservation objectives.

Proposed Amendments to Upperchurch Windfarm Electrical Substation—Screening for Appropriate Assessment Report

2.5.5 Consideration of Other Projects for in-combination impacts to European Sites

The Proposed Amended Substation will not result in changes to sources or pathways for impacts associated with the authorised Upperchurch Windfarm on European Sites, and is evaluated as having no potential to cause significant impacts to Qualifying Interests or Special Conservation Interests.

Therefore, it is considered that there is no potential for changes to in-combination impacts with other plans or projects, associated with the Authorised Upperchurch Windfarm or with the whole Upperchurch Windfarm Project.

2.6 Screening for Appropriate Assessment: Conclusion Statement

The Screening Evaluation provided herein has examined the likely effects of the Proposed Amended Substation at the authorised Upperchurch Windfarm, either alone or in combination with other projects or plans, upon any European Site and has established that it can be objectively concluded that these effects will not be significant.

There are a total of 23 European Sites located within the extended zone of consideration:

- 1. Slievefelim to Silvermines Mountain SPA (004165)
- 2. Lower River Shannon SAC (002165)
- 3. Lower River Suir SAC (002137)
- 4. Anglesey Road SAC (002125)
- 5. Bolingbrook Hill SAC (002124)
- 6. Keeper Hill SAC (001197)
- 7. Silvermine Mountain SAC (000939)
- 8. Silvermine Mountain West SAC (002258)
- 9. Philipston Marsh SAC (001847)
- 10. Kilduff, Devilsbit Mountain SAC (000934)
- 11. Clare Glen SAC (000930)
- 12. Glenstal Wood SAC (001432)
- 13. Slieve Bernagh Bog SAC (002312)
- 14. Lough Derg, North-East Shore SAC (002241)
- 15. Glenomra Wood SAC (001013)
- 16. Tory Hill SAC (000439)
- 17. Ratty River Cave SAC (002316)
- 18. Askeaton Fen Complex SAC (002279)
- 19. Barrigone SAC (000432)
- 20. Curraghchase Woods SAC (000174)
- 21. Lough Derg (Shannon) SPA (004058)
- 22. River Shannon and River Fergus Estuaries SPA (004077)
- 23. Stack's to Mullaghareirk Mountains, West Limerick Hills & Mount Eagle SPA (004161)

The Screening Evaluation concludes that there is no potential for the Proposed Amended Substation to change the authorised impact of the authorised Upperchurch Windfarm, this is mainly due to the fact that the Proposed Amended Substation will remain in the same location as its authorised counterpart and will not result in any changes to the footprint of the authorised windfarm, or to other elements of the whole project or to haul routes associated with the whole project. Furthermore, the Proposed Amended Substation will not result in changes to sources of impacts such as groundworks and excavations, vegetation clearance, number of loads of concrete, use of machinery, oils of fuels, or to the levels of site activity.

Therefore, following screening, it can be objectively concluded that **there** is <u>no</u> likelihood of significant effects to any of the above European Sites as a result of the Proposed Amended Substation, either alone or incombination with other plans or projects. It is also concluded that the Proposed Amended Substation will not increase the impact of the authorised Upperchurch Windfarm, i.e. Upperchurch Windfarm, including the Proposed Amended Substation, will not adversely affect the integrity of any European Site in light of the site's conservation objectives.

For the reasons outlined above the potential for the Proposed Amended Substation to cause significant effects to European Sites has been excluded, and the Proposed Amended Substation has been 'Screened Out' from the Appropriate Assessment process, - no Appropriate Assessment is required.

A Finding of No Significant Effects (FONSE) Report is appended to this Report as Appendix A1.

Proposed Amendments to Upperchurch Windfarm Electrical Substation—Screening for Appropriate Assessment Report

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APPENDIX A1: Finding of No Significant Effects (FONSE) Report

Proposed Amendments to Upperchurch Windfarm Electrical Substation

APPENDIX TO SCREENING FOR APPROPRIATE ASSESSMENT REPORT

APPENDIX A1: FINDING OF NO SIGNIFICANT EFFECTS (FONSE) REPORT

The data and descriptions in this appendix have informed the cumulative evaluations in the Screening for Appropriate Assessment Report.

APPENDIX A1: Finding of No Significant Effects (FONSE) Report

Proposed Amendments to Upperchurch Windfarm Electrical Substation

1.1 Finding of No Significant Effects Report

In accordance with the EC (2001) guidance document, Assessment of plans and projects significantly affecting Natura 2000 sites – Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, A Finding of No Significant Effects Report has been completed for the Proposed Amendments to Upperchurch Windfarm Electrical Substation (also referred to herein as the 'Proposed Amended Substation'. The standard matrix for this report provided in Annex 2 of the guidance document was followed. Line items in italics are taken directly from the guidance document.

Finding of No Significance Effects Report

Name and location of the Natura 2000 sites

The screening appraisal provided herein has examined potential effects via source pathway linkages on the designated SACs and SPAs within 15km of the Proposed Amendments to Upperchurch Windfarm Electrical Substation at the already authorised Upperchurch Windfarm.

This has been applied around the Proposed Amended Substation and further is extended to include a 15km area around all of the other elements of the Whole Upperchurch Windfarm (UWF) Project in order to establish whether or not the Proposed Amendments to Upperchurch Windfarm Electrical Substation either alone or in-combination with the other elements of the Whole UWF Project and other projects is likely, or has potential, to have a significant effect on a European Site.

There are 23 European Sites within the extended Study Area - nineteen Special Areas of Conservation (SAC) and four Special Protection Area (SPA for birds):

- 1. Anglesey Road SAC (002125),
- 2. Bolingbrook Hill SAC (002124),
- 3. Keeper Hill SAC (001197),
- 4. Silvermine Mountain SAC (000939),
- 5. Silvermine Mountain West SAC (002258),
- 6. Philipston Marsh SAC (001847),
- 7. Kilduff, Devilsbit Mountain SAC (000934),
- 8. Clare Glen SAC (000930),
- 9. Glenstal Wood SAC (001432),
- 10. Slieve Bernagh Bog SAC (002312),
- 11. Lough Derg, North-East Shore SAC (002241),
- 12. Glenomra Wood SAC (001013),
- 13. Tory Hill SAC (000439),
- 14. Ratty River Cave SAC (002316),
- 15. Askeaton Fen Complex SAC (002279),
- 16. Barrigone SAC (000432),
- 17. Curraghchase Woods SAC (000174),
- 18. Lough Derg (Shannon) SPA (004058,
- 19. River Shannon and River Fergus Estuaries SPA (004077), and
- 20. Stack's to Mullaghareirk Mountains, West Limerick Hills & Mount Eagle SPA (004161)
- 21. Lower River Shannon SAC (002165)
- 22. Lower River Suir SAC (002137), and
- 23. Slieve Felim to Silvermines Mountain SPA (004165).

3

Description of the project or plan

<u>Overview:</u> The Proposed Amendments to Upperchurch Windfarm Electrical Substation relate to the already authorised substation at Upperchurch Windfarm, which was authorised in 2014 but is not yet constructed. The Authorised Upperchurch Windfarm is located on the eastern foothills of the Silvermine Mountain range in County Tipperary. The authorised Upperchurch Windfarm is part of a larger whole Upperchurch Windfarm project, which also includes UWF Grid Connection, UWF Related Works, UWF Replacement Forestry, and UWF Other Activities.

Description of the Proposed Amendments to Upperchurch Windfarm Electrical

<u>Substation</u>: It is proposed to increase the size of the hardcore compound yard of the authorised Upperchurch Windfarm Substation from $2176m^2$ to $3107m^2$ in area (68.64m x 45.27m), by extending out the perimeter palisade fencing. This is to accommodate a change to the layout of electrical equipment in the compound yard, and a change in size and design of the two control buildings. It is proposed to increase one of the control buildings from $99.67m^2$ to $176.8m^2$ (17m x 10.4m), with welfare facilities to be installed. Both control buildings will increase in height from 6.4m to 7.05m and 8.36m.

There will be no increase in the authorised hardcore area, because the extended yard can be accommodated on the windfarm road area outside the substation fencing. The hardcore drainage system, which includes a settlement pond, will remain as authorised. Also, to reduce excavations, under the new design layout only part of the hardcore area will be excavated to the authorised ground level. The amended control buildings will be built on different levels, with the taller of the two buildings on the lower level (2m below). This will result in the amended control buildings presenting to the viewer, as of similar height to the authorised buildings.

There is no change to the location of the substation, the Proposed Amended Substation is within the authorised hard cored area at the Authorised Substation. The substation compound is located in a grassland field, adjacent to a forestry plantation, sited adjacent to a private paved road which is accessed from a public local road (L6188-0, to the north).

<u>Purpose:</u> The Proposed Amended Substation is required because of updates to ESB Networks specifications for 110kV substations, which specify larger spacing between electrical equipment, larger control buildings and the provision of welfare facilities within.

ls	the	Proje	ct	or	Plan		
directly connected with or							
necessary			to		the		
ma	nage	ment	of	the	site		
(provide details)?							

No

Are there other projects or plans that together with the project of plan being

Yes: In addition to any in-combination effects from the individual Whole UWF Project Elements 1 to 5, the other projects which were included in the Appropriate Assessment reports for Upperchurch Windfarm (NIS 2013), UWF Grid Connection (NIS 2019), UWF Related Works (Revised NIS 2019) and UWF

Finding of No Significance Effects Report

assessed could affect the site (provide details)?

Replacement Forestry (NIS 2018) were considered in this Screening Evaluation. This projects are listed below:

- existing Rear Cross Quarry,
- existing Milestone Windfarm,
- consented Newport Town Park,
- consented Castlewaller Windfarm (and potential grid connection),
- potential Bunkimalta Windfarm (and consented grid connection),
- other windfarms included in the AA Reporting for Upperchurch Windfarm (Revised Natura Impact Statement 2013) – Knockastanna, Garracummer, Hollyford, Glencarbry, Glenough, Cappagh White, Curraghgraigue, Knockmeala; and
- General Agriculture and Forestry operations, and turf-cutting.

The Assessment of Significant Effects

Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 site

The Proposed Amended Substation is not located within, or on/adjacent the boundary of any SPA or SAC site.

The Proposed Amended Substation will remain in the same location as the previously authorised Upperchurch Windfarm Substation. It will not result in any changes to the footprint of the authorised substation or authorised windfarm, extent of groundworks, vegetation clearance or excavations, number of loads of concrete, use of machinery, oils of fuels, or to the levels of site activity. The Proposed Amendments to Upperchurch Windfarm Electrical Substation will also not result in changes to any other aspect of the authorised windfarm or to other elements of the Whole Upperchurch Windfarm Project, including to haul routes associated with the whole project.

In relation to SPA sites, the Proposed Amended Substation will not result in any changes to sources of loss, degradation, fragmentation or loss/reduction in connectivity of suitable habitat for Special Conservation Interests, neither will the Proposed Amended Substation cause any further reductions in prey item species or result in any changes to disturbance or displacement effects to Species of Conservation Interest associated with the authorised Upperchurch Windfarm. Furthermore, it is evaluated that the Proposed Amended Substation does not present an increase in collision risk.

In relation to SAC sites, the Proposed Amended Substation will not result in any changes to sources of loss, degradation, fragmentation or loss/reduction in connectivity of Qualifying Interest habitats or plant species or to suitable habitat for Qualify Interest animal species, and will not result in any changes to sources of disturbance, displacement or mortality of Qualifying Interest species, neither will the Proposed Amended Substation present an increase in collision risk to non-volant Qualifying Interest species such as Lesser Horseshoe bat or Marsh Fritillary butterfly.

Explain why these effects are not considered significant

As evaluated in the Revised Natura Impact Statement (2013) and assessed by An Bord Pleanála (2014), the Upperchurch Windfarm (authorised in 2014), is not likely to cause significant adverse effects to any European Site and will not adversely affect the integrity of any Special Protection Area European Sites in light of the site's conservation objectives.

Finding of No Significance Effects Report							
	Electrical Substat associated with t Areas or Special A of the authorised Windfarm, includ combination with significant adverse	ion has no potential to in he Authorised Upperchurc reas of Conservation Europe Upperchurch Windfarm wing the Proposed Amende the other elements and of e effects to any European Si ecial Areas of Conservation	ments to Upperchurch Windfarm crease the magnitude of impacts h Windfarm to Special Protection ean Sites, and therefore the impact will not change — i.e. Upperchurch ed Substation, either alone or inther projects, is not likely to cause te and will not adversely affect the European Sites in light of the site's				
	Therefore, as it can be objectively concluded that the Proposed Amendments to Upperchurch Windfarm Electrical Substation, either alone or in-combination, is not likely to cause significant impacts to European Sites, all European Sites listed above are 'Screened Out' at Stage One of the Appropriate Assessment process.						
	We refer to Section 2.5 of the Appropriate Assessment Report for detailed examination.						
Name of Agency or Body Consulted	Summary of Response						
Tipperary County Council	The planning application for the Proposed Amended Substation to include an AA Screening report.						
Data Collected to Carry out the Assessment							
Who carried out the assessment Sources of Data		Level of assessment completed	Where can the full results of the assessment be accessed and viewed				
Karen Dylan Shevlin, Ecologist Ecopower boundary information for all European Sites; Appropriate Assessment Reports for other elements of the Whole UWF Project; and descriptions and drawings of the Proposed Amended Substation and authorised Upperchurch Windfarm.		Stage 1: Screening for Appropriate Assessment. Following screening it can reasonably be concluded that Significant Effects are not likely to occur to any of the 23 European sites as a result of the Proposed Amended	The public office for Tipperary County Council, Nenagh, Co Tipperary.				



INIS ENVIRONMENTAL CONSULTANTS LTD.

SUITE 16, SHANNON COMMERCIAL PROPERTIES INFORMATION AGE PARK GORT ROAD, ENNIS COUNTY CLARE, IRELAND

Julie Brett, Ecopower Ltd, Zetec House, Purcellsinch IDA Business Park, Kilkenny.

Date: 04/09/2020

RE: Breeding season 2020 - Hen harrier activity proximal to Upperchurch Wind Farm

Dear Julie,

We can confirm that low levels of Hen Harrier activity were recorded from the 10VPs that we conducted each month for Upperchurch Wind Farm during the 2020 breeding season.

In summary, between April and August 2020 just one observation was recorded on the wind farm of an adult female foraging. Four additional Hen Harrier observations were offsite, less than 1km from the site boundary. The closest hen harrier breeding activity recorded during the 2020 breeding season was at a traditional nest site > 5km from the closest turbine.

If you have any queries please let me know.

Kind regards,

Howard Williams

Chief Executive Officer

Chartered Environmentalist

Chartered Biologist