

Appendix to Chapter 2: The EIA Process Including Scoping

Appendix 2.1: Scoping of Other Projects or Activities for the Cumulative Evaluations

The data and descriptions in this appendix have informed the cumulative evaluations in each of the Environmental Factor topic chapters Chapter 6 to Chapter 17 of the EIA Report.

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A2.1 .1 Introduction to Scoping of Other Projects and Activities

Unlike off-site projects or secondary projects (which are integral to the subject project or may arise largely because of it), Other Projects or Activities relates to existing or consented (or proposed) projects and on-going activities in the area, which are not connected to the subject project, and which by addition could create larger more significant effects to the environment. This appendix sets out how Other Projects or Activities in the area were scoped in for the evaluation of cumulative effects in the EIAR Main Report.

A2.1 .2 Research Results of Other Projects or Activities in the Area

A 15km area around the footprint of all Elements of the Whole UWF Project was drawn, and research of other large projects within this area was carried out. This research, carried out by Construction Information Services (CIS), one of Ireland's leading research companies, and by the EIA Coordinators Ecopower Developments, covered the period from January 2011 to October 2019. In addition to this, the EIAR Team's knowledge of the area added existing projects such as existing windfarms, to the list. Activities in the general area surrounding the works were also considered. Other works including public road maintenance/upgrade works were considered, but not included as the UWF Grid Connection 110kV UGC works will not take place at the same time as any public authority works, as per pre-planning consultation with Tipperary County Council. Similarly, the potential for public water mains works along the public road were also considered, however no upgrade works are currently planned along the 110kV UGC route. The list of 23 No. Other Projects and 3 No. Activities are the relevant projects and activities which have potential to cause cumulative effects. These projects and activities are then scoped in **Section A2.1.4 below**.

The following **changes from the previous application for UWF Grid connection (2018)**, have been applied to this 2019 application:

- The Newport Distributer Road was excluded as planning permission has expired on this project;
- Newport Town Park was included as this project was consented by An Bord Pleanála in April 2019;
- Thurles Regional Water Treatment Works has commenced construction with completion expected in 2021, and remains scoped-in;
- The previously consented Bunkimalta Windfarm planning permission has been annulled, however the grid connection remains consented and it is conservatively assumed that a windfarm could be proposed in the same area, therefore Bunkimalta Windfarm remains scoped in;
- A planning search of plans submitted to Clare, Tipperary and Limerick county councils from May 2018 to end of October 2019 resulted in 7 No. projects being included for scoping for potential cumulative impacts – these comprise forestry entrances at Cappamore, CummerBeg and Knockshanbrittas, a quarry at Curraghduff, a glamping site at Lackamore, and a Biorefinery facility in Moyne, near Thurles, along with the aforementioned Newport Town Park.
- Smaller developments such as agricultural developments, which were scoped in the previous 2018 application and which were found not to have potential to cause noticeable cumulative impacts mainly due to the small scale of these developments and separation from the project, have been scoped out from consideration in this 2019 EIAR.

Table 1: List of Other Projects and Activities included in the Scoping exercise

Other Project or Activity Map ID	Name	Industry	Details	Location	Status	Planning Authority	Planning Ref
1	Killonan to Nenagh 110kV Overhead Line	Utilities	Existing 110kV overhead line between Killonan 110kV Station near Limerick City and the 110kV/38kV substation station on the outskirts of Nenagh town. The 110kV overhead lines are located to the west of the UWF Grid Connection 110kV UGC in Mountphilips townland. The new Mountphilips Substation associated with the UWF Grid Connection will connect to this line via the new End Masts.	Between Killonan Station and Nenagh Substation	Existing	Limerick Tipperary	Existing
2	Shannonbridge to Killonan 220kV Overhead Line	Utilities	Existing 220kV overhead line between Shannonbridge 220kV Station and Killonan 110kV Station near Limerick City. The 220kV overhead lines pass over the route of the UWF Grid Connection 110kV UGC in Coole townland.	Between Shannonbridge Station and Killonan Station	Existing	Offaly Tipperary Limerick	Existing
3	Bunkimalta Windfarm	Energy	<p><u>Potential Windfarm</u>: c.34MW wind farm in potentially the same general location as the previously consented (and now annulled) windfarm comprising wind turbines, substation compound, access tracks, anemometer masts, potentially borrow pits and soils storage areas and associated site works. The potential windfarm is assumed, for the purposes of this EIA Report, to be located in the same townlands as the previous application – i.e. Bunkimalta, Bauraglanna, Lackabrack, Knockfune and Foilduff at Keeper Hill. It is assumed that any future application for the windfarm would be accompanied by an EIAR and NIS.</p> <p><u>Consented Grid Connection</u>: The Bunkimalta Windfarm (should it be permitted in the future) is expected to connect to the National Grid via the already consented underground grid connection to the existing Nenagh Substation, on the outskirts of Nenagh town. The consented grid connection comprises the installation of approximately 22.25km of 38kV underground cable (UGC) between Bunkimalta Wind Farm and Nenagh 110kV substation, to be installed primarily in public roads. Bunkimalta Windfarm is located c.3.5km to the north of the UWF Grid Connection. Modifications to the existing entrance from the L-2163 to the Keeper Hill Coillte Forest.</p>	<p>Potential windfarm: Bunkimalta, Bauraglanna, Lackabrack, Knockfune and Foilduff at Keeper Hill</p> <p>Grid connection: Tooreen, Logg, Ballyquiveen, Coolagh, Mountisland, Lissatunny, Tullamoylin, Ballinenagh, Curragh-arneen, Kilboy, Tyone, Pollanorman, Curryquin, Ballynaclogh, Lackabrack, Foilduff, Mucklin, Bolingbrook, Kilriffet and Ballygasheen</p>	<p>Potential windfarm, Consented grid connection</p>	Tipperary	<p>n/a (for windfarm)</p> <p>16600433 (grid connection)</p> <p>16600432 (entrance)</p>

Other Project or Activity Map ID	Name	Industry	Details	Location	Status	Planning Authority	Planning Ref
			Overlap of Construction Periods: Although it is not expected that the Bunkmalta Windfarm will be constructed at the same time as Upperchurch Windfarm or UWF Grid Connection (due to the recent annulment of the Bunkmalta Windfarm planning permission following the European Court of Justice ruling C-164/17), this project and its associated grid connection are nonetheless included in the cumulative evaluation on a precautionary basis.				
4	Castlewaller Windfarm	Energy	<p><u>Consented Windfarm:</u> 16 turbines and associated hardstands, electrical substation, internal underground cables, internal access roads, upgrading of existing internal access roads, borrow pits, expansion of drainage system and ancillary works. A Natura Impact Statement accompanied the planning application 11/51/0251 for Castlewaller Windfarm.</p> <p><u>Potential Grid Connection:</u> The grid connection for Castlewaller Windfarm is neither currently consented nor proposed. In SID pre-application consultation, commenced in December 2018 with An Bord Pleanála for the grid connection element of Castlewaller Windfarm, the applicant (ABO Wind Ireland) indicated underground cabling to connect the windfarm to Killonan Station, near Limerick City. The potential route of this grid connection is predominantly on public roads. Part of the grid route is along the L6009-0, just east of Newport Town which will also be used for the UWF Grid Connection 110kV UGC. A potential site entrance off the R503 via an existing forestry entrance (along the UWF Grid Connection route) was also included in the SID Pre-Application consultations for the grid connection</p> <p><u>Overlap of Construction Periods:</u> Although Castlewaller Windfarm is not likely to be constructed during the same period as UWF Grid Connection (because the Castlewaller Windfarm has not yet been offered a grid connection from EirGrid, and has to obtain planning consent for its grid connection), there is some possibility that this windfarm could be built during the same period as UWF Grid Connection, and therefore the Castlewaller Windfarm project is included in the</p>	<p>Windfarm: Castlewaller, Newport, Co. Tipperary</p> <p>Potential grid connection: Castlewaller, Carrowkeale, Derryleight, Coolnacalla, Scragheen, Ashroe, Annagh, Laghtane,, Ballyvarra, Foyle, Killonan and Milltown</p>	Consented Windfarm, Potential grid connection	Tipperary	16600472, 11510251 SID Pre-Application: 303293-19.

Other Project or Activity Map ID	Name	Industry	Details	Location	Status	Planning Authority	Planning Ref
			cumulative evaluation on a precautionary basis. It is assumed that any future application for the windfarm would be accompanied by an EIA and NIS.				
5	Milestone Windfarm	Energy	Milestone Windfarm is an existing 4-turbine windfarm located adjacent to the southwest of the consented Upperchurch Windfarm at Knockcurraghbola Commons, Knockcurraghbola Crownlands, Graniera, Shevry, Inchivara and Knockduff. Milestone Windfarm comprises 4 No. wind turbines (each with a maximum tip height of 126m) along with new access tracks, and electrical substation, a borrow pit and associated works. The grid connection associated with Milestone Windfarm is towards the south at EBN Cauteen Station, cabled along the public road network. The UWF Grid Connection 110kV UGC and UWF Related Works Internal Windfarm Cabling will pass through a landholding associated with Milestone Windfarm, which is located on lands adjacent to Upperchurch Windfarm.	Windfarm: Knockcurraghbola Commons, Knockcurraghbola Crownlands, Graniera and Shevry, Co. Tipperary & Knockduff & Inchivara, Milestone, Co. Tipperary	Existing	Tipperary	12510385 , 1410 16600701
6	Garracummer Windfarm	Energy	13 no. wind turbines, turbine hardstands, access roads, drainage; a substation control building with fenced compound for electrical equipment; underground electrical cables linking the turbines with the substation compound; underground communication cables. Garracummer Windfarm is located c.4km to the southwest of the Upperchurch Windfarm	Curraghmarky, Birchgrove, Moanvaun, Garracummer, Cummer More, Cummer Beg	Existing	Tipperary	041259 041034 041178
7	Hollyford Windfarm	Energy	3 wind turbine generators, 80m in hub height, c.4.5km to the south of Upperchurch Windfarm	Glenough Upper TD, Hollyford, Co. Tipperary	Existing	Tipperary	05287 12400
8	Knockastanna Windfarm	Energy	4 no. turbines, sub-station, access road, monitoring mast	Curraghfoill, Doon, Co Limerick	Existing	Limerick	011385
9	Gortnahalla Turbine	Energy	Single wind generator with a maximum output set at 500kw, hub height 65m	Gortnahalla, Upperchurch, Co. Tipperary	Existing	Tipperary	12510368

Other Project or Activity Map ID	Name	Industry	Details	Location	Status	Planning Authority	Planning Ref
10	Rear Cross Quarry	Quarry	<p>Rearcross Quarry is an operational quarry which exists at Shanballyedmond townland c.1km to the south of the 110kV UGC along the Regional Road R503. The quarry is located in the Shannon regional catchment, to the south of Rear Cross village. Quarry operations only interface with 110kV UGC works at the point of egress from the quarry access road onto the R503. Hen Harrier and water protection measures form part of the planning conditions and licences for this quarry which ensure adverse impacts on European Sites are avoided. This project was accompanied by Environmental Reports and Appropriate Assessment Screening (Stage 1) Report.</p> <p><i>Note: the supply of aggregate to the UWF Grid Connection and Other Elements of the Whole UWF Project will be supplied as part of the consented capacity of the Rearcross Quarry, and no expansion of the quarry is required in relation to this supply.</i></p>	Shanballyedmond Rearcross, Co. Tipperary	Existing	Tipperary	11510323
11	Foilmaman Mast	Utilities	Existing communications mast comprising a 30m steel lattice mast structure at Knockmaroe townland, in the vicinity of the UWF Related Works/Upperchurch Windfarm site.	Knockmaroe	Existing	Tipperary	10510462
12	Cummersmore Communication Pole	Utilities	Existing communications structure comprising a 20m support pole, c.2km to the southwest of the Upperchurch Windfarm, and within 4km of the UWF Related Works (Telecom Relay Pole). This existing pole carries radio aerials and a communications dish, together with associated equipment, cabling, gantry pole, GPS timing antenna, cabinet and fencing.	Cummersmore	Existing	Tipperary	14600313
13	Newport Regional Water Supply	Utilities	Existing Irish Water facility in New Ross townland. Surface water supply from the Newport River upstream of Rockvale Bridge, with groundwater supply from wells in Castletwaller townland. Upgrade works on the existing local network – completed, no further upgrade works are currently planned.	Newross, Newport	Existing	Tipperary	n/a

Other Project or Activity Map ID	Name	Industry	Details	Location	Status	Planning Authority	Planning Ref
14	Thurles Regional Water Treatment Works	Utilities	The construction of a water treatment plant and outfall to the River Suir. The water treatment plant will consist of a water treatment and administration building, sludge dewatering building, ESB sub-station, generator & oil tank enclosure, raw water balancing tank, clear water tanks, sludge balancing tank, sludge thickening and sludge holding tank, washwater tank, sludge skip and emergency sludge storage area, chemical storage tanks, washwater storage tank and all associated site development and site excavation works above and below ground	Bohernacrusha, Killeenyarda, Holycross, Co. Tipperary	Under Construction Completion expected in 2021	Tipperary	16600877
15	Waste Management Facility, Thurles	Utilities	Waste management facility with facility buildings, conveyance plant, offices, on-site waste water treatment plant & associated pipework, surface water collection system with rainwater harvesting, attenuation measures, vehicle parking, fuelling facilities, noise attenuation barriers and associated ancillary works including weighbridge, wheelwash, relocated hydrocarbon interceptor, silt trap, & pipework, and slabs. The facility recovers inert waste arising from construction & demolition activity including concrete, bricks, tiles, or other such similar material. The facility will recover, store, & transfer dry recyclables and will receive, store, & transfer waste (other than hazardous waste) for onward disposal. A waste facility permit would be required in relation to the development.	Monakeeba, Mill Road, Thurles	Existing	Tipperary	15601055
16	Forestry entrances, Cappamore (new entrance and upgrade of existing entrance)	Forestry	Construction of a new entrance from public roadway onto forestry lands on the Western side of the public roadway, to comprise of the provision of splayed access, clear visibility sightlines, associated setting back of adjacent roadside boundaries, provision of associated surface water drainage, fences, finished hardcored structure to access area and all associated site works. Upgrade of existing entrance from public roadway onto forestry lands on the Eastern side of the public roadway, to comprise the provision of the same works as above.	Cappamore,	Proposed	Limerick Local Authorities	19738, 19739

Other Project or Activity Map ID	Name	Industry	Details	Location	Status	Planning Authority	Planning Ref
17	Forestry entrance, Cummer Beg	Forestry	Construction of new entrance from public roadway onto forestry lands, to comprise the provision of splayed access, clear visibility sightlines, associated setting back of adjacent roadside boundaries, provision of associated surface water drainage, fences, finished hardcored structure to access area and all associated siteworks	Cummer Beg, Kilcommon	Consented	Tipperary County Council	18601167
18	Forestry entrance, Knockshanbrittas	Forestry	Construction of new entrance from public roadway onto forestry lands, to comprise the provision of splayed access, clear visibility sightlines, associated setting back of adjacent roadside boundaries, provision of associated surface water drainage, fences, finished hardcored structure to access area and all associated siteworks	Knockshanbrittas, Kilcommon	Proposed	Tipperary County Council	19600640
19	Proposed Quarry at Curraghduff	Quarry	This quarry is currently in the planning permission process at Further Information Stage. (Tipperary County Council Ref. 19600317). The extraction of sandstone from a 3.585ha disused quarry site, which includes site entrance and access laneway. It is intended to extract between 590,000 - 690,000m ³ of sandstone and to install temporary settlement ponds. Quarry works to entail removal of sandstone by blasting and mechanical digger, dry screening and crushing and restoration of the area on completion of works. This application was accompanied by an NIS.	Curraghduff, Upperchurch	Proposed - Request for Further Information	Tipperary County Council	19600317
20	Biorefinery facility, Moyne, Thurles	Utility	Biorefinery facility comprising of a process building with processing areas, plant rooms, stores, personnel & administrative areas; external bunded process & storage areas; vessels and tanks; CHP plant; an effluent & water treatment plant which includes bunded tanks & a building; sewage treatment plant; water storage tanks & site development works including demolition of an existing electrical building, roads, paved areas, parking areas, drains and services, bore well, lighting, fire water retention tank, attenuation pond, site fencing, alterations to the discharge pipeline from the sewage treatment plant, weighbridges & weighbridge office, connection to an existing outfall pipeline and landscaping works. The application is accompanied by an Environmental	Killoran, Moyne, Thurles	Consented	Tipperary County Council	18601296

Other Project or Activity Map ID	Name	Industry	Details	Location	Status	Planning Authority	Planning Ref
			Impact Assessment Report. This application relates to development which comprises or is for the purpose of an activity requiring an Integrated Pollution Prevention and Control Licence				
21	Newport town Park	Public Facility	A recently consented public park on lands immediately adjacent to the Newport River within the urban area of Newport town. The new park will incorporate children's play area, play equipment, zip wire, outdoor gym equipment, pump track, multi-use games area, recreational walkways, seating, signage, interpretive panels, landscaping and car parking. The development of Newport Town Park will involve excavations and groundworks within the boundary of the Lower River Shannon SAC. However, there will be no instream works, nor works within 5m, of the Newport River. Sediment control and water quality protection measures will be implemented, as conditioned by planning consent. Funding secured. To commence in 2019/2020	Mulkear View, Tullow, Newport	Consented	Tipperary County Council	PL92.3029 60
22	Glamping Site	Tourism	Proposed glamping site comprising of 8 no individual glamping units, a storage unit, parking, wastewater treatment system, new signage at entrance and associated site works	Lackamore, Newport	Proposed	Tipperary County Council	19601111
23	Forestry	Activity	General forestry activities in commercial conifer plantations in the surrounding area, includes management of growing forests, along with planting, thinning and harvesting activities. Roughly half of the surrounding landuse in the upland area relates to forestry.	n/a	Ongoing	n/a	n/a
24	Agriculture	Activity	Agriculture is widespread throughout the study area and predominately comprises hill farming with more intensive grassland farming occurring at lower altitudes. General agricultural activities on agricultural lands in the surrounding area, includes dry stock farming, mainly cattle, along with some dairy farming, and some sheep farming. Roughly half of the surrounding landuse in the upland area relates to agriculture.	n/a	Ongoing	n/a	n/a

Other Project or Activity Map ID	Name	Industry	Details	Location	Status	Planning Authority	Planning Ref
25	Turf-Cutting	Activity	General turf cutting activities which occur in pockets of peatlands in the surrounding upland area. Turf cutting carried out both mechanically and by hand, with cut-over bog evident at a number of locations including at Bleanbeg Bog, Cummermore, Gortmahonoge and at Cummer (Mulloghney).	n/a	Ongoing	n/a	n/a
26	All operating wind turbines in the Irish State	Energy	All wind turbines generating Electricity from Renewable Energy (RE-E)	n/a	Existing	n/a	n/a

A2.1 .3 Methodology for Scoping of Other Projects or Activities in the Area

A-2.1 .3.1 Introduction

In this Section A2.1.3 scoping of the Other Projects or Activities is presented.

A-2.1 .3.2 Order of Presentation

The scoping in this Appendix is presented by Environmental Factor topic, in the same order as in the EIAR Main Report.

A-2.1 .3.3 Scoping Process

For each Environmental Factor topic, the scoping of Other Projects or Activities followed the following presentation format:

1. The scoping is presented by Sensitive Aspect
2. The geographical boundaries of the Cumulative Evaluation Study Areas are defined; The Other Projects or Activities (listed in **Section A2.1 .2 Research Results of Other Projects or Activities in the Area** above) which occur within the geographical boundaries are identified;
3. The relevant time-frame boundaries for effects are defined. This is the stage of the UWF Grid Connection during which impacts to the Sensitive Aspects are likely to occur e.g. the construction stage; The Other Projects or Activities (identified at point 2 above) with potential to cause cumulative effects within the time-frame boundary are identified;
4. The impacts scoped in for evaluation are listed;
5. The Other Projects or Activities which are within both geographical and timeframe boundaries are then scoped for potential to cause cumulative effects with the proposed development;
6. As a result of the scoping exercise, each Other Project or Activity is either *scoped-in* for evaluation in the topic chapters in Volume C2 EIAR Main Report, or *scoped-out, with justification provided*.

A-2.1 .3.4 Basic Assumptions

The EIAR Team scoping starts with certain **basic assumptions** for the proposed UWF Grid Connection, the Other Elements of the Whole UWF Project and the Other Projects or Activities:

For the proposed UWF Grid Connection and the Other Elements of the Whole UWF Project:

- Any **matters already scoped out** by the topic authors, in the Environmental Factor topic chapters (Vol C2 EIAR Main Report), where effects from the UWF Grid Connection or the Other Elements Whole UWF Project have either no potential to occur, or are not likely to occur, or any effects (should they occur) will be Neutral from the UWF Grid Connection or the Other Elements Whole UWF Project in the first instance, are not included in the Cumulative Conceptual Site Model. This is because it was considered that there is no potential for significant cumulative effects with Other Projects or Activities, where there will be no effects or neutral effects from the UWF Grid Connection or the Other Elements Whole UWF Project in the first instance.
- The UWF Grid Connection, is the project as described in Chapter 5: Description of the Development, and includes the Environmental Protection Measures which are listed in Section 5.2.3 of Chapter 5.
- The residual effect of the Other Elements of the Whole UWF Project is used for the Other Elements. The residual effects are presented in the Impact Evaluation Tables in Volume C2: EIAR Main Report Chapters 6 to 17.

For Other Projects

- the residual effect of the Other Project which assumes that these projects will be constructed, operated and decommissioned according to their planning conditions, or proposed mitigation measures (where not yet consented).

For Activities

- The Activity as it is normally carried out.

A-2.1 .3.5 Other Projects or Activities brought forward for further evaluation in the EIAR

Only the Other Projects or Activities *scoped in for further evaluation* in the sections hereunder are included in the Environmental Factor topic chapters which make up Chapters 6 to 17 of the EIAR Main Report.

A list/ matrix of these Other Projects or Activities is presented at the end of this Appendix (Section A2.1 .6) showing which Environmental Factor topic chapters is relevant.

A2.1 .4 Scoping of Other Projects or Activities for each Environmental Factor

The scoping exercise is presented in this section, in the same order as the evaluation of the Environmental Factors in the EIAR Main Report, i.e. from Chapter 6 Population to Chapter 17 Landscape. Each Sensitive Aspect Scoping section is presented as follows:

- **Table Part 1:** the first part of each Table identifies the Sensitive Aspect; and provides a description of the Geographical Boundaries of the cumulative evaluation study areas; the Other Projects or Activities located within these geographical boundaries are also identified. The Geographical Boundary is the zone for potential cumulative impacts of UWF Grid Connection or Other Elements of the Whole UWF Project with Other Projects or Activities. Other Projects or Activities within this zone, are listed in the first part of the Table. *Note: Justification for the extent of the geographical boundary for the Cumulative Evaluation Study Area is provided in the Cumulative Information section of each Sensitive Aspect in the EIAR Main Report.*
- **Table Part 2:** The second part of each Table identifies the development stage of the UWF Grid Connection when impacts are likely to occur, i.e. construction stage, etc. This stage is the timeframe boundary during which cumulative impacts with Other Projects or Activities could occur. The relevant Other Projects & Activities that could interact during this stage are identified. *Note: Generally if Other Projects are already constructed, these projects do not have the potential to cause cumulative construction stage effects.*
- **Table Part 3:** The third part of each Table lists the potential impacts on the subject Sensitive Aspect that could be caused by UWF Grid Connection or Other Elements of the Whole UWF Project and the project stage when these impacts could occur. *Note: Impacts which were scoped out/excluded from detailed evaluation in the EIAR Main Report are not scoped for cumulative effects with Other Projects or Activities, as either no impacts or Neutral impacts are likely to be caused by the UWF Grid Connection or Other Elements of the Whole UWF Project and therefore it is considered that there is no potential for significant cumulative impacts with Other Projects or Activities.*
- **Table Part 4:** the last part of each table provides a Scoping exercise whereby the Other Projects & Activities that are both within the Geographical Boundary (first part of the Table) and the Timeframe Boundary (second part of the table) are examined for potential to cause cumulative impacts with the impacts listed (third part of the table). The Other Projects & Activities are either **Scoped in** for inclusion in the examination in the Main Report Topic Chapter or are **Scoped out** from further examination.

A-2.1 .4.1 Population: Sensitive Aspect: Local Economy

TABLE 1: LOCAL ECONOMY: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

Geographical Boundary:	Slieve Felim to Silvermines Uplands Area comprising the Electoral Divisions (EDs) of Electoral Divisions (EDs): Kilcomenty, Newport, Killoscully, Kilnarath, Abington ¹ , Foilnahan, Upperchurch, Glengar and Curraheen in County Tipperary; and Glenstal, Doon West and Bilboa in County Limerick
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Other Projects or Activities located within the Geographical Boundary

1. Killonan to Nenagh 110kV Overhead Line
2. Shannonbridge to Killonan 220kV Overhead Line
3. Bunkimalta Windfarm
4. Castlewaller Windfarm
5. Milestone Windfarm
6. Garracummer Windfarm
7. Hollyford Windfarm
8. Knockastanna Windfarm
9. Gortnahalla Turbine
10. Rear Cross Quarry
11. Foilnahan Mast
12. Cummermore Communication Pole
13. Newport Regional Water Supply
16. Forestry entrance, Cappamore
17. Forestry entrance, CummerBeg
18. Forestry entrance, Knockshanbrittas
19. Proposed Quarry at Curraghduff
21. Newport Town Park
22. Proposed Lackamore Glamping Site
23. Forestry
24. Agriculture
25. Turf-Cutting

TABLE 2: LOCAL ECONOMY: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

Timeframe Boundary:	Construction Stage of UWF Grid Connection	
Other Projects or Activities	Within the Timeframe Boundary? Y/N	
1. Killonan to Nenagh 110kV Overhead Line	No - Construction Stage complete	
2. Shannonbridge to Killonan 220kV Overhead Line	No - Construction Stage complete	
3. Bunkimalta Windfarm	Yes – Potentially	
4. Castlewaller Windfarm	Yes – Potentially	
5. Milestone Windfarm	No - Construction Stage complete	
6. Garracummer Windfarm	No - Construction Stage complete	
7. Hollyford Windfarm	No - Construction Stage complete	
8. Knockastanna Windfarm	No - Construction Stage complete	
9. Gortnahalla Turbine	No - Construction Stage complete	
10. Rear Cross Quarry	No - Construction Stage complete	
11. Foilnahan Mast	No - Construction Stage complete	
12. Cummermore Communication Pole	No - Construction Stage complete	
13. Newport Regional Water Supply	No – existing, no construction works planned	
16. Forestry entrance, Cappamore	Yes – Potentially	
17. Forestry entrance, CummerBeg	Yes – Potentially	
18. Forestry entrance, Knockshanbrittas	Yes – Potentially	

¹ Abington is located in both Counties Tipperary and Limerick

19. Proposed Quarry at Curraghduff	Yes – Potentially
21. Newport Town Park	Yes – Potentially
22. Proposed Lackamore Glamping Site	Yes – Potentially
23. Forestry	Yes – Ongoing
24. Agriculture	Yes – Ongoing
25. Turf-Cutting	Yes – Ongoing

TABLE 3: LOCAL ECONOMY: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIAR Main Report	Relevant Stage of UWF Grid Connection during which impacts will occur
Gross Value Added to Businesses & Employment Opportunities	Construction Stage

TABLE 4: LOCAL ECONOMY: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

Other Project/Activity	Scoped In/Out	Justification for Scoping in/out
3. Bunkimalta Windfarm 4. Castlewaller Windfarm	Scoped In	Although neither of these windfarms are likely to be constructed during the same period as UWF Grid Connection (because the Castlewaller Windfarm has not yet been offered a grid connection from EirGrid, and has to obtain planning consent for its grid connection; and because Bunkimalta Windfarm has to obtain new planning consent for the windfarm), there is <i>some possibility</i> that these windfarms could be built during the same period as UWF Grid Connection, and therefore there is potential for cumulative impacts (positive) to the local economy.
16: Forestry entrance works at Cappamore 17: Forestry entrance works at CummerBeg 18: Forestry entrance works, Knockshanbrittas 19: Proposed Quarry at Curraghduff 21. Newport Town Park 22. Proposed Lackamore Glamping Site	Scoped Out	None of these projects are of a large enough scale to cause any measurable cumulative effects with UWF Grid Connection or the Whole UWF Project.
23: Forestry 24: Agriculture 25: Turf-Cutting	Scoped Out	These activities are on-going and form part of the baseline conditions. No material changes in agricultural/farming/turf-cutting practices are expected or planned in the area.

A-2.1 .4.2 Human Health: Sensitive Aspect: Local Residents & Community

TABLE 1: LOCAL RESIDENTS & COMMUNITY: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

Geographical Boundary:	In order to evaluate cross-factor cumulative effects, the same geographical boundaries were used for Human Health as those used for Chapter 6: Population (Local Economy), Chapter 11: Water (Local Wells & Springs), Chapter 12: Air (Local Residents & Community), Chapter 14: Material Assets – Built Services (Local Residents & Community) and Chapter 15: Material Assets - Roads (Road Users).
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Other Projects or Activities located within the Geographical Boundary

1. Killonan to Nenagh 110kV Overhead Line
2. Shannonbridge to Killonan 220kV Overhead Line
3. Bunkimalta Windfarm
4. Castlewaller Windfarm
5. Milestone Windfarm
6. Garracummer Windfarm
7. Hollyford Windfarm
8. Knockastanna Windfarm
9. Gortnahalla Turbine
10. Rear Cross Quarry
11. Foilnahan Mast
12. Cummermore Communication Pole
13. Newport Regional Water Supply
16. Forestry entrance, Cappamore
17. Forestry entrance, CummerBeg
18. Forestry entrance, Knockshanbrittas
19. Proposed Quarry at Curraghduff
21. Newport Town Park
22. Proposed Lackamore Glamping Site
23. Forestry
24. Agriculture
25. Turf-Cutting

TABLE 2: LOCAL RESIDENTS & COMMUNITY: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

Timeframe Boundary:	Construction Stage of UWF Grid Connection	
Other Projects or Activities		Within the Timeframe Boundary? Y/N
1. Killonan to Nenagh 110kV Overhead Line		No - Construction Stage complete
2. Shannonbridge to Killonan 220kV Overhead Line		No - Construction Stage complete
3. Bunkimalta Windfarm		Yes – Potentially
4. Castlewaller Windfarm		Yes – Potentially
5. Milestone Windfarm		No - Construction Stage complete
6. Garracummer Windfarm		No - Construction Stage complete
7. Hollyford Windfarm		No - Construction Stage complete
8. Knockastanna Windfarm		No - Construction Stage complete
9. Gortnahalla Turbine		No - Construction Stage complete
10. Rear Cross Quarry		No - Construction Stage complete
11. Foilnahan Mast		No - Construction Stage complete
12. Cummermore Communication Pole		No - Construction Stage complete
13. Newport Regional Water Supply		No – existing, no construction works planned
16. Forestry entrance, Cappamore		Yes – Potentially
17. Forestry entrance, CummerBeg		Yes – Potentially

18. Forestry entrance, Knockshanbrittas	Yes – Potentially
19. Proposed Quarry at Curraghduff	Yes – Potentially
21. Newport Town Park	Yes – Potentially
22. Proposed Lackamore Glamping Site	Yes – Potentially
23. Forestry	Yes – Ongoing
24. Agriculture	Yes – Ongoing
25. Turf-Cutting	Yes – Ongoing

TABLE 3: LOCAL RESIDENTS & COMMUNITY: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIA Main Report	Relevant Stage of the development during which impacts will occur
Increased employment which is a wider determinant of health	Construction Stage

TABLE 4: LOCAL RESIDENTS & COMMUNITY: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

Other Project/Activity	Scoped In/Out	Justification for Scoping in/out
3. Bunkimalta Windfarm 4. Castlewaller Windfarm	Scoped In	Although neither of these windfarms are likely to be constructed during the same period as UWF Grid Connection (because the Castlewaller Windfarm has not yet been offered a grid connection from EirGrid, and has to obtain planning consent for its grid connection; and because Bunkimalta Windfarm has to obtain new planning consent for the windfarm), there is <i>some possibility</i> that these windfarms could be built during the same period as UWF Grid Connection, and therefore these projects could contribute to beneficial cumulative human health effects associated with increased employment locally during construction.
16: Forestry entrance works at Cappamore 17: Forestry entrance works at CummerBeg 18: Forestry entrance works, Knockshanbrittas 19: Proposed Quarry at Curraghduff 21. Newport Town Park 22. Proposed Lackamore Glamping Site	Scoped Out	None of these projects are of a large enough scale to cause any measurable cumulative human health effects with UWF Grid Connection or the Whole UWF Project.
23: Forestry 24: Agriculture 25: Turf-Cutting	Scoped Out	These activities are on-going and form part of the baseline conditions. No material changes in agricultural/farming/turf-cutting practices are expected or planned in the area.

A-2.1 .4.3 Human Health: Sensitive Aspect: TRANSIENT PEOPLE

TABLE 1: TRANSIENT PEOPLE: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

<u>Geographical Boundary:</u>	In order to evaluate cross-factor cumulative effects, the same geographical boundaries were used for Human Health as those used for Chapter 12: Air (Transient People), and Chapter 15: Material Assets - Roads (Road Users).
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Other Projects or Activities located within the Geographical Boundary

1: Killonan to Nenagh 110kV Overhead Line
 2: Shannonbridge to Killonan 220kV Overhead Line
 4: Castlewaller Windfarm
 11: Foilnahan Mast
 13: Newport Regional Water Supply
 21: Newport Town Park
 22. Proposed Lackamore Glamping Site
 23: Forestry
 24: Agriculture

TABLE 2: TRANSIENT PEOPLE: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

<u>Timeframe Boundary:</u>	Construction Stage of UWF Grid Connection
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Other Projects or Activities	Within the Timeframe Boundary? Y/N
1: Killonan to Nenagh 110kV Overhead Line	No - Construction Stage complete
2: Shannonbridge to Killonan 220kV Overhead Line	No - Construction Stage complete
4: Castlewaller Windfarm	Yes – Potentially
11: Foilnahan Mast	Yes – Potentially
13: Newport Regional Water Supply	No - Construction Stage complete
21: Newport Town Park	Yes – Potentially
22. Proposed Lackamore Glamping Site	Yes – Potentially
23: Forestry	Yes – Ongoing
24: Agriculture	Yes – Ongoing

TABLE 3: TRANSIENT PEOPLE: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIAR Main Report	Relevant Stage of the development during which impacts will occur
No Impacts were SCOPED IN for Further Evaluation (Potential for Neutral or No Likely Impacts only)	N/A

A-2.1 .4.4 BIODIVERSITY Sensitive Aspect: European Sites

TABLE 1: EUROPEAN SITES: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

<u>Geographical Boundary:</u>	15km from footprint of UWF Grid Connection and the Other Elements of the Whole UWF Project
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Other Projects or Activities located within the Geographical Boundary

- 1: Killonan to Nenagh 110kV Overhead Line
- 2: Shannonbridge to Killonan 220kV Overhead Line
- 3: Bunkimalta Windfarm
- 4: Castlewaller Windfarm
- 5: Milestone Windfarm
- 6: Garracummer Windfarm
- 7: Hollyford Windfarm
- 8: Knockastanna Windfarm
- 9: Gortnahalla Turbine
- 10: Rear Cross Quarry
- 11: Foilnahan Mast
- 12: Cummermore Communication Pole
- 13: Newport Regional Water Supply
- 14: Thurles Regional Water Treatment Works
- 15: Waste Management Facility, Thurles
- 16: Forestry entrance, Cappamore
- 17: Forestry entrance, CummerBeg
- 18: Forestry entrance, Knockshanbrittas
- 19: Proposed Quarry at Curraghduff
- 20: Biorefinery Plant, Thurles
- 21: Newport Town Park
22. Proposed Lackamore Glamping Site
- 23: Forestry
- 24: Agriculture
- 25: Turf-Cutting

TABLE 2: EUROPEAN SITES: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

<u>Timeframe Boundary:</u>	Construction Stage and Operational Stage of UWF Grid Connection
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<u>Other Projects or Activities</u>	<u>Within the Timeframe Boundary? Y/N</u>
1: Killonan to Nenagh 110kV Overhead Line	No - Construction Stage complete
2: Shannonbridge to Killonan 220kV Overhead Line	No - Construction Stage complete
3: Bunkimalta Windfarm & grid connection	Yes – Potentially
4: Castlewaller Windfarm & grid connection	Yes – Potentially
5: Milestone Windfarm	Yes – Potentially
6: Garracummer Windfarm	No - Construction Stage complete
7: Hollyford Windfarm	No - Construction Stage complete
8: Knockastanna Windfarm	No - Construction Stage complete
9: Gortnahalla Turbine	No - Construction Stage complete
10: Rear Cross Quarry	Yes – Potentially
11: Foilnahan Mast	No - Construction Stage complete
12: Cummermore Communication Pole	No - Construction Stage complete
13: Newport Regional Water Supply	No – existing, upgrade works complete
14: Thurles Regional Water Treatment Works	Yes – Potentially
15: Waste Management Facility Thurles	No – construction stage complete
16: Forestry entrance, Cappamore	Yes – Potentially
17: Forestry entrance, CummerBeg	Yes – Potentially

18: Forestry entrance, Knockshanbrittas	Yes – Potentially
19: Proposed Quarry at Curraghduff	Yes – Potentially
20: Biorefinery Facility, Thurles	Yes – Potentially
21: Newport Town Park	Yes – Potentially
22: Proposed Lackamore Glamping Site	Yes – Potentially
23: Forestry	Yes – Ongoing
24: Agriculture	Yes – Ongoing
25: Turf-Cutting	Yes – Ongoing

TABLE 3: EUROPEAN SITES: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the Appropriate Assessment Report (with the findings summaries in the EIA Report)	Relevant Stage of the development during which impacts will occur
Direct effects to Qualifying Interest habitats of an SAC Site (i.e. habitat loss, fragmentation, degradation, loss/reduction in connectivity) within the SAC	Construction Stage
Indirect Effects to Qualifying Interest habitats of an SAC Site (i.e. via reductions in water quality or spread of invasive species) within the SAC	Construction Stage
Indirect Effects to Qualifying Interest habitats, of an SAC Site (i.e. via reductions in water quality or spread of invasive species) ex-situ the SAC	Construction Stage
Direct effects to Qualifying Interest species of an SAC Site (i.e. mortality) within or ex-situ the SAC	Construction Stage
Indirect effects to Qualifying Interest species of an SAC Site (i.e. disturbance /displacement) within the SAC	Construction Stage
Indirect effects to Qualifying Interest species of an SAC Site (i.e. habitat loss, fragmentation, degradation, loss/reduction in connectivity) within the SAC	Construction Stage
Indirect effects to Qualifying Interest species of the SAC Site (i.e. disturbance /displacement) ex-situ to the SAC	Construction Stage
Indirect effects to Qualifying Interest species of the SAC Site (i.e. habitat loss, fragmentation, degradation, loss/reduction in connectivity) ex-situ the SAC	Construction Stage
Direct effects to Special Conservation Interest Species within an SPA (i.e. Disturbance, Mortality)	Construction Stage
Indirect effects to Special Conservation Interest Species within an SPA (i.e. Secondary effects on suitable habitat via habitat loss, degradation, fragmentation or reduction/loss of connectivity, or through a reduction in prey item species)	Construction Stage
Indirect effects to Special Conservation Interest Species 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, or through disturbance or mortality effects to Special Conservation Interest bird species outside their respective SPA).	Construction Stage

TABLE 4: EUROPEAN SITES: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

Other Project/Activity	Scoped In/Out	Justification for Scoping in/out:
3: Bunkimalta Windfarm 4: Castlewaller Windfarm	<u>Scoped In</u>	<u>Scoped In</u> for Lower River Shannon SAC/Clare Glen SAC/Slievefelim to Silvermines Mountain SPA: Although neither of these windfarms are likely to be constructed during the same period as UWF Grid Connection (because the Castlewaller Windfarm has not yet been offered a grid connection from EirGrid, and because of planning issues in relation to Bunkimalta Windfarm), there is <i>some possibility</i> that these windfarms could be built during the same period as UWF

		Grid Connection, and therefore this project is included on a precautionary basis. <u>Scoped Out</u> for Lower River Suir SAC – no hydrological connectivity
5. Milestone Windfarm	<u>Scoped In</u>	<u>Scoped In</u> for Slievefelim to Silvermines Mountain SPA: operational windfarm, outside SPA. <u>Scoped Out</u> for Lower River Suir SAC – already operational – no sources of significant sediment creating activities <u>Scoped Out</u> for Lower River Shannon SAC/Clare Glen SAC – no hydrological connectivity.
10: Rear Cross Quarry	<u>Scoped In</u>	<u>Scoped In</u> for Lower River Shannon SAC/Clare Glen SAC/Slievefelim to Silvermines Mountain SPA: due to proximity. <u>Scoped Out</u> for Lower River Suir SAC – no hydrological connectivity
14: Thurles Regional Water Treatment Works	Scoped Out	Under Construction at present – unlikely to cause cumulative effects at the end of the construction period for the Treatments Works (2021), and due to the Substantial separation distance/buffer between the project and UWF Grid Connection or the Whole UWF Project.
16: Forestry entrance works at Cappamore 17: Forestry entrance works at CummerBeg 18: Forestry entrance works at Knockshanbrittas	Scoped Out	None of these projects are of a large enough scale to cause any measurable cumulative effects with UWF Grid Connection or the Whole UWF Project.
19: Proposed Quarry at Curraghduff	<u>Scoped In</u>	<u>Scoped In</u> for Lower River Suir SAC/ Slievefelim to Silvermines Mountain SPA <u>Scoped Out</u> for Lower River Shannon SAC/Clare Glen SAC – no hydrological connectivity
21: Newport Town Park	<u>Scoped In</u>	<u>Scoped In</u> for Lower River Shannon SAC <u>Scoped Out</u> for Lower River Suir SAC/Clare Glen SAC – no hydrological connectivity <u>Scoped Out</u> for Slievefelim to Silvermines Mountain SPA - implementation of planning conditions will ensure no adverse effects on European Sites, location within an urban centre (i.e. Newport Town).
20: Biorefinery Facility, Thurles	Scoped Out	Due to the separation distance of this project from either the UWF Grid Connection or the Other Elements of the Whole UWF Projects, and the assimilative and dilution factors in downstream waterbodies, this project is not likely to cause any measurable cumulative effects with UWF Grid Connection or the Whole UWF Project to European Sites
22. Proposed Lackamore Glamping Site	Scoped Out	Implementation of planning conditions will ensure no adverse effects on European Sites
23: : Forestry 24: : Agriculture 25: : Turf-Cutting	<u>Scoped In</u>	<u>Scoped In</u> for Lower River Shannon SAC/Lower River Suir SAC/Clare Glen SAC/Slievefelim to Silvermines Mountain SPA: While these activities are on-going and form part of the baseline conditions, they are identified as sources of impacts to European Sites.

A-2.1 .4.5 BIODIVERSITY Sensitive Aspect: National Sites

TABLE 1: NATIONAL SITES: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

Geographical Boundary:	15km from the boundary of construction works, afforestation lands, activity locations.
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Other Projects or Activities located within the Geographical Boundary

- 1: Killonan to Nenagh 110kV Overhead Line
- 2: Shannonbridge to Killonan 220kV Overhead Line
- 3: Bunkimalta Windfarm
- 4: Castlewaller Windfarm
- 5: Milestone Windfarm
- 6: Garracummer Windfarm
- 7: Hollyford Windfarm
- 8: Knockastanna Windfarm
- 9: Gortnahalla Turbine
- 10: Rear Cross Quarry
- 11: Foilnahan Mast
- 12: Cummermore Communication Pole
- 13: Newport Regional Water Supply
- 14: Thurles Regional Water Treatment Works
- 16: Forestry entrance, Cappamore
- 17: Forestry entrance, CummerBeg
- 18: Forestry entrance, Knockshanbrittas
- 19: Proposed Quarry at Curraghduff
- 21: Newport Town Park
22. Proposed Lackamore Glamping Site
- 23: Forestry
- 24: Agriculture
- 25: Turf-Cutting

TABLE 2: NATIONAL SITES: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

Timeframe Boundary:	Construction Stage of UWF Grid Connection	
Other Projects or Activities	Within the Timeframe Boundary? Y/N	
1: Killonan to Nenagh 110kV Overhead Line	No - Construction Stage complete	
2: Shannonbridge to Killonan 220kV Overhead Line	No - Construction Stage complete	
3: Bunkimalta Windfarm & grid connection	Yes – Potentially	
4: Castlewaller Windfarm & grid connection	Yes – Potentially	
5: Milestone Windfarm	No - Construction Stage complete	
6: Garracummer Windfarm	No - Construction Stage complete	
7: Hollyford Windfarm	No - Construction Stage complete	
8: Knockastanna Windfarm	No - Construction Stage complete	
9: Gortnahalla Turbine	No - Construction Stage complete	
10: Rear Cross Quarry	Yes – Potentially	
11: Foilnahan Mast	No - Construction Stage complete	
12: Cummermore Communication Pole	No - Construction Stage complete	
13: Newport Regional Water Supply	No – existing, no construction works planned	
14: Thurles Regional Water Treatment Works	Yes – Potentially	
16: Forestry entrance, Cappamore	Yes – Potentially	
17: Forestry entrance, CummerBeg	Yes – Potentially	
18: Forestry entrance, Knockshanbrittas	Yes – Potentially	
19: Proposed Quarry at Curraghduff	Yes – Potentially	
21: Newport Town Park	Yes – Potentially	
22. Proposed Lackamore Glamping Site	Yes – Potentially	

23: Forestry 24: Agriculture 25: Turf-Cutting	Yes – Potentially Yes – Ongoing Yes – Ongoing Yes – Ongoing
TABLE 3: NATIONAL SITES: IMPACTS SCOPED IN FOR EVALUATION	
Impact evaluated in the EIAR Main Report	Relevant Stage of the development during which impacts will occur
No Impacts were SCOPED IN for Further Evaluation UWF Grid Connection development has been excluded as a source of impacts to National Sites, primarily due to separation distances between UWF Grid Connection and National Sites.	N/A

A-2.1 .4.6 BIODIVERSITY Sensitive Aspect: Aquatic Habitats & Species

TABLE 1: AQUATIC HABITATS & SPECIES: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

Geographical Boundary: Watercourse Crossing Locations and Sub-catchments

Other Projects or Activities located within the Geographical Boundary

- 1: Killonan to Nenagh 110kV Overhead Line
- 2: Shannonbridge to Killonan 220kV Overhead Line
- 3: Bunkimalta Windfarm
- 4: Castlewaller Windfarm
- 5: Milestone Windfarm
- 6: Garracummer Windfarm
- 7: Hollyford Windfarm
- 8: Knockastanna Windfarm
- 9: Gortnahalla Turbine
- 10: Rear Cross Quarry
- 11: Foilnahan Mast
- 12: Cummermore Communication Pole
- 13: Newport Regional Water Supply
- 14: Thurles Regional Water Treatment Works
- 16: Forestry entrance, Cappamore
- 17: Forestry entrance, CummerBeg
- 18: Forestry entrance, Knockshanbrittas
- 19: Proposed Quarry at Curraghduff
- 21: Newport Town Park
22. Proposed Lackamore Glamping Site
- 23: Forestry
- 24: Agriculture
- 25: Turf-Cutting

TABLE 2: AQUATIC HABITATS & SPECIES: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

Timeframe Boundary: Construction Stage of UWF Grid Connection

Other Projects or Activities	Within the Timeframe Boundary? Y/N
1: Killonan to Nenagh 110kV	No - Construction Stage complete
2: Shannonbridge to Killonan 220kV Overhead Line	No - Construction Stage complete
3: Bunkimalta Windfarm & grid connection	Yes – Potentially
4: Castlewaller Windfarm & grid connection	Yes – Potentially
5: Milestone Windfarm	No - Construction Stage complete
6: Garracummer Windfarm	No - Construction Stage complete
7: Hollyford Windfarm	No - Construction Stage complete
8: Knockastanna Windfarm	No - Construction Stage complete
9: Gortnahalla Turbine	No - Construction Stage complete
10: Rear Cross Quarry	Yes – Potentially
11: Foilnahan Mast	No - Construction Stage complete
12: Cummermore Communication Pole	No - Construction Stage complete
13: Newport Regional Water Supply	No – existing, no construction works planned
14: Thurles Regional Water Treatment Works	Yes – Potentially
16: Forestry entrance, Cappamore	Yes – Potentially
17: Forestry entrance, CummerBeg	Yes – Potentially
18: Forestry entrance, Knockshanbrittas	Yes – Potentially
19: Proposed Quarry at Curraghduff	Yes – Potentially
21: Newport Town Park	Yes – Potentially
22. Proposed Lackamore Glamping Site	Yes – Potentially
23: Forestry	Yes – Potentially

24: Agriculture 25: Turf-Cutting	Yes – Ongoing Yes – Ongoing Yes – Ongoing
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TABLE 3: AQUATIC HABITATS & SPECIES: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIA Main Report	Relevant Stage of the development during which impacts will occur
Decrease in instream aquatic habitat quality	Construction Stage
Changes to flow regime	Construction Stage
Disturbance or displacement of fish and aquatic species	Construction Stage
Riparian habitat degradation	Construction Stage
Spread of Invasive Aquatic Species	Construction Stage

TABLE 4: AQUATIC HABITATS & SPECIES: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

Other Project/Activity	Scoped In/Out	Justification for Scoping in/out:
3: Bunkimalta Windfarm 4: Castlewaller Windfarm	Scoped In	Although neither of these windfarms are likely to be constructed during the same period as UWF Grid Connection (because the Castlewaller Windfarm has not yet been offered a grid connection from EirGrid, and because of planning issues in relation to Bunkimalta Windfarm), there is <i>some possibility</i> that these windfarms could be built during the same period as UWF Grid Connection, and therefore this project is included on a precautionary basis
14: Thurles Regional Water Treatment Works	Scoped Out	Unlikely to cause measurable cumulative effects to aquatic habitats or species due to the large downstream distance to where cumulative effect could occur.
16: Forestry entrance works at Cappamore 17: Forestry entrance works at CummerBeg 18: Forestry entrance works at Knockshanbrittas 22. Proposed Lackamore Glamping Site	Scoped Out	None of these projects are of a large enough scale to cause significant cumulative effects with UWF Grid Connection or the Whole UWF Project.
19: Proposed Quarry at Curraghduff	Scoped Out	Quarry project too small a scale to cause any measurable cumulative effects with UWF Grid Connection or the Whole UWF Project. In addition, the quarry will have to avoid adverse effects to European Sites. Furthermore, the conditions of planning (should it be granted) and discharge licence (if required) will include conditions for the protection of water quality, which will in turn protect aquatic habitats and species.
21: Newport Town Park	Scoped In	Could be built during the same period as UWF Grid Connection
23: Forestry 24: Agriculture 25: Turf-Cutting	Scoped Out	These activities are on-going and form part of the baseline conditions. No material changes in agricultural/forestry/turf-cutting practices are expected or planned in the area.

A-2.1 .4.7 BIODIVERSITY Sensitive Aspect: Terrestrial Habitats

TABLE 1: TERRESTRIAL HABITATS: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

Geographical Boundary:	Construction works area boundary/afforestation lands plus 50m in all directions
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Other Projects or Activities located within the Geographical Boundary

- 1: Killonan to Nenagh 110kV Overhead Line
- 2: Shannonbridge to Killonan 220kV Overhead Line
- 4: Castlewaller Windfarm
- 11: Foilnahan Mast
- 13: Newport Regional Water Supply
- 22. Proposed Lackamore Glamping Site
- 23: Forestry
- 24: Agriculture

TABLE 2: TERRESTRIAL HABITATS: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

Timeframe Boundary:	Construction Stage of UWF Grid Connection
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Other Projects or Activities	Within the Timeframe Boundary? Y/N
1: Killonan to Nenagh 110kV Overhead Line	No - Construction Stage complete
2: Shannonbridge to Killonan 220kV Overhead Line	No - Construction Stage complete
4: Castlewaller Windfarm	Yes – Potentially
11: Foilnahan Mast	No - Construction Stage complete
13: Newport Regional Water Supply	No – existing, no construction works planned
22. Proposed Lackamore Glamping Site	Yes – Potentially
23: Forestry	Yes – ongoing
24: Agriculture	Yes – ongoing

TABLE 3: TERRESTRIAL HABITATS: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIAR Main Report	Relevant Stage of the development during which impacts will occur
Reduction in Terrestrial Habitats	Construction Stage
Hedgerow Severance	Construction Stage
Loss of High Nature Value Trees	Construction Stage

TABLE 4: TERRESTRIAL HABITATS: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

Other Project/Activity	Scoped In/Out	Justification for Scoping in/out:
4: Castlewaller Windfarm 22. Proposed Lackamore Glamping Site	Scoped Out	No potential for cumulative effects, due to separation distance from the Mountphilips Substation site, and no effects from the 110kV UGC due to location on road, therefore no potential for cumulative effects.
23: Forestry 24: Agriculture	Scoped Out	Typical Activity – no new agricultural/forestry projects planned. Part of Baseline Conditions.

A-2.1 .4.8 **BIODIVERSITY Sensitive Aspect: Hen Harrier**

TABLE 1: HEN HARRIER: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

Geographical Boundary:	2km from the construction works/afforestation area boundaries in all directions for whole project effect; 4km from construction works areas to identify other projects which could contribute to cumulative effects.
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Other Projects or Activities located within the Geographical Boundary

- 1: Killonan to Nenagh 110kV Overhead Line
- 2: Shannonbridge to Killonan 220kV Overhead Line
- 4: Castlewaller Windfarm
- 5: Milestone Windfarm
- 6: Garracummer Windfarm
- 7: Hollyford Windfarm
- 8: Knockastanna Windfarm
- 9: Gortnahalla Turbine
- 10: Rear Cross Quarry
- 11: Foilnahan Mast
- 12: Cummermore Communication Pole
- 13: Newport Regional Water Supply
- 16: Forestry entrance, Cappamore
- 17: Forestry entrance, CummerBeg
- 18: Forestry entrance, Knockshanbrittas
- 19: Proposed Quarry at Curraghduff
- 21: Newport Town Park
- 22: Proposed Lackamore Glamping Site
- 23: Forestry
- 24: Agriculture
- 25: Turf-Cutting

TABLE 2: HEN HARRIER: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

Timeframe Boundary:	Construction and Operational Stages of UWF Grid Connection	
Other Projects or Activities	Within the Timeframe Boundary? Y/N	
1: Killonan to Nenagh 110kV Overhead Line	No – already exists, no construction works planned	
2: Shannonbridge to Killonan 220kV Overhead Line	No – already exists, no construction works planned	
3: Bunkimalta Windfarm	Yes – potentially	
4: Castlewaller Windfarm	Yes – potentially	
5: Milestone Windfarm	Yes – potentially	
6: Garracummer Windfarm	Yes – potentially	
7: Hollyford Windfarm	Yes – potentially	
8: Knockastanna Windfarm	Yes – potentially	
9: Gortnahalla Turbine	Yes – potentially	
10: Rear Cross Quarry	Yes – potentially	
11: Foilnahan Mast	No – already constructed	
12: Cummermore Communication Pole	No – already constructed	
13: Newport Regional Water Supply	No – existing, no construction works planned	
16: Forestry entrance, Cappamore	Yes, potentially	
17: Forestry entrance, CummerBeg	Yes, potentially	
18: Forestry entrance, Knockshanbrittas	Yes, potentially	
19: Proposed Quarry at Curraghduff	Yes – potentially	
21: Newport Town Park	Yes – Potentially	

22: Proposed Lackamore Glamping Site	Yes – Potentially
23: Forestry	Yes – Ongoing
24: Agriculture	Yes – Ongoing
25: Turf-Cutting	Yes – ongoing

TABLE 3: Hen Harrier: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIAR Main Report	Relevant Stage of the development during which impacts will occur
Permanent or Temporary Reduction or Loss of Suitable Foraging Habitat	Construction/Operational Stage
Disturbance/Displacement of foraging Hen Harrier, <u>during</u> the breeding season	Construction Stage
Disturbance/Displacement of foraging Hen Harrier outside the breeding season	Construction Stage
Reduction in Prey Item Species	Construction/Operational Stage

TABLE 4: HEN HARRIER: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

Other Project/Activity	Scoped In/Out	Justification for Scoping in/out:
3: Bunkimalta Windfarm 4: Castlewaller Windfarm	Scoped In	Although neither of these windfarms are likely to be constructed during the same period as UWF Grid Connection (because the Castlewaller Windfarm has not yet been offered a grid connection from EirGrid, and because of planning issues in relation to Bunkimalta Windfarm), there is <i>some possibility</i> that these windfarms could be built during the same period as UWF Grid Connection, and therefore this project is included on a precautionary basis
5: Milestone Windfarm	Scoped In	Operational – however scoped in due to proximity to Whole UWF Project
6: Garracummer Windfarm 7: Hollyford Windfarm 8: Knockastanna Windfarm 9: Gortnahalla Turbine	Scoped Out	No construction stage effects (these projects are already operating) – part of the baseline
10: Rear Cross Quarry	Scoped In	Existing quarry 1km south of the R503 – 110kV UGC and materials haul routes.
16: Forestry entrance, Cappamore 17: Forestry entrance, CummerBeg 18: Forestry entrance, Knockshanbrittas	Scoped Out	None of these projects are of a large enough scale to cause any measurable cumulative effects with UWF Grid Connection or the Whole UWF Project and will be subject to AA.
19: Proposed Quarry at Curraghduff	Scoped Out	Scoped out due to separation distance. The continued usage of the quarry, with no expansion is unlikely to result in any contrast to the baseline conditions in terms of available Hen Harrier habitat. Separation distance from the Hen Harrier SPA (5.6km) precludes disturbance related effects on birds within the SPA. An NIS has been submitted with the planning application which has determined that there will be no impacts on the Slievefelim to Silvermines Mountains SPA, and its Special Conservation Interest, Hen Harrier.
22: Proposed Lackamore Glamping Site	Scoped Out	This project can only be approved if it can show that no adverse effects remain on the Slieve Felim to Silvermines Mountains SPA. Cumulative effects to breeding hen harrier are not likely with the application of UWF Grid Connection

		project design (i.e. no works during breeding season outside of Mountphilips Substation site).
21: Newport Town Park	Scoped Out	Newport Town Part does not contain any suitable foraging or breeding sites for Hen Harrier, located in urban setting and therefore no potential for significant cumulative impacts.
23: Forestry 24: Agriculture 25: Turf-Cutting	Scoped In	These activities are on-going and form part of the baseline conditions and have the potential to have cumulative effects with foraging and breeding hen harrier.

A-2.1 .4.9 BIODIVERSITY Sensitive Aspect: General Bird Species

TABLE 1: GENERAL BIRD SPECIES: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

Geographical Boundary:	50m area around and incorporating the construction works areas, afforestation lands, activity locations 1km from construction works areas and activity locations in relation to cumulative effects with Other Projects or Activities
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Other Projects or Activities located within the Geographical Boundary

1: Killonan to Nenagh 110kV Overhead Line
 2: Shannonbridge to Killonan 220kV Overhead Line
 4: Castlewaller Windfarm
 5: Milestone Windfarm
 11: Foilnahan Mast
 13: Newport Regional Water Supply
 17: Forestry entrance, CummerBeg
 18: Forestry entrance, Knockshanbrittas
 21: Newport Town Park
 22: Proposed Lackamore Glamping Site
 23: Forestry
 24: Agriculture

TABLE 2: GENERAL BIRD SPECIES: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

Timeframe Boundary:	Construction and Operational Stage
Other Projects or Activities	Within the Timeframe Boundary? Y/N
1: Killonan to Nenagh 110kV Overhead Line	No – existing, no construction works planned
2: Shannonbridge to Killonan 220kV Overhead Line	No – existing, no construction works planned
4: Castlewaller Windfarm	Yes – potentially
5: Milestone Windfarm	No – existing, no construction works planned
11: Foilnahan Mast	No – existing, no construction works planned
13: Newport Regional Water Supply	No – existing, no construction works planned
17: Forestry entrance, CummerBeg	Yes – potentially
18: Forestry entrance, Knockshanbrittas	Yes – potentially
21: Newport Town Park	Yes – potentially
22: Proposed Lackamore Glamping Site	Yes – Potentially
23: Forestry	Yes – Ongoing
24: Agriculture	Yes – Ongoing

TABLE 3: GENERAL BIRD SPECIES: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIAR Main Report	Relevant Stage of the development during which impacts will occur
Meadow Pipit: Habitat Loss	Construction Stage
Golden Plover: Habitat Loss	Construction Stage
Golden Plover: Disturbance/Displacement	Construction Stage
Grey Wagtail, Kingfisher, Dipper: Disturbance /Displacement	Construction Stage
General Birds: Habitat Enhancement	Operational Stage

TABLE 4: GENERAL BIRD SPECIES: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

Other Project/Activity	Scoped In/Out	Justification for Scoping in/out
3: Bunkimalta Windfarm 4: Castlewaller Windfarm	Scoped Out	Neither of these windfarms are likely to be constructed during the same period as UWF Grid Connection (because the Castlewaller Windfarm has not yet been offered a grid connection from EirGrid, and because of planning issues in relation to Bunkimalta Windfarm). However should they be constructed at the same time, habitat loss and displacement will be confined to the project sites which are typical of habitats in the area. Furthermore, habitat effects to General Birds from UWF Grid Connection are confined to Mountphilips Substation site which is in close proximity to either of these windfarms. Significant cumulative disturbance impacts the 110kV UGC are not likely to occur.
17: Forestry entrance works at CummerBeg 18: Forestry entrance works at Knockshanbrittas 22: Proposed Lackamore Glamping Site	Scoped Out	None of these projects are of a large enough scale to cause any measurable cumulative effects with UWF Grid Connection or the Whole UWF Project.
21: Newport Town Park	Scoped Out	No likely cumulative impacts due to separation distance from 110kV UGC works and Mountphilips Substation site.
23: Forestry 24: Agriculture	Scoped Out	These activities are on-going and form part of the baseline conditions. No material changes in agricultural/farming/turf-cutting practices are expected or planned in the area.

A-2.1 .4.10 BIODIVERSITY Sensitive Aspect: Bats

TABLE 1: BATS: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

Geographical Boundary:	<ul style="list-style-type: none"> Buildings within 150m of Element construction works areas or activity locations Mature trees within 50m of Element construction works areas or activity locations; Hedgerow severance locations Bridges within construction works locations or along concrete/aggregate haulage routes for Elements of the Whole UWF Project.
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Other Projects or Activities located within the Geographical Boundary

1: Killonan to Nenagh 110kV Overhead Line
 2: Shannonbridge to Killonan 220kV Overhead Line
 4: Castlewaller Windfarm
 11: Foilnahan Mast
 13: Newport Regional Water Supply
 22: Proposed Lackamore Glamping Site
 23: Forestry
 24: Agriculture

TABLE 2: BATS: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

Timeframe Boundary:	Construction Stage of UWF Grid Connection	
Other Projects or Activities	Within the Timeframe Boundary? Y/N	
1: Killonan to Nenagh 110kV Overhead Line	No – already exists, no construction works planned	
2: Shannonbridge to Killonan 220kV Overhead Line	No – already exists, no construction works planned	
4: Castlewaller Windfarm	Yes – potentially	
11: Foilnahan Mast	No – already exists	
13: Newport Regional Water Supply	No – existing, no construction works planned	
22: Proposed Lackamore Glamping Site	Yes – Potentially	
23: Forestry	Yes – Ongoing	
24: Agriculture	Yes – Ongoing	

TABLE 3: BATS: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIA Main Report	Relevant Stage of the development during which impacts will occur
Destruction or disturbance of bat roosts in trees	Construction Stage
Destruction or disturbance of bat roosts in bridges	Construction Stage
Severance of commuting routes or feeding areas	Construction Stage
Disturbance or Displacement due to lighting	Construction Stage

TABLE 4: BATS: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

Other Project/Activity	Scoped In/Out	Justification for Scoping in/out
4: Castlewaller Windfarm grid connection	Scoped Out	UWF Grid Connection will only interact with Castlewaller Windfarm where its Potential Grid Connection is routed along the public road in Castlewaller/Carrowkeale, UWF Grid Connection works on this road will occur in the road pavement, and involve drilling under 2 watercourse

		crossings (which have no bat roost suitability). No trees with moderate or high bat roost suitability are identified along this local road, and therefore there is no potential for significant cumulative effects to bats. Works at a new Potential site entrance from the R503 have no potential to cause significant cumulative effects with 110V UGC in this location, due to the absence of suitable bat roost locations in close proximity.
22. Proposed Lackamore Glamping Site	Scoped out	This project is not of a large enough scale to cause any measurable cumulative effects with UWF Grid Connection, in addition the operational 110kV UGC will be underground.
23: Forestry 24: Agriculture	Scoped Out	These activities are on-going and form part of the baseline conditions. No material changes in agricultural or forestry practices are expected or planned in the area.

A-2.1 .4.11 BIODIVERSITY Sensitive Aspect: Non-Volant Mammals

TABLE 1: NON-VOLANT MAMMALS: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

Geographical Boundary:	<p>Otter: Watercourse crossing locations plus 300m in either direction</p> <p>Badger and Other: construction works area, afforestation lands, activity locations plus 50m in all directions</p>
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Other Projects or Activities located within the Geographical Boundary

- 1: Killonan to Nenagh 110kV Overhead Line
- 2: Shannonbridge to Killonan 220kV Overhead Line
- 4: Castlewaller Windfarm
- 11: Foilnahan Mast
- 13: Newport Regional Water Supply
- 22: Proposed Lackamore Glamping Site
- 23: Forestry
- 24: Agriculture

TABLE 2: NON-VOLANT MAMMALS: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

Timeframe Boundary:	Construction Stage of UWF Grid Connection
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Other Projects or Activities	Within the Timeframe Boundary? Y/N
1: Killonan to Nenagh 110kV Overhead Line	No – already exists, no construction works planned
2: Shannonbridge to Killonan 220kV Overhead Line	No – already exists, no construction works planned
4: Castlewaller Windfarm	Yes – potentially
11: Foilnahan Mast	No – already exists
13: Newport Regional Water Supply	No – existing, no construction works planned
22: Proposed Lackamore Glamping Site	Yes – Potentially
23: Forestry	Yes – Ongoing
24: Agriculture	Yes – Ongoing

TABLE 3: NON-VOLANT MAMMALS: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIAR Main Report	Relevant Stage of the development during which impacts will occur
Otter: Disturbance/Displacement	Construction Stage
Badger: Habitat Loss	Construction Stage
Badger: Disturbance/Displacement	Construction Stage

TABLE 4: NON-VOLANT MAMMALS: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

Other Project/Activity	Scoped In/Out	Justification for Scoping in/out:
4: Castlewaller Windfarm	Scoped Out	UWF Grid Connection will only interact with Castlewaller Windfarm where its Potential Grid Connection is routed along the public road in Castlewaller/Carrowkeale, UWF Grid Connection works on this road will occur in the road pavement, and involve drilling under 2 watercourse crossings. No signs or evidence of otter or badger was recorded along this road or at the watercourse crossing points. Therefore there is no potential for significant cumulative effects to otter or badger. Works at a new potential site entrance from the R503 have no potential to

		cause significant cumulative effects with 110V UGC in this location, due to the absence of suitable habitat in close proximity.
22. Proposed Lackamore Glamping Site	Scoped out	This project is not of a large enough scale to cause any measurable cumulative effects with UWF Grid Connection.
23: Forestry 24: Agriculture	Scoped Out	These activities are on-going and form part of the baseline conditions. No material changes in agricultural or forestry practices are expected or planned in the area.

A-2.1 .4.12 **BIODIVERSITY Sensitive Aspect: Amphibians & Reptiles**

TABLE 1: AMPHIBIANS & REPTILES: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

Geographical Boundary:	50m area around and incorporating the construction works areas, afforestation lands and activity locations
Other Projects or Activities located within the Geographical Boundary	
1: Killonan to Nenagh 110kV Overhead Line 2: Shannonbridge to Killonan 220kV Overhead Line 4: Castlewaller Windfarm 11: Foilnahan Mast 13: Newport Regional Water Supply 22: Proposed Lackamore Glamping Site 23: Forestry 24: Agriculture	

TABLE 2: AMPHIBIANS & REPTILES: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

Timeframe Boundary:	Construction Stage of UWF Grid Connection	
Other Projects or Activities	Within the Timeframe Boundary? Y/N	
1: Killonan to Nenagh 110kV Overhead line	No – already exists, no construction works planned	
2: Shannonbridge to Killonan 220kV Overhead Line	No – already exists, no construction works planned	
4: Castlewaller Windfarm	Yes – potentially	
11: Foilnahan Mast	No – already exists	
13: Newport Regional Water Supply	No – existing, no construction works planned	
22: Proposed Lackamore Glamping Site	Yes – Potentially	
23: Forestry	Yes – Ongoing	
24: Agriculture	Yes – Ongoing	

TABLE 3: AMPHIBIANS & REPTILES: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIAR Main Report	Relevant Stage of the development during which impacts will occur
No Impacts were SCOPED IN for Further Evaluation The extent of any reduction in suitable habitat for Amphibians & Reptiles is negligible in the context of availability of habitats in the immediate surrounding area. However the spatial extent, limited frequency, and brief duration of works at Identified locations of suitable habitat do not overlap construction works areas or activity locations. Neutral effects only are likely.	N/A

A-2.1 .4.13 BIODIVERSITY Sensitive Aspect: Marsh Fritillary

TABLE 1: MARSH FRITILLARY: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

<u>Geographical Boundary:</u>	50m area around and incorporating the construction works areas, afforestation lands, activity locations 2km from Whole UWF Project for cumulative effects with Other Projects and Activities
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Other Projects or Activities located within the Geographical Boundary

- 1: Killonan to Nenagh 110kV Overhead Line
- 2: Shannonbridge to Killonan 220kV Overhead Line
- 4: Castlewaller Windfarm
- 5: Milestone Windfarm
- 8: Knockastanna Windfarm
- 10: Rear Cross Quarry
- 11: Foilnahan Mast
- 12: Cummermore Communication Pole
- 13: Newport Regional Water Supply
- 17: Forestry entrance, CummerBeg
- 18: Forestry entrance, Knockshanbrittas
- 21: Newport Town Park
- 22: Proposed Lackamore Glamping Site
- 23: Forestry
- 24: Agriculture
- 25: Turf-Cutting

TABLE 2: MARSH FRITILLARY: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

<u>Timeframe Boundary:</u>	Construction Stage of UWF Grid Connection	
Other Projects or Activities	Within the Timeframe Boundary? Y/N	
1: Killonan to Nenagh 110kV Overhead Line	No – already exists, no construction works planned	
2: Shannonbridge to Killonan 220kV Overhead Line	No – already exists, no construction works planned	
4: Castlewaller Windfarm	Yes – potentially	
5: Milestone Windfarm	No – already exists	
8: Knockastanna Windfarm	No – already exists	
10: Rear Cross Quarry	No – already exists	
11: Foilnahan Mast	No – already exists	
12: Cummermore Communication Pole	No – already exists	
13: Newport Regional Water Supply	No – existing, no construction works planned	
17: Forestry entrance, CummerBeg	Yes - potentially	
18: Forestry entrance, Knockshanbrittas	Yes - potentially	
21: Newport Town Park	Yes - potentially	
22: Proposed Lackamore Glamping Site	Yes – Potentially	
23: Forestry	Yes – Ongoing	
24: Agriculture	Yes – Ongoing	
25: Turf-Cutting	Yes - Ongoing	

TABLE 3: MARSH FRITILLARY: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIAR Main Report	Relevant Stage of the development during which impacts will occur
Habitat Loss	Construction Stage

TABLE 4: MARSH FRITILLARY: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES		
Other Project/Activity	Scoped In/Out	Justification for Scoping in/out:
4: Castlewaller Windfarm	Scoped out	No suitable habitat for Marsh Fritillary found at the interaction of UWF Grid Connection 110kV UGC and the potential route of the Castlewaller Windfarm grid connection or potential new entrance off the R503. No potential for cumulative impacts with the UWF Grid Connection.
22. Proposed Lackamore Glamping Site	Scoped out	No suitable habitat for Marsh Fritillary found at the interaction of UWF Grid Connection 110kV UGC and this Other Project - the 110kV UGC is entirely on public road at this location.
17: Forestry entrance works at CumberBeg 18: Forestry entrance works at Knockshanbrittas	Scoped Out	None of these projects are of a large enough scale to cause any measurable cumulative effects with UWF Grid Connection or the Whole UWF Project.
21: Newport Town Park	Scoped Out	No likely cumulative impacts given the separation distance to the nearest known Marsh Fritillary populations, and in any case the separation distance to UWF Grid Connection.
23: Forestry 24: Agriculture 25: Turf-Cutting	Scoped In	These activities are on-going and are sources of habitat loss for March Fritillary and therefore there is potential to have cumulative effects with the Whole UWF Project.

A-2.1 .4.14 Land Sensitive Aspect: Agricultural Land

TABLE 1: AGRICULTURAL LAND: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

Geographical Boundary:	Boundary of works areas in general, and the individual landholdings where there is any potential to split parcels of land
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Other Projects or Activities located within the Geographical Boundary

1 Killonan to Nenagh 110kV Overhead Line
 2: Shannonbridge to Killonan 220kV Overhead Line
 5: Milestone Windfarm
 11 Foilnaman Mast
 23: Forestry
 24: Agriculture

TABLE 2: AGRICULTURAL LAND: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

Timeframe Boundary:	Construction Stage/Early Operational Stage of UWF Grid Connection
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Other Projects or Activities	Within the Timeframe Boundary? Y/N
1: Killonan to Nenagh 110kV Overhead Line	No – already exists, no construction works planned
2: Shannonbridge to Killonan 220kV Overhead Line	No – already exists, no construction works planned
5: Milestone Windfarm	Yes, potentially
11: Foilnaman Mast	Yes, potentially
23: Forestry	No – form part of the baseline environment
24: Agriculture	No – form part of the baseline environment

TABLE 3: AGRICULTURAL LAND: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIAR Main Report	Relevant Stage of the development during which impacts will occur
Loss of Use and Connectivity of Landholdings	Construction/Early Operational Stage

TABLE 4: AGRICULTURAL LAND: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

Other Project/Activity	Scoped In/Out	Justification for Scoping in/out:
5: Milestone Windfarm 11: Foilnaman Mast	Scoped out	The addition of UWF Grid Connection or the Whole UWF Project will not cause loss of Use and Connectivity of Landholdings for these other existing projects

A-2.1 .4.15 LAND Sensitive Aspect: Forestry Land

TABLE 1: FORESTRY LAND: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

Geographical Boundary:	Boundary of works areas (<i>Other Elements only</i>) in general, and the individual landholdings where there is any potential to split parcels of land
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Other Projects or Activities located within the Geographical Boundary

- 1: Killonan to Nenagh 110kV Overhead Line
- 2: Shannonbridge to Killonan 220kV Overhead Line
- 23: Forestry
- 24: Agriculture

TABLE 2: FORESTRY LAND: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

Timeframe Boundary:	Construction Stage of UWF Grid Connection
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Other Projects or Activities	Within the Timeframe Boundary? Y/N
1: Killonan to Nenagh 110kV OHL	No – existing
2: Shannonbridge to Killonan 220kV OHL	No – existing
23: Forestry	No – form part of the baseline environment
24: Agriculture	No – form part of the baseline environment

TABLE 3: FORESTRY LAND: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIA Main Report	Relevant Stage of the development during which impacts will occur
Loss of Use and Connectivity of Landholdings	Construction Stage

TABLE 4: FORESTRY LAND: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

Other Project/Activity	Scoped In/Out	Justification for Scoping in/out:
No Other Projects or Activities within both the Geographical and Timeframe boundaries		

A-2.1 .4.16 SOILS Sensitive Aspect: Local Soils, Subsoils & Bedrock

TABLE 1: LOCAL SOILS, SUBSOILS & BEDROCK: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

Geographical Boundary:	Boundary of works areas and activity locations
Other Projects or Activities located within the Geographical Boundary	
1: Killonan to Nenagh 110kV Overhead Line 2: Shannonbridge to Killonan 220kV Overhead Line 4: Castlewaller Windfarm (<i>potential grid connection only</i>) 22: Proposed Lackamore Glamping Site 23: Forestry 24: Agriculture	

TABLE 2: LOCAL SOILS, SUBSOILS & BEDROCK: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

Timeframe Boundary:	Construction Stage of UWF Grid Connection
Other Projects or Activities	Within the Timeframe Boundary? Y/N
1: Killonan to Nenagh 110kV Overhead Line 2: Shannonbridge to Killonan 220kV Overhead Line 4: Castlewaller Windfarm 22: Proposed Lackamore Glamping Site 23: Forestry 24: Agriculture	No – already exists, no construction works planned No – already exists, no construction works planned Yes - potentially Yes – potentially Yes, ongoing Yes, ongoing

TABLE 3: LOCAL SOILS, SUBSOILS & BEDROCK: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIAR Main Report	Relevant Stage of the development during which impacts will occur
Excavation and relocation of soil, subsoil and bedrock	Construction Stage
Soil and subsoil compaction	Construction Stage
Soil and subsoil erosion	Construction Stage
Contamination from Oils, Fuels & Chemicals	Construction Stage
Contamination from Cement Based Compounds	Construction Stage

Table 4: LOCAL SOILS, SUBSOILS & BEDROCK: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

Other Project/Activity	Scoped In/Out	Justification for Scoping in/out:
4: Castlewaller Windfarm 22: Proposed Lackamore Glamping Site	Scoped Out	No potential for significant cumulative effects to soils where potential Castlewaller Windfarm grid connection or site entrance interact, or where the site entrance for the glamping site interact – these projects will not involve road works, whereas the UWF Grid Connection will be on road pavements along the L6009-0 and R503 public roads at these locations.
23: Forestry 24: Agriculture	Scoped Out	These activities are on-going and form part of the baseline conditions. No material changes in agricultural or forestry practices are expected or planned in the area.

A-2.1 .4.17 SOILS Sensitive Aspect: Lower River Shannon SAC

TABLE 1: LOWER RIVER SHANNON SAC: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS		
<u>Geographical Boundary:</u>	Boundary of construction works areas, planting lands or activity locations where they interact/overlap with the boundary of the Lower River Shannon SAC	
<u>Other Projects or Activities located within the Geographical Boundary</u>		
No Other Projects or Activities are relevant as the boundary of construction works areas overlapping the boundary of the Lower River Shannon SAC only relates to the UWF Grid Connection, and only to the 110kV UGC which is entirely on public road pavements or bridge structures within the boundary of the SAC.		
TABLE 2: LOWER RIVER SHANNON SAC: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS		
<u>Timeframe Boundary:</u>	Construction Stage of UWF Grid Connection	
<u>Other Projects or Activities</u>	<u>Within the Timeframe Boundary? Y/N</u>	
None	None form part of the baseline environment	
TABLE 3: LOWER RIVER SHANNON SAC: IMPACTS SCOPED IN FOR EVALUATION		
<u>Impact evaluated in the EIAR Main Report</u>	<u>Relevant Stage of the development during which impacts will occur</u>	
Excavation & Relocation of Soil, Subsoil and Bedrock	Construction Stage	
Contamination from Oils, Fuels & Chemicals	Construction Stage	
Contamination from Cement Based Compounds	Construction Stage	
TABLE 4: LOWER RIVER SHANNON SAC: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL <u>AND</u> TIMEFRAME BOUNDARIES		
<u>Other Project/Activity</u>	<u>Scoped In/Out</u>	<u>Justification for Scoping in/out:</u>
No Other Projects or Activities within both the Geographical and Timeframe boundaries		

A-2.1 .4.18 WATER Sensitive Aspect: Local Surface Water Bodies

TABLE 1: LOCAL SURFACE WATER BODIES: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

<u>Geographical Boundary:</u>	As defined by local surface water catchments and regional surface water catchments. The cumulative assessment was completed on a Local Surface Water Body scale and at Regional Catchment scale (the regional catchment scale was done to assess impacts on downstream SAC's).
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Other Projects or Activities located within the Geographical Boundary

- 1: Killonan to Nenagh 110kV Overhead Line
- 2: Shannonbridge to Killonan 220kV Overhead Line
- 3: Bunkimalta Windfarm
- 4: Castlewaller Windfarm
- 5: Milestone Windfarm
- 6: Garracummer Windfarm
- 7: Hollyford Windfarm
- 8: Knockastanna Windfarm
- 9: Gortnahalla Turbine
- 10: Rear Cross Quarry
- 11: Foilnahan Mast
- 12: Cummermore Communication Pole
- 13: Newport Regional Water Supply
- 14: Thurles Regional Water Treatment Works
- 16: Forestry entrance, Cappamore
- 17: Forestry entrance, CummerBeg
- 18: Forestry entrance, Knockshanbrittas
- 19: Proposed Quarry at Curraghduff
- 21: Newport Town Park
- 22: Proposed Lackamore Glamping Site
- 23: Forestry
- 24: Agriculture
- 25: Turf-Cutting

TABLE 2: LOCAL SURFACE WATER BODIES: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

<u>Timeframe Boundary:</u>	Construction/Operational Stage of UWF Grid Connection	
<u>Other Projects or Activities</u>	Within the Timeframe Boundary? Y/N	
1: Killonan to Nenagh 110kV Overhead Line	No – already exists, no construction works planned	
2: Shannonbridge to Killonan 220kV Overhead Line	No – already exists, no construction works planned	
3: Bunkimalta Windfarm	Yes – potentially	
4: Castlewaller Windfarm	Yes – potentially	
5: Milestone Windfarm	No – already exists, no construction works planned	
6: Garracummer Windfarm	No – already exists, no construction works planned	
7: Hollyford Windfarm	No – already exists, no construction works planned	
8: Knockastanna Windfarm	No – already exists, no construction works planned	
9: Gortnahalla Turbine	No – already exists, no construction works planned	
10: Rear Cross Quarry	Yes - potentially	
11: Foilnahan Mast	No – already exists, no construction works planned	
12: Cummermore Communication Pole	No – already exists, no construction works planned	
13: Newport Regional Water Supply	No – existing, no construction works planned	
14: Thurles Regional Water Treatment Work	Yes, potentially	

16: Forestry entrance, Cappamore	Yes, potentially
17: Forestry entrance, CumberBeg	Yes, potentially
18: Forestry entrance, Knockshanbrittas	Yes, potentially
19: Proposed Quarry at Curraghduff	Yes, potentially
21: Newport Town Park	Yes, potentially
22. Proposed Lackamore Glamping Site	Yes, potentially
23: Forestry	Yes, ongoing
24: Agriculture	Yes, ongoing
25: Turf-Cutting	Yes, ongoing

TABLE 3: LOCAL SURFACE WATER BODIES: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIA Main Report	Relevant Stage of the development during which impacts will occur
Surface water quality impacts due to earthworks	Construction Stage
Water quality impacts from dewatering of excavations (i.e. cable trench),	Construction Stage
Morphological Impacts to watercourses due to in-stream works	Construction Stage
Surface water quality impacts due watercourse crossing works,	Construction Stage
Surface Water Impacts due to Contamination by Fuels, Oils and Chemicals	Construction Stage
Water Quality Impacts from Cement Based Compounds	Construction Stage
Surface Water Quality Impacts during Directional Drilling Works	Construction Stage
Surface water quality impacts during conifer plantation tree felling	Construction Stage
Surface Water Quality Impacts due to Nutrient Input	Construction Stage
Increased flood risk due to runoff from permanent hardstanding areas and from new permanent watercourse crossings (culverts),	Operational Stage
Surface water quality impacts due to runoff from permanent access roads	Operational Stage

TABLE 4: LOCAL SURFACE WATER BODIES: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

Other Project/Activity	Scoped In/Out	Justification for Scoping in/out
3: Bunkimalta Windfarm 4: Castlewaller Windfarm	Scoped In	Although neither of these windfarms are likely to be constructed during the same period as UWF Grid Connection (because the Castlewaller Windfarm has not yet been offered a grid connection from EirGrid, and has to obtain planning consent for its grid connection; and because Bunkimalta Windfarm has to obtain new planning consent for the windfarm), there is <i>some possibility</i> that these windfarms could be built during the same period as UWF Grid Connection, and therefore these projects are included on a precautionary basis for impacts to local surface water bodies because works will be carried out in the same sub-catchments as UWF Grid Connection.
10: Rear Cross Quarry	Scoped Out	The potential for increased flood risk and run-off during the operational stage of UWF Grid Connection is confined to the permanent new hard-standing areas (Mountphilips Substation and End Masts). Due to separation distance, these Other Projects are not likely to have any measurable cumulative effects. In relation to cumulative effects, water protection measures are/will form part of the planning conditions for these projects will make significant cumulative effects unlikely. Also, if quarries are discharging to local watercourses, they will do so under a discharge licence which considers the hydraulic capacity of the receiving watercourse. Also Thurles Regional Treatment
14: Thurles Regional Water Treatment Works		
19: Proposed Quarry at Curraghduff 22. Proposed Lackamore Glamping Site		

		Works are currently under construction and unlikely to have any measurable cumulative effects by the time of the UWF Grid Connection/Whole UWF Project construction period.
16: Forestry entrance, Cappamore 17: Forestry entrance, CummerBeg 18: Forestry entrance, Knockshanbrittas	Scoped Out	None of these projects are of a large enough scale to cause any measurable cumulative effects with UWF Grid Connection or the Whole UWF Project.
21: Newport Town Park	Scoped In	Could be built during the same period as UWF Grid Connection. In the same sub-catchment and downstream of UWF Grid Connection
23: Forestry 24: Agriculture 25: Turf-Cutting	Scoped Out	These activities are on-going and form part of the baseline conditions. No material changes in agricultural/farming/turf-cutting practices are expected or planned in the area.

A-2.1 .4.19 WATER Sensitive Aspect: Local Groundwater Bodies

TABLE 1: LOCAL GROUNDWATER BODIES: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

<u>Geographical Boundary:</u>	Local GWBs catchment divides as defined by GSI/WFD within 300m of construction works areas
<u>Other Projects or Activities located within the Geographical Boundary</u>	
1: Killonan to Nenagh 110kV Overhead Line 2: Shannonbridge to Killonan 220kV Overhead Line 3: Bunkimalta Windfarm 4: Castlewaller Windfarm 5: Milestone Windfarm 6: Garracummer Windfarm 7: Hollyford Windfarm 8: Knockastanna Windfarm 9: Gortnahalla Turbine 10: Rear Cross Quarry 11: Foilnaman Mast 12: Cummermore Communication Pole 13: Newport Regional Water Supply 14: Thurles Regional Water Treatment Works 15: Waste Management Facility, Thurles 16: Forestry entrance, Cappamore 17: Forestry entrance, CummerBeg 18: Forestry entrance, Knockshanbrittas 19: Proposed Quarry at Curraghduff 21: Newport Town Park 22. Proposed Lackamore Glamping Site 23: Forestry 24: Agriculture 25: Turf-Cutting	

TABLE 2: LOCAL GROUNDWATER BODIES: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

<u>Timeframe Boundary:</u>	Construction Stage of UWF Grid Connection	
<u>Other Projects or Activities</u>	<u>Within the Timeframe Boundary? Y/N</u>	
1: Killonan to Nenagh 110kV Overhead Line	No – already exists, no construction works planned	
2: Shannonbridge to Killonan 220kV Overhead Line	No – already exists, no construction works planned	
3: Bunkimalta Windfarm	Yes – potentially	
4: Castlewaller Windfarm	Yes - potentially	
5: Milestone Windfarm	No – already exists	
6: Garracummer Windfarm	No – already exists	
7: Hollyford Windfarm	No – already exists	
8: Knockastanna Windfarm	No – already exists	
9: Gortnahalla Turbine	No – already exists	
10: Rear Cross Quarry	No – already exists	
11: Foilnaman Mast	No – already exists	
12: Cummermore Communication Pole	No – already exists	
13: Newport Regional Water Supply	No – already exists, upgrade works complete	
14: Thurles Regional Water Treatment Work	Yes, potentially	
15: Waste Management Facility, Thurles	No – already exists	
16: Forestry entrance, Cappamore	Yes, potentially	
17: Forestry entrance, CummerBeg	Yes, potentially	

18: Forestry entrance, Knockshanbrittas	Yes, potentially
19: Proposed Quarry at Curraghduff	Yes, potentially
21: Newport Town Park	Yes, potentially
22: Proposed Lackamore Glamping Site	Yes, potentially
23: Forestry	Yes, ongoing
24: Agriculture	Yes, ongoing
25: Turf-Cutting	Yes, ongoing

TABLE 3: LOCAL GROUNDWATER BODIES: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIA Main Report	Relevant Stage of the development during which impacts will occur
Groundwater Impacts due to Contamination by Fuels, Oils and Chemicals	Construction Stage
Groundwater Quality Impacts from Cement Based Compounds	Construction Stage
Groundwater level (quantity) impacts from dewatering of excavations	Construction Stage

TABLE 4: LOCAL GROUNDWATER BODIES: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

Other Project/Activity	Scoped In/Out	Justification for Scoping in/out:
4: Castlewaller Windfarm 22: Proposed Lackamore Glamping Site	Scoped Out	No Likely direct impacts envisaged for Local GWB from UWF Grid Connection during construction with the zone of potential cumulative impacts, due to the location of the 110kV UGC within the L6009-0 and R503 public road pavements, in close proximity to Castlewaller Windfarm's potential grid connection and potential site entrance works on the R503, and in close proximity to the Proposed Lackamore Glamping Site, and therefore no potential for cumulative impacts.
3: Bunkimalta Windfarm 14: Thurles Regional Water Treatment Works 21: Newport Town Park 19: Proposed Quarry at Curraghduff	Scoped Out	Due to the separation distances to the development, no likely cumulative impacts.
16::Forestry entrance works at Cappamore 17: Forestry entrance works at CummerBeg 18: Forestry entrance works at Knockshanbrittas	Scoped Out	In addition to the separation distance between these projects and the UWF Grid Connection or Whole UWF Project, none of these projects are of a large enough scale to cause any measurable cumulative effects with UWF Grid Connection or the Whole UWF Project notwithstanding that no Likely direct impacts are envisaged for Local GWB from UWF Grid Connection during construction and therefore no potential for cumulative impacts.
23: Forestry 24: Agriculture 25: Turf-Cutting	Scoped Out	These activities are on-going and form part of the baseline conditions. No material changes in agricultural/forestry/turf-cutting practices are expected or planned in the area.

A-2.1 .4.20 **WATER Sensitive Aspect: Local Wells & Springs**

TABLE 1: LOCAL WELLS & SPRINGS: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

Geographical Boundary:	100m corridor, either side of construction works area from construction work area boundaries for Other Elements.
Other Projects or Activities located within the Geographical Boundary	
1: Killonan to Nenagh 110kV Overhead Line 2: Shannonbridge to Killonan 220kV Overhead Line 4: Castlewaller Windfarm 11: Foilnahan Mast 13: Newport Regional Water Supply 22. Proposed Lackamore Glamping Site 23: Forestry 24: Agriculture	

TABLE 2: LOCAL WELLS & SPRINGS: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

Timeframe Boundary:	Construction/Operational Stage of UWF Grid Connection	
Other Projects or Activities	Within the Timeframe Boundary? Y/N	
1: Killonan to Nenagh 110kV Overhead Line	No – already exists, no construction works planned	
2: Shannonbridge to Killonan 220kV Overhead Line	No – already exists, no construction works planned	
4: Castlewaller Windfarm	Yes - potentially	
11: Foilnahan Mast	No – already exists	
13: Newport Regional Water Supply	No – already exists, upgrade works completed	
22. Proposed Lackamore Glamping Site	Yes, potentially	
23: Forestry	Yes, ongoing	
24: Agriculture	Yes, ongoing	

TABLE 3: LOCAL WELLS & SPRINGS: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIAR Main Report	Relevant Stage of the development during which impacts will occur
No Impacts were SCOPED IN for Further Evaluation No likely impacts to Local Wells & Springs during construction of UWF Grid Connection or the Other Elements. No potential for operational stage to cause impacts.	n/a

TABLE 4: LOCAL WELLS & SPRINGS: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

Other Project/Activity	Scoped In/Out	Justification for Scoping in/out:
<i>No Other Projects or Activities scoped In</i> The Haul Route Activities are located entirely within the public road corridor. There will be no requirement for earthworks/groundworks and therefore no water quantity or quality effects to Local Wells & Springs are likely. Overhead Line Activities: These works involve upgrade works to the overhead existing lines such as cable wrapping which do not require any major excavations. Therefore no water quantity or quality effects to Local Wells & Springs are expected. Monitoring Activities do not require any major construction activities. Therefore, no surface water or groundwater impacts are expected. Once off activities will take place during the pre-construction stage, and comprise planting and		

fencing at hedgerows, watercourse boundaries and areas of scrub. These activities will generally take place on the periphery of fields and are not expected to impact on water quality.

During the Operational Stage, farming practices under the Upperchurch Hen Harrier Scheme will, to a certain extent, cause lands to revert back to wet grassland. All associated potential hydrological effects are expected to be Neutral. During decommissioning of UWF, the Upperchurch Hen Harrier Scheme will finish, but no activities will be required, therefore there is no potential for impacts to Local Wells & Springs.

A-2.1 .4.21 WATER Sensitive Aspect: Lower River Shannon SAC

TABLE 1: LOWER RIVER SHANNON SAC: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

<u>Geographical Boundary:</u>	<p>The regional Mulkear River catchment, comprising the following EPA Sub-Catchments:</p> <ul style="list-style-type: none"> • Newport[Tipperary]_SC_010, • Kileengarrif_SC_010, • Bilboa_SC_010, • Dead_SC_010, • Mulkear_SC_010, • Mulkear_SC_020, • Shannon[Lower]_SC_090
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Other Projects or Activities located within the Geographical Boundary

- 1: Killonan to Nenagh 110kV Overhead Line
- 2: Shannonbridge to Killonan 220kV Overhead Line
- 3: Bunkimalta Windfarm
- 4: Castlewaller Windfarm
- 6: Garracummer Windfarm
- 8: Knockastanna Windfarm
- 10: Rear Cross Quarry
- 12: Cummermore Communication Pole
- 13: Newport Regional Water Supply
- 16: Forestry entrance, Cappamore
- 17: Forestry entrance, CummerBeg
- 18: Forestry entrance, Knockshanbrittas
- 21: Newport Town Park
22. Proposed Lackamore Glamping Site
- 23: Forestry
- 24: Agriculture
- 25: Turf-Cutting

TABLE 2: LOWER RIVER SHANNON SAC: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

<u>Timeframe Boundary:</u>	Construction Stage of UWF Grid Connection	
Other Projects or Activities		Within the Timeframe Boundary? Y/N
1: Killonan to Nenagh 110kV Overhead Line		No – already exists, no construction works planned
2: Shannonbridge to Killonan 220kV Overhead Line		No – already exists, no construction works planned
3: Bunkimalta Windfarm		Yes – potentially
4: Castlewaller Windfarm		Yes - potentially
6: Garracummer Windfarm		No – already exists
8: Knockastanna Windfarm		No – already exists
10: Rear Cross Quarry		Yes - potentially
12: Cummermore Communication Pole		No – already exists
13: Newport Regional Water Supply		No – already exists, upgrade works completed
16: Forestry entrance, Cappamore		Yes, potentially
17: Forestry entrance, CummerBeg		Yes, potentially
18: Forestry entrance, Knockshanbrittas		Yes, potentially
21: Newport Town Park		Yes, potentially
22. Proposed Lackamore Glamping Site		Yes, potentially
23: Forestry		Yes, ongoing
24: Agriculture		Yes, ongoing
25: Turf-Cutting		Yes, ongoing

TABLE 3: LOWER RIVER SHANNON SAC: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIAR Main Report	Relevant Stage of the development during which impacts will occur
Surface water quality impacts due to earthworks	Construction Stage
Water quality impacts from dewatering of excavations	Construction Stage
Surface water quality impacts due watercourse crossing works	Construction Stage
Surface Water Quality Impacts during Directional Drilling	Construction Stage
Surface Water Impacts from Fuels, Oils and Chemicals	Construction Stage
Water Quality Impacts from Cement Based Compounds	Construction Stage

TABLE 4: LOWER RIVER SHANNON SAC: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

Other Project/Activity	Scoped In/Out	Justification for Scoping in/out:
3: Bunkimalta Windfarm 4: Castlewaller Windfarm	Scoped In	Although neither of these windfarms are likely to be constructed during the same period as UWF Grid Connection (because the Castlewaller Windfarm has not yet been offered a grid connection from EirGrid, and has to obtain planning consent for its grid connection; and because Bunkimalta Windfarm has to obtain new planning consent for the windfarm), there is <i>some possibility</i> that these windfarms could be built during the same period as UWF Grid Connection, and therefore these projects are included on a precautionary basis.
10: Rearcross Quarry	Scoped Out	The potential for increased flood risk and run-off during the operational stage of UWF Grid Connection is confined to the permanent new hard-standing areas (Mountphilips Substation and End Masts). Due to separation distance, Rearcross Quarry is not likely to have any measurable cumulative effects. Also, water protection measures form part of the planning conditions/licences for the quarry which will make significant cumulative effects unlikely.
21: Newport Town Park	Scoped In	Could be built during the same period as UWF Grid Connection, involves works adjacent to the river.
16: Forestry entrance, Cappamore 17: Forestry entrance, CummerBeg 18: Forestry entrance, Knockshanbrittas	Scoped Out	Due to the limited size and scale of these developments, and the dilution factor in downstream waterbodies, these projects are not likely to cause any measurable cumulative effects with UWF Grid Connection or the Whole UWF Project on the SAC.
22: Proposed Lackamore Glamping Site	Scoped Out	Could be built during the same period as UWF Grid Connection, however water protection measures will form part of the planning conditions for this project which will ensure that adverse effects will not occur to the SAC, therefore significant cumulative effects unlikely.
23: Forestry 24: Agriculture 25: Turf-Cutting	Scoped Out	These activities are on-going and form part of the baseline conditions. No material changes in agricultural/farming/turf-cutting practices are expected or planned in the area.

A-2.1 .4.22 **WATER Sensitive Aspect: Lower River Suir SAC**

TABLE 1: LOWER RIVER SUIR SAC: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

Geographical Boundary:	Suir_SC_030 sub-catchment and Multeen (East) SC_010 within the Regional River Suir Hydrometric area HA16
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Other Projects or Activities located within the Geographical Boundary

5: Milestone Windfarm
 6: Garracummer Windfarm
 7: Hollyford Windfarm
 9: Gortnahalla Turbine
 11: Foilnahan Mast
 12: Cummermore Communication Pole
 14: Thurles Regional Water Treatment Works
 15: Waste Management Facility, Thurles
 19: Proposed Quarry at Curraghduff
 20: Biorefinery Facility Moyne Thurles
 23: Forestry
 24: Agriculture

Table 2: LOWER RIVER SUIR SAC: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

Timeframe Boundary:	Construction Stage of UWF Grid Connection
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Other Projects or Activities	Within the Timeframe Boundary? Y/N
5: Milestone Windfarm	No – already exists
6: Garracummer Windfarm	No – already exists
7: Hollyford Windfarm	No – already exists
9: Gortnahalla Turbine	No – already exists
11: Foilnahan Mast	No – already exists
12: Cummermore Communication Pole	No – already exists
14: Thurles Regional Water Treatment Work	Yes, potentially
15: Waste Management Facility, Thurles	No – already exists
19: Proposed Quarry at Curraghduff	Yes, potentially
20: Biorefinery Facility Moyne Thurles	Yes, potentially
23: Forestry	Yes, ongoing
24: Agriculture	Yes, ongoing

TABLE 3: LOWER RIVER SUIR SAC: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIAR Main Report	Relevant Stage of the development during which impacts will occur
Surface water quality impacts due to earthworks (excavations and overburden	Construction Stage
Surface water quality impacts due watercourse crossing works,	Construction Stage
Surface Water Impacts due to Contamination by Fuels, Oils and Chemicals	Construction Stage
Water Quality Impacts from Cement Based Compounds	Construction Stage
Surface water quality impacts due to forestry felling of conifer plantation (Other Elements only)	Construction Stage

TABLE 4: LOWER RIVER SUIR SAC: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

Other Project/Activity	Scoped In/Out	Justification for Scoping in/out:
14: Thurles Regional Water Treatment Works 20: Biorefinery Facility Moyne Thurles	Scoped Out	Due to the separation distance of these projects from either the UWF Grid Connection or the Other Elements of the Whole UWF Projects, and the assimilative and dilution factors in downstream waterbodies, these projects are not likely to cause any measurable cumulative effects with UWF Grid Connection or the Whole UWF Project on the SAC
19: Proposed Quarry at Curraghduff	Scoped Out	Quarry project too small a scale to cause any measurable cumulative effects with UWF Grid Connection or the Whole UWF Project. In addition, the quarry will have to avoid adverse effects to European Sites. Furthermore, the conditions of planning (should it be granted) and discharge licence (if required) will include conditions for the protection of water quality.
23: Forestry 24: Agriculture 25: Turf-Cutting	Scoped Out	These activities are on-going and form part of the baseline conditions. No material changes in agricultural/farming/turf-cutting practices are expected or planned in the area.

A-2.1 .4.23 WATER Sensitive Aspect: Local Water Dependant Habitat

TABLE 1: LOCAL WATER DEPENDANT HABITAT: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

Geographical Boundary:	50m corridor, either side of Element works/ planting/ activity areas
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Other Projects or Activities located within the Geographical Boundary

- 1: Killonan to Nenagh 110kV Overhead Line
- 2: Shannonbridge to Killonan 220kV Overhead Line
- 4: Castlewaller Windfarm
- 11: Foilnahan Mast
- 22: Proposed Lackamore Glamping Site
- 23: Forestry
- 24: Agriculture

TABLE 2: LOCAL WATER DEPENDANT HABITAT: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

Timeframe Boundary:	Construction/Operation Stage of UWF Grid Connection
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Other Projects or Activities	Within the Timeframe Boundary? Y/N
1: Killonan to Nenagh 110kV Overhead Line	No – already exists, no construction works planned
2: Shannonbridge to Killonan 220kV Overhead Line	No – already exists, no construction works planned
4: Castlewaller Windfarm	Yes – potentially
11: Foilnahan Mast	No – already exists, no construction works planned
22: Proposed Lackamore Glamping Site	Yes, potentially
23: Forestry	Yes, ongoing
24: Agriculture	Yes, ongoing

TABLE 3: LOCAL WATER DEPENDANT HABITAT: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIAR Main Report	Relevant Stage of the development during which impacts will occur
Drainage of Marsh Fritillary habitat	Construction/Operational Stage

TABLE 4: LOCAL WATER DEPENDANT HABITAT: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

Other Project/Activity	Scoped In/Out	Justification for Scoping in/out:
4: Castlewaller Windfarm 22: Proposed Lackamore Glamping Site	Scoped Out	There is no suitable water dependent habitat within 50m of UWF Grid Connection, and due to the separation distance to UWF Related Works/Upperchurch Windfarm, it is evaluated that there is no potential for cumulative effects to occur with Castlewaller Windfarm or with the proposed glamping site at Lackamore.
23: Forestry 24: Agriculture 25: Turf-Cutting	Scoped Out	These activities are on-going and form part of the baseline conditions. No material changes in agricultural/farming/turf-cutting practices are expected or planned in the area.

A-2.1 .4.24 AIR Sensitive Aspect: Local Residents & Community

TABLE 1: LOCAL RESIDENTS & COMMUNITY: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

Geographical Boundary:	<p>Construction Dust, Noise & Vibration: Air Quality, Noise & Vibration: 700m from construction works, 50m from main transport routes,</p> <p>Operational Noise: 800m from both the Mountphilips Substation and Consented UWF Substation</p> <p>Operational EMF: 200m from 110kV UGC, Internal Windfarm Cabling, Consented UWF Turbines and Consented UWF Substation.</p>
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Other Projects or Activities located within the Geographical Boundary

- 1: Killonan to Nenagh 110kV Overhead Line
- 2: Shannonbridge to Killonan 220kV Overhead Line
- 4: Castlewaller Windfarm
- 5: Milestone Windfarm
- 11: Foilnaman Mast
- 13: Newport Regional Water Supply
- 18: Forestry entrance, Knockshanbrittas
- 22. Proposed Lackamore Glamping Site
- 23: Forestry
- 24: Agriculture

TABLE 2: LOCAL RESIDENTS & COMMUNITY: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

Timeframe Boundary:	Construction/Operational Stage of UWF Grid Connection
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Other Projects or Activities	Within the Timeframe Boundary? Y/N
1: Killonan to Nenagh 110kV Overhead Line	Yes – operational electrical infrastructure
2: Shannonbridge to Killonan 220kV Overhead Line	Yes – operational electrical infrastructure
4: Castlewaller Windfarm	Yes – potentially during construction and operation
5: Milestone Windfarm	Yes – potentially during operation stage
11: Foilnaman Mast	Yes – potentially during operation stage
13: Newport Regional Water Supply	No – already constructed, no operational effects,
18: Forestry entrance, Knockshanbrittas	Yes, potentially during construction
22. Proposed Lackamore Glamping Site	Yes, potentially during construction
23: Forestry	Yes, ongoing
24: Agriculture	Yes, ongoing

TABLE 3: LOCAL RESIDENTS & COMMUNITY: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIAR Main Report	Relevant Stage of the development during which impacts will occur
Increase in Airborne Dust	Construction Stage
Increase in ambient noise levels	Construction Stage
Increase in ambient noise levels	Operational Stage
Increase in ambient EMF levels	Operational Stage

TABLE 4: LOCAL RESIDENTS & COMMUNITY: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

Other Project/Activity	Scoped In/Out	Justification for Scoping in/out:
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1: Killonan to Nenagh 110kV Overhead Line	Scoped Out	No cumulative construction effects (already constructed). No measurable cumulative operational EMF effects due to distance from Local Residents and Community
2: Shannonbridge to Killonan 220kV Overhead Line	Scoped In	No cumulative construction effects (already constructed). Operational EMF effects considered due to proximity to Local Residents & Community
4: Castlewaller Windfarm	Scoped In	<p>Potential for impacts only relates to UWF Grid Connection. The potential for impacts only relates to the potential grid connection and R503 site entrance works. No potential for cumulative impacts with the windfarm, due to separation distance.</p> <p>In relation to the potential grid connection and site entrance works, cumulative construction impacts are not expected as works will either take place at separate times, or should works be carried out at the same time, then works for both projects are likely to be carried out by one crew, with no material cumulative increase in noise or dust at local residents, and although a longer construction periods is possible on the local road L6009-0, this will not cause significant effects to residential amenity, as the works are still temporary and of short duration, during daylight hours. Works at the R503 entrance will not cause cumulative significant impacts to local residents due the very short duration of both 110kV UGC works and the entrance works. As the potential route of the grid connection is along one of the local roads (L6009-0) for the 110kV UGC route, the potential for cumulative operational EMF Impacts are scoped in.</p>
5: Milestone Windfarm 11: Foilnahan Mast	Scoped Out	No cumulative construction effects (already constructed). No potential for cumulative operational EMF Impacts due to separation distance from Local Residents & Community.
18: Forestry entrance works at Knockshanbrittas 22. Proposed Lackamore Glamping Site	Scoped Out	Not large enough scale to cause any measurable cumulative effects with UWF Grid Connection or the Whole UWF Project. No operational EMF effects
23: Forestry 24: Agriculture	Scoped Out	These activities are on-going and form part of the baseline conditions for ambient dust and noise. No operational EMF effects

A-2.1 .4.25 AIR Sensitive Aspect: Transient People

TABLE 1: TRANSIENT PEOPLE: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

<u>Geographical Boundary:</u>	Air Quality, Noise & Vibration: Lands, roads and waymarked walking trails within 350m from construction works areas and within 50m from main transport routes, and EMF: Lands, roads and waymarked walking trails within 100m of Whole UWF Project electrical and communication equipment.
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Other Projects or Activities located within the Geographical Boundary

- 1: Killonan to Nenagh 110kV Overhead Line
- 2: Shannonbridge to Killonan 220kV Overhead Line
- 4: Castlewaller Windfarm
- 11: Foilnahan Mast
- 13: Newport Regional Water Supply
- 21: Newport Town Park
- 22. Proposed Lackamore Glamping Site
- 23: Forestry
- 24: Agriculture

TABLE 2: TRANSIENT PEOPLE: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

<u>Timeframe Boundary:</u>	Operational Stage of UWF Grid Connection
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Other Projects or Activities	Within the Timeframe Boundary? Y/N
1: Killonan to Nenagh 110kV Overhead Line	Yes – operational electrical infrastructure
2: Shannonbridge to Killonan 220kV Overhead Line	Yes – operational electrical infrastructure
4: Castlewaller Windfarm	Yes – potential, operational electrical infrastructure
11: Foilnahan Mast	Yes – operational electrical infrastructure
13: Newport Regional Water Supply	No – existing, does not emit EMF during operation
21: Newport Town Park	Yes, potentially during construction only
22. Proposed Lackamore Glamping Site	Yes, potentially during construction only
23: Forestry	No – ongoing, does not emit EMF
24: Agriculture	No – ongoing, does not emit EMF

TABLE 3: TRANSIENT PEOPLE: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIAR Main Report	Relevant Stage of the development during which impacts will occur
Increase in ambient EMF levels	Operational Stage

TABLE 4: TRANSIENT PEOPLE: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

Other Project/Activity	Scoped In/Out	Justification for Scoping in/out:
1: Killonan to Nenagh 110kV Overhead Line 2: Shannonbridge to Killonan 220kV Overhead Line	Scoped In	Scoped in due to the likelihood of Transient People being within the study area
4: Castlewaller Windfarm	Scoped In	As the route of the potential grid connection is potentially routed on the L6009-0 local road where the UWF Grid

		Connection 110kV UGC is also routed, the potential for cumulative operational EMF Impacts are scoped in
11: Foilnahan Mast	Scoped Out	No potential for cumulative effects with UWF Grid Connection due to separation distance from 110kV UGC. No likely significant cumulative effects UWF Related Works due to the negligible level of EMF emissions from the mast, the very low number of transient people in close proximity, and the limited extent of Internal Windfarm Cabling within 100m.
21: Newport Town Park 22. Proposed Lackamore Glamping Site	Scoped Out	No likely impacts to air quality, noise or vibration effects during construction of UWF Grid Connection or the Other Elements, therefore no potential for significant cumulative effects with these two projects.

A-2.1 .4.26 Climate Sensitive Aspect: Climate

TABLE 1: CLIMATE: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

Geographical Boundary:	Irish State
Other Projects or Activities located within the Geographical Boundary	
1: Killonan to Nenagh 110kV Overhead Line 2: Shannonbridge to Killonan 220kV Overhead Line 3: Bunkimalta Windfarm 4: Castlewaller Windfarm 5: Milestone Windfarm <i>(included in Other Project No. 26 below)</i> 6: Garracummer Windfarm <i>(included in Other Project No. 26 below)</i> 7: Hollyford Windfarm <i>(included in Other Project No. 26 below)</i> 8: Knockastanna Windfarm <i>(included in Other Project No. 26 below)</i> 9: Gortnahalla Turbine <i>(included in Other Project No. 26 below)</i> 10: Rear Cross Quarry 11: Foilnahan Mast 12: Cummermore Communication Pole 13: Newport Regional Water Supply 14: Thurles Regional Water Treatment Works 15: Waste Management Facility, Thurles 16: Forestry entrance, Cappamore 17: Forestry entrance, CummerBeg 18: Forestry entrance, Knockshanbrittas 19: Proposed Quarry at Curraghduff 20: Biorefinery Facility Moyne Thurles 21: Newport Town Park 22. Proposed Lackamore Glamping Site 23: Forestry 24: Agriculture 25: Turf-Cutting 26: All operating wind turbines in the Irish State	

TABLE 2: CLIMATE: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

Timeframe Boundary:	Operational Stage of UWF Grid Connection	
Other Projects or Activities	Within the Timeframe Boundary? Y/N	
1: Killonan to Nenagh 110kV Overhead Line	No – does not produce energy	
2: Shannonbridge to Killonan 220kV Overhead Line	No – does not produce energy	
3: Bunkimalta Windfarm	Yes - potentially	
4: Castlewaller Windfarm	Yes - potentially	
10: Rear Cross Quarry	No – does not produce energy	
11: Foilnahan Mast	No – does not produce energy	
12: Cummermore Communication Pole	No – does not produce energy	
13: Newport Regional Water Supply	No – does not produce energy	
14: Thurles Regional Water Treatment	No – does not produce energy	
15: Waste Management Facility	No – does not produce energy	
16: Forestry entrance, Cappamore	No – does not produce energy	
17: Forestry entrance, CummerBeg	No – does not produce energy	
18: Forestry entrance	No – does not produce energy	
19: Proposed Quarry at Curraghduff	No – does not produce energy	
21: Newport Town Park	No – does not produce energy	
22. Proposed Lackamore Glamping Site	No – does not produce energy	

23: Forestry 24: Agriculture 25: Turf-Cutting 26: All operating wind turbines in the Irish State	No – does not produce energy No – does not produce energy No – does not produce energy Yes
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TABLE 3: CLIMATE: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIA Main Report	Relevant Stage of the development during which impacts will occur
Increase in Renewable Energy Production	Operational Stage

TABLE 4: CLIMATE: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

Other Project/Activity	Scoped In/Out	Justification for Scoping in/out:
3: Bunkimalta Windfarm 4: Castlewaller Windfarm	Scoped In	There is <i>some possibility</i> that these windfarms could be operational during the same period as UWF Grid Connection and Upperchurch Windfarm
26: All operating wind turbines in the Irish State (includes the Other Projects 5 to 9)	Scoped In	Part of the existing operational windfarms in the Republic of Ireland

A-2.1 .4.27 MATERIAL ASSETS (BUILT SERVICES) Sensitive Aspect: Local Residents & Community

TABLE 1: LOCAL RESIDENTS & COMMUNITY: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

<u>Geographical Boundary:</u>	Underground pipes or cables within construction works area boundaries, Overhead lines within 7m of the construction works area boundaries to allow for machinery movement. The extent of the study area is from the fault point to the nearest valve/transformer/cabinet.
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Other Projects or Activities located within the Geographical Boundary

- 1: Killonan to Nenagh 110kV Overhead Line
- 2: Shannonbridge to Killonan 220kV Overhead Line
- 4: Castlewaller Windfarm
- 22. Proposed Lackamore Glamping Site
- 23: Forestry
- 24: Agriculture

TABLE 2: LOCAL RESIDENTS & COMMUNITY: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

<u>Timeframe Boundary:</u>	Construction Stage of UWF Grid Connection
Other Projects or Activities	Within the Timeframe Boundary? Y/N
1: Killonan to Nenagh 110kV Overhead Line	No – already exists, no construction works planned
2: Shannonbridge to Killonan 220kV Overhead Line	No – already exists, no construction works planned
4: Castlewaller Windfarm	Yes – potentially
22. Proposed Lackamore Glamping Site	Yes – potentially
23: Forestry	Yes, ongoing
24: Agriculture	Yes, ongoing

TABLE 3: LOCAL RESIDENTS & COMMUNITY: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIAR Main Report	Relevant Stage of the development during which impacts will occur
Loss of public water supply	Construction Stage

TABLE 4: LOCAL RESIDENTS & COMMUNITY: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

Other Project/Activity	Scoped In/Out	Justification for Scoping in/out:
4: Castlewaller Windfarm	Scoped Out	Although Castlewaller is not likely to be constructed during the same period as UWF Grid Connection (because the Castlewaller Windfarm has not yet been offered a grid connection from EirGrid), in the event that the 2 No. projects grid connection trenches are built at the same time under the L6009-0, existing water pipes will be protected by standard best practice measures for works under the public road – i.e. banksmen, confirmatory surveys before excavations begin, adherence to Road Opening Licences, consultation with Irish Water, and therefore significant impacts to water mains are not likely to occur.

22. Proposed Lackamore Glamping Site	Scoped Out	Although sightline works will be carried out, these works are in the verge of the road corridor and no works on the public road pavement which could affect built services, no potential to cause cumulative effects with UWF Grid Connection.
23: Forestry 24: Agriculture	Scoped Out	These activities are on-going and form part of the baseline conditions. No material changes in agricultural or forestry practices are expected or planned in the area so no potential for cumulative effects on public water supplies

A-2.1 .4.28 MATERIAL ASSETS (BUILT SERVICES) Sensitive Aspect: Electricity Transmission System

TABLE 1: ELECTRICITY TRANSMISSION SYSTEM: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

Geographical Boundary:	Existing Killonan to Nenagh 110kV overhead line
Other Projects or Activities located within the Geographical Boundary	
3: Bunkimalta Windfarm grid connection 4: Castlewaller Windfarm grid connection	

TABLE 2: ELECTRICITY TRANSMISSION SYSTEM: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

Timeframe Boundary:	Construction Stage
Other Projects or Activities	Within the Timeframe Boundary? Y/N
3: Bunkimalta Windfarm grid connection 4: Castlewaller Windfarm grid connection	Yes - potentially Yes - potentially

TABLE 3: ELECTRICITY TRANSMISSION SYSTEM: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIAR Main Report	Relevant Stage of the development during which impacts will occur
No Impacts Included for Further Evaluation The Killonan to Nenagh 110kV Overhead Line is connected to the Killonan Node which is part of the Limerick/Tipperary Eirgrid transmission system. The electricity system is an integrated system with generation flowing from different sources and directions. Connecting the potential Bunkimalta Windfarm via a consented grid connection to Nenagh Substation or connecting the consented Castlewaller Windfarm via a potential grid connection to Killonan Station will not cause an interruption of electricity flow on the Killonan to Nenagh 110kV Overhead Line.	Construction Stage

TABLE 4: ELECTRICITY TRANSMISSION SYSTEM: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

Other Project/Activity	Scoped In/Out	Justification for Scoping in/out:
3: Bunkimalta Windfarm 4: Castlewaller Windfarm	Scoped In	There is <i>some possibility</i> that these windfarms could be operational during the same period as UWF Grid Connection and Upperchurch Windfarm

A-2.1 .4.29 MATERIAL ASSETS (ROADS) Sensitive Aspect: Public Roads

TABLE 1: PUBLIC ROADS: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

Geographical Boundary:	Route of concentrated UWF Grid Connection construction traffic; roadwork locations on local roads; at site access points and the R503 regional road between Newport and Ballycahill.
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Other Projects or Activities located within the Geographical Boundary

4: Castlewaller Windfarm
 21: Newport Town Park
 22: Proposed Lackamore Glamping Site
 23: Forestry
 24: Agriculture

TABLE 2: PUBLIC ROADS: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

Timeframe Boundary:	Construction Stage of UWF Grid Connection
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Other Projects or Activities	Within the Timeframe Boundary? Y/N
4: Castlewaller Windfarm	Yes - potentially
21: Newport Town Park	Yes, potentially
22: Proposed Lackamore Glamping Site	Yes, potentially
23: Forestry	Yes, ongoing
24: Agriculture	Yes, ongoing

TABLE 3: PUBLIC ROADS: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIAR Main Report	Relevant Stage of the development during which impacts will occur
Damage to road pavements	Construction Stage
Damage to Bridges & Culverts	Construction Stage
Damage to road boundaries	Construction Stage

TABLE 4: PUBLIC ROADS: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

Other Project/Activity	Scoped In/Out	Justification for Scoping in/out:
4: Castlewaller Windfarm	Scoped In	Although Castlewaller Windfarm is not likely to be constructed during the same period as UWF Grid Connection (because the Castlewaller Windfarm has not yet been offered a grid connection from EirGrid, and has to obtain planning consent for its grid connection), there is <i>some possibility</i> that this windfarm could be built during the same period as UWF Grid Connection. In the event that the 2 No. projects are built at the same time, there could be cumulative impacts to public roads, and therefore this project is scoped in for consideration.
21: Newport Town Park	Scoped Out	There will be negligible interaction with the construction works traffic for Newport Town Park because the 110kV UGC avoids Newport Town, with construction delivery traffic similar to the baseline traffic conditions through the

		town. The Newport Town Park is not expected to materially increase traffic levels in the town.
22. Proposed Lackamore Glamping Site	Scoped Out	No potential for significant cumulative impacts due to the small scale of this project, and the likely very small contribution to traffic levels on the R503. No road works are associated with the glamping site, with entrance works involving the provision of wider sightlines, however the 110kV UGC will be located entirely in the road pavements, will not be located in verges and will not affect any road boundaries along the R503 and therefore there is no potential for cumulative impacts.
23: Forestry 24: Agriculture	Scoped Out	These activities are on-going and form part of the baseline conditions. No material changes in agricultural or forestry practices and associated traffic, are expected or planned in the area.

A-2.1 .4.30 Material Assets (Roads) Sensitive Aspect: Road Users

TABLE 1: ROAD USERS: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

Geographical Boundary:	Route of concentrated construction traffic or roadwork locations on regional roads and on local roads as far as the site access points.
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Other Projects or Activities located within the Geographical Boundary

4: Castlewaller Windfarm
 21: Newport Town Park
 22: Proposed Lackamore Glamping Site
 23: Forestry
 24: Agriculture

TABLE 2: ROAD USERS: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

Timeframe Boundary:	Construction Stage of UWF Grid Connection
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Other Projects or Activities	Within the Timeframe Boundary? Y/N
4: Castlewaller Windfarm	Yes - potentially
21: Newport Town Park	Yes, potentially
22: Proposed Lackamore Glamping Site	Yes, potentially
23: Forestry	Yes, ongoing
24: Agriculture	Yes, ongoing

TABLE 3: ROAD USERS: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIA Main Report	Relevant Stage of the development during which impacts will occur
Increased journey times	Construction Stage

TABLE 4: ROAD USERS: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

Other Project/Activity	Scoped In/Out	Justification for Scoping in/out:
4: Castlewaller Windfarm	Scoped In	Although Castlewaller Windfarm is not likely to be constructed during the same period as UWF Grid Connection (because the Castlewaller Windfarm has not yet been offered a grid connection from EirGrid, and has to obtain planning consent for its grid connection), there is <i>some possibility</i> that this windfarm could be built during the same period as UWF Grid Connection. The potential site entrance works on the R503 are not expected to cause any impacts to road users and are not scoped in. Similarly the windfarm works are not located on the public road, with traffic levels not of a quantity to cause significant cumulative impacts to road users, therefore the windfarm is scoped out. In the event that the 2 No. projects are built at the same time, there could be cumulative increased journey times for Road Users at the points of interaction on the L6009-0, and therefore this project is scoped in for consideration.
21: Newport Town Park	Scoped Out	There will be negligible interaction with the construction works traffic for Newport Town Park because the 110kV UGC avoids Newport Town, with construction delivery traffic similar to the baseline traffic

		conditions through the town. The Newport Town Park is not expected to increase journey times in the town.
22. Proposed Lackamore Glamping Site	Scoped Out	No potential for significant cumulative impacts due to the small scale of this project.
23: Forestry 24: Agriculture	Scoped Out	These activities are on-going and form part of the baseline conditions. No material changes in agricultural and forestry practices are expected or planned in the area.

A-2.1 .4.31 CULTURAL HERITAGE Sensitive Aspect: Recorded Legally Protected Sites

TABLE 1: RECORDED LEGALLY PROTECTED SITES: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

<u>Geographical Boundary:</u>	2km radius from above ground level structures, 4km to identify any Other Projects or Activities
<u>Other Projects or Activities located within the Geographical Boundary</u>	
1: Killonan to Nenagh 110kV Overhead Line 2: Shannonbridge to Killonan 220kV Overhead Line 4: Castlewaller Windfarm 5: Milestone Windfarm 11: Foilnahan Mast 12: Cummermore Communication Pole 13: Newport Regional Water Supply 18: Forestry entrance, Knockshanbrittas 19: Proposed Quarry at Curraghduff 21: Newport Town Park 23: Forestry 24: Agriculture	

TABLE 2: RECORDED LEGALLY PROTECTED SITES: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

<u>Timeframe Boundary:</u>	Operational stage of UWF Grid Connection	
<u>Other Projects or Activities</u>	<u>Within the Timeframe Boundary? Y/N</u>	
1: Killonan to Nenagh 110kV Overhead Line	Yes, existing	
2: Shannonbridge to Killonan 220kV Overhead Line	Yes, existing	
4: Castlewaller Windfarm	Yes, potentially	
5: Milestone Windfarm	Yes, existing	
11: Foilnahan Mast	Yes, existing	
12: Cummermore Communication Pole	Yes, existing	
13: Newport Regional Water Supply	Yes, existing	
19: Proposed Quarry at Curraghduff	Yes, potentially	
18: Forestry entrance, Knockshanbrittas	Yes, potentially	
21: Newport Town Park	Yes, potentially	
23: Forestry	Yes, ongoing	
24: Agriculture	Yes, ongoing	

TABLE 3: RECORDED LEGALLY PROTECTED SITES: IMPACTS SCOPED IN FOR EVALUATION

<u>Impact evaluated in the EIAR Main Report</u>	<u>Relevant Stage of the development during which impacts will occur</u>
Visual Impact (The only impact scoped in for Recorded Legally Protected Sites is visual impact on monuments of the above ground elements (Mountphilips Substation and End Masts))	Operational Stage

TABLE 4: RECORDED LEGALLY PROTECTED SITES: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

<u>Other Project/Activity</u>	<u>Scoped In/Out</u>	<u>Justification for Scoping in/out:</u>
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1: Killonan to Nenagh 110kV Overhead Line 2: Shannonbridge to Killonan 220kV OHL	Scoped Out	Although these existing electricity lines will be intervisible with the new substation at Mountphilips, their presence in the countryside is commonplace and part of the baseline conditions.
4: Castlewaller Windfarm 13: Newport Regional Water Supply 21: Newport Town Park	Scoped Out	These projects will not be intervisible with either the Mountphilips Substation and End Masts part of UWF Grid Connection or the wind turbines at Upperchurch Windfarm (Whole UWF Project)
5: Milestone Windfarm 11: Foilnahan Mast 12: Cummermore Communication Pole	Scoped In	Due to separation distance, there is no potential for cumulative effects with the UWF Grid Connection. There is potential for intervisibility with the wind turbines at Upperchurch Windfarm and the Telecoms Relay Pole for UWF Related Works
19: Proposed Quarry at Curraghduff	Scoped Out	Due to separation distance, there is no potential for cumulative effects with the UWF Grid Connection. No potential for significant cumulative impacts with Other Elements due to the small scale of this quarry and separation distance from the turbines and relay pole.
23: Forestry 24: Agriculture	Scoped Out	Commonplace activities - part of the baseline conditions.

A-2.1 .4.32 **CULTURAL HERITAGE Sensitive Aspect: Other Recorded Sites**

TABLE 1: OTHER RECORDED SITES: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

Geographical Boundary:	500m corridor from works areas and activity locations for each Element 2km radius from above ground level structures, 4km to identify any Other Projects or Activities
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Other Projects or Activities located within the Geographical Boundary

- 1: Killonan to Nenagh 110kV Overhead Line
- 2: Shannonbridge to Killonan 220kV Overhead Line
- 4: Castlewaller Windfarm
- 5: Milestone Windfarm
- 11: Foilnahan Mast
- 12: Cummermore Communication Pole
- 13: Newport Regional Water Supply
- 18: Forestry entrance, Knockshanbrittas
- 19: Proposed Quarry at Curraghduff
- 21: Newport Town Park
- 22. Proposed Lackamore Glamping Site
- 23: Forestry
- 24: Agriculture

TABLE 2: OTHER RECORDED SITES: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

Timeframe Boundary:	Construction/Operational Stage of UWF Grid Connection
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Other Projects or Activities	Within the Timeframe Boundary? Y/N
1: Killonan to Nenagh 110kV Overhead Line	Yes
2: Shannonbridge to Killonan 220kV Overhead Line	Yes
4: Castlewaller Windfarm	Yes - potentially
5: Milestone Windfarm	Yes
11: Foilnahan Mast	Yes
12: Cummermore Communication Pole	Yes
13: Newport Regional Water Supply	Yes
18: Forestry entrance, Knockshanbrittas	Yes, potentially
19: Proposed Quarry at Curraghduff	Yes, potentially
21: Newport Town Park	Yes, potentially
22. Proposed Lackamore Glamping Site	Yes, potentially
23: Forestry	Yes, ongoing
24: Agriculture	Yes, ongoing

TABLE 3: OTHER RECORDED SITES: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIAR Main Report	Relevant Stage of the development during which impacts will occur
No Impacts Included for Further Evaluation The UWF Grid Connection works occur within the boundary of 2 sites - Demesne (GR3) and Bridge (GR12). There is no potential for impacts to GR3 because this site has been subsumed into the modern agricultural landscape in the area, with virtually no recognisable features visible. There will be no works to GR12 – the cabling will be in the public road with no works to the columns or supporting structure of the bridge. There is no likely impact to other sites during construction and no potential for operational impacts with either UWF Grid Connection or the Other Elements.	N/A

A-2.1 .4.33 CULTURAL HERITAGE Sensitive Aspect: Previously Unrecorded Sites

TABLE 1: PREVIOUSLY UNRECORDED SITES: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

Geographical Boundary:	500m corridor from works areas and activity locations for each Element 2km radius from above ground level structures, 4km to identify any Other Projects or Activities
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Other Projects or Activities located within the Geographical Boundary

- 1: Killonan to Nenagh 110kV Overhead Line
- 2: Shannonbridge to Killonan 220kV Overhead Line
- 4: Castlewaller Windfarm
- 5: Milestone Windfarm
- 11: Foilnahan Mast
- 12: Cummermore Communication Pole
- 13: Newport Regional Water Supply
- 18: Forestry entrance, Knockshanbrittas
- 19: Proposed Quarry at Curraghduff
- 21: Newport Town Park
- 22. Proposed Lackamore Glamping Site
- 23: Forestry
- 24: Agriculture

TABLE 2: PREVIOUSLY UNRECORDED SITES: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

Timeframe Boundary:	Construction Stage of UWF Grid Connection
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Other Projects or Activities	Within the Timeframe Boundary? Y/N
1: Killonan to Nenagh 110kV Overhead Line	No – already exists, no construction works planned
2: Shannonbridge to Killonan 220kV Overhead Line	No – already exists, no construction works planned
4: Castlewaller Windfarm	Yes – potentially
5: Milestone Windfarm	No – already exists
11: Foilnahan Mast	No – already exists
12: Cummermore Communication Pole	No – already exists
13: Newport Regional Water Supply	No – already exists
18: Forestry entrance, Knockshanbrittas	Yes, potentially
19: Proposed Quarry at Curraghduff	Yes, potentially
21: Newport Town Park	Yes, potentially
22. Proposed Lackamore Glamping Site	Yes, potentially
23: Forestry	Yes, ongoing
24: Agriculture	Yes, ongoing

TABLE 3: PREVIOUSLY UNRECORDED SITES: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIA Main Report	Relevant Stage of the development during which impacts will occur
Damage to townland boundaries	Construction Stage

TABLE 4: PREVIOUSLY UNRECORDED SITES: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

Other Project/Activity	Scoped In/Out	Justification for Scoping in/out:
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4: Castlewaller Windfarm, entrance & grid Connection	Scoped Out	Castlewaller Windfarm is not likely to be constructed during the same period as UWF Grid Connection, because the windfarm has not yet been offered a grid connection from EirGrid. Nevertheless, as a precaution, it is considered to be within the geographical and possibly the timeframe boundary. The only likely impacts from UWF Grid Connection to Previously Unrecorded Sites is limited to the temporary or permanent removal of small sections of townland boundaries at site access points (UWF Grid Connection and UWF Related Works). There is no interaction at townland boundaries with Castlewaller Windfarm or Castlewaller Windfarm's grid connection and site entrance, therefore no potential for cumulative impacts.
18: Forestry entrance works at Knockshanbrittas	Scoped Out	Due to separation distance, this project will not cause any UWF Project.
22. Proposed Lackamore Glamping Site	Scoped Out	No effects to townland boundaries associated with UWF Grid Connection where it is in within 500m of this project, therefore no potential for cumulative impacts. Due to separation distance no potential for cumulative impacts with Other Elements of the Whole UWF Project
19: Proposed Quarry at Curraghduff 21: Newport Town Park	Scoped Out	Due to separation distance, neither of these projects will cause any cumulative impacts with any Element of the Whole UWF Project.
23: Forestry 24: Agriculture	Scoped Out	These activities are on-going and form part of the baseline conditions. No material changes in agricultural or forestry practices are expected or planned in the area.

A-2.1 .4.34 CULTURAL HERITAGE Sensitive Aspect: Unrecorded Subsurface Sites

TABLE 1: UNRECORDED SUBSURFACE SITES: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

Geographical Boundary:	Footprint of works areas where groundworks will take place.
Other Projects or Activities located within the Geographical Boundary	
1: Killonan to Nenagh 110kV Overhead Line 2: Shannonbridge to Killonan 220kV Overhead Line 4: Castlewaller Windfarm 23: Forestry (<i>other Elements only</i>) 24: Agriculture	

TABLE 2: UNRECORDED SUBSURFACE SITES: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

Timeframe Boundary:	Construction Stage
Other Projects or Activities	Within the Timeframe Boundary? Y/N
1: Killonan to Nenagh 110kV Overhead Line 2: Shannonbridge to Killonan 220kV Overhead Line 4: Castlewaller Windfarm 23: Forestry 24: Agriculture	No – already exists, no construction works planned No – already exists, no construction works planned Yes – potentially Yes, ongoing Yes, ongoing

TABLE 3: UNRECORDED SUBSURFACE SITES: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIAR Main Report	Relevant Stage of the development during which impacts will occur
Complete or Partial Destruction of unrecorded subsurface sites	Construction Stage

TABLE 4: UNRECORDED SUBSURFACE SITES: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES

Other Project/Activity	Scoped In/Out	Justification for Scoping out:
4: Castlewaller Windfarm	Scoped Out	The only potential interaction of ground works with this project is on a L6009-0 and R503 public roads. During excavations it is unlikely that any unrecorded subsurface sites will be uncovered because a) it is unlikely that any undiscovered fully intact remains of special archaeological significance could be uncovered under the public road which was previously excavated on many occasions and b) the project design measure stipulating that monitoring will be undertaken of all initial groundworks within 500m of an RMP or NIAH site, by an archaeologist, under license.
23: Forestry 24: Agriculture	Scoped Out	The dominant land uses in the area over a long period - agriculture and forestry - mean that it is unlikely that any undiscovered fully intact remains of special archaeological significance would be uncovered because the ground has already been disturbed many times by these activities.

A-2.1 .4.35 LANDSCAPE Sensitive Aspect: Landscape Character

TABLE 1: LANDSCAPE CHARACTER: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

<u>Geographical Boundary:</u>	500m corridor from works areas and activity locations, 1km to identify any Other Projects or Activities 2km radius from above ground level structures, 4km to identify any Other Projects or Activities.
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Other Projects or Activities located within the Geographical Boundary

1: Killonan to Nenagh 110kV Overhead Line
 2: Shannonbridge to Killonan 220kV Overhead Line
 4: Castlewaller Windfarm
 5: Milestone Windfarm
 11: Foilnahan Mast
 12: Cummermore Communication Pole
 13: Newport Regional Water Supply
 18: Forestry entrance, Knockshanbrittas
 19: Proposed Quarry at Curraghduff
 21: Newport Town Park
 22. Proposed Lackamore Glamping Site
 23: Forestry
 24: Agriculture

TABLE 2: LANDSCAPE CHARACTER: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

<u>Timeframe Boundary:</u>	Construction/Operational Stage of UWF Grid Connection
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Other Projects or Activities	Within the Timeframe Boundary? Y/N
1: Killonan to Nenagh 110kV Overhead Line	Yes – existing
2: Shannonbridge to Killonan 220kV Overhead Line	Yes - existing
4: Castlewaller Windfarm	Yes – potentially
5: Milestone Windfarm	Yes - existing
11: Foilnahan Mast	Yes - existing
12: Cummermore Communication Pole	Yes - existing
13: Newport Regional Water Supply	Yes - existing
18: Forestry entrance, Knockshanbrittas	Yes – potentially
19: Proposed Quarry at Curraghduff	Yes, potentially
21: Newport Town Park	Yes - potentially
22. Proposed Lackamore Glamping Site	Yes - potentially
23: Forestry	Yes, ongoing
24: Agriculture	Yes, ongoing

TABLE 3: LANDSCAPE CHARACTER: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIAR Main Report	Relevant Stage of the development during which impacts will occur
Alteration or division of land cover and vegetation patterns	Construction Stage
Intensification of activity causing a reduction in rural tranquility	Construction Stage
Intensification of built development and reduction in the integrity of rural landscape patterns	Operational Stage

TABLE 4: LANDSCAPE CHARACTER: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES		
Other Project/Activity	Scoped In/Out	Justification for Scoping in/out:
1: Killonan to Nenagh 110kV Overhead Line 2: Shannonbridge to Killonan 220kV Overhead Line	Scoped Out	Existing so no potential construction stage cumulative impacts. No operational stage impacts as these structures are commonplace in the rural landscape and part of the baseline conditions
4: Castlewaller Windfarm	Scoped Out	The only potential interaction of ground works with this project is on a L6009-0 and R503 public roads outside Newport Town and the Castlewaller Site entrance on the R503. Too small in scale and location on public roads results in very limited cumulative intensification of activity impacts. No operational impacts because this windfarm will not be intervisible with UWF Grid Connection (Mountphilips Substation and End Masts) or Whole UWF Project (Upperchurch Windfarm turbines).
5: Milestone Windfarm 11: Foilnahan Mast 12: Cummermore Communication Pole	Scoped In	Existing so no potential construction stage cumulative impacts No potential for cumulative operational (intensification of activity) effects with the Mountphilips Substation due to separation distance. Potential for effects with the Whole UWF Project (operating wind turbines).
13: Newport Regional Water Supply 21: Newport Town Park	Scoped Out	Existing so no potential construction stage cumulative impacts No intervisibility with UWF Grid Connection or Whole UWF Project so no potential for intensification of activity during operation cumulative effects
18: Forestry entrance, Knockshanbrittas 22. Proposed Lackamore Glamping Site	Scoped Out	Too small in scale to have measurable cumulative construction stage effects
19: Proposed Quarry at Curraghduff	Scoped Out	Due to separation distance, there is no potential for cumulative effects with the UWF Grid Connection. No potential for significant cumulative impacts with Other Elements due to the small scale of this quarry and separation distance from the turbines and relay pole.
23: Forestry	Scoped In	Included for the evaluation of cumulative construction stage effects because periodic forestry harvesting could occur at the same time as the Whole UWF Project, with potential to cause cumulative effects. Excluded from cumulative operational stage effects as these activities are the prevailing and characteristic land uses in this area, i.e. they are the baseline land cover, rather than other sources of impact.
24: Agriculture	Scoped Out	Agriculture activities form part of the baseline, with normal agricultural activities not of a scale to cause noticeable cumulative impacts.

A-2.1 .4.36 **LANDSCAPE Sensitive Aspect: Visual Amenity**

TABLE 1: VISUAL AMENITY: GEOGRAPHICAL BOUNDARY FOR CUMULATIVE IMPACTS

<u>Geographical Boundary:</u>	500m corridor from works areas and activity locations, 1km to identify any Other Projects or Activities 2km radius from above ground level structures, 4km to identify any Other Projects or Activities.
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Other Projects or Activities located within the Geographical Boundary

1: Killonan to Nenagh 110kV Overhead Line
 2: Shannonbridge to Killonan 220kV Overhead Line
 4: Castlewaller Windfarm
 5: Milestone Windfarm
 11: Foilnahan Mast
 12: Cummermore Communication Pole
 13: Newport Regional Water Supply
 18: Forestry entrance, Knockshanbrittas
 19: Proposed Quarry at Curraghduff
 21: Newport Town Park
 22. Proposed Lackamore Glamping Site
 23: Forestry
 24: Agriculture

TABLE 2: VISUAL AMENITY: TIMEFRAME BOUNDARY FOR CUMULATIVE IMPACTS

<u>Timeframe Boundary:</u>	Construction/Operational Stage
Other Projects or Activities	Within the Timeframe Boundary? Y/N
1: Killonan to Nenagh 110kV Overhead Line 2: Shannonbridge to Killonan 220kV Overhead Line 4: Castlewaller Windfarm 5: Milestone Windfarm 11: Foilnahan Mast 12: Cummermore Communication Pole 13: Newport Regional Water Supply 18: Forestry entrance, Knockshanbrittas 19: Proposed Quarry at Curraghduff 21: Newport Town Park 22. Proposed Lackamore Glamping Site 23: Forestry 24: Agriculture	Yes – existing Yes - existing Yes – potentially Yes - existing Yes - existing Yes - existing Yes - existing Yes - existing Yes – potentially Yes - potentially Yes - potentially Yes, ongoing Yes, ongoing

TABLE 3: VISUAL AMENITY: IMPACTS SCOPED IN FOR EVALUATION

Impact evaluated in the EIAR Main Report	Relevant Stage of the development during which impacts will occur
Intensification of activity causing visual disharmony, clutter or complexity	Construction Stage
Addition of new features or loss of existing features causing visual disharmony, clutter or complexity	Operational Stage

TABLE 4: VISUAL AMENITY: SCOPING OF OTHER PROJECTS & ACTIVITIES WHICH OCCUR WITHIN BOTH GEOGRAPHICAL AND TIMEFRAME BOUNDARIES		
Other Project/Activity	Scoped In/Out	Justification for Scoping in/out:
1: Killonan to Nenagh 110kV Overhead Line 2: Shannonbridge to Killonan 220kV Overhead Line	Scoped Out	Existing so no potential construction stage cumulative impacts (intensification of activity) No operational stage impacts as these structures are commonplace in the rural landscape and part of the baseline conditions
4: Castlewaller Windfarm	Scoped Out	Interaction during construction limited to a small stretch of L6009-0 and R503 roads outside Newport Town and the Castlewaller Site entrance on the R503. Too small in scale and location on public roads results in very limited cumulative intensification of activity impacts. No operational impacts because this windfarm will not be intervisible with UWF Grid Connection (Mountphilips Substation and End Masts) or Whole UWF Project (Upperchurch Windfarm turbines).
5: Milestone Windfarm 11: Foilnahan Mast 12: Cummermore Communication Pole	Scoped In	Existing so no potential construction stage cumulative impacts (intensification of activity) No potential for cumulative operational (addition of new features) effects with the Mountphilips Substation due to separation distance. Potential for operational effects with the Whole UWF Project (operating wind turbines).
13: Newport Regional Water Supply 21: Newport Town Park	Scoped Out	Existing so no potential construction stage cumulative impacts (intensification of activity) No intervisibility with UWF Grid Connection or Whole UWF Project so no potential for operation stage (addition of new features) cumulative effects
18: Forestry entrance, Knockshanbrittas 22. Proposed Lackamore Glamping Site	Scoped Out	Too small in scale to have measurable cumulative construction stage effects
19: Proposed Quarry at Curraghduff	Scoped Out	Due to separation distance, there is no potential for cumulative effects with the UWF Grid Connection. No potential for significant cumulative impacts with Other Elements due to the small scale of this quarry and separation distance from the turbines and relay pole.
23: Forestry	Scoped In	Included for the evaluation of cumulative construction stage effects because periodic forestry harvesting could occur at the same time as the Whole UWF Project, with potential to cause cumulative effects. Excluded from cumulative operational stage effects as these activities are the prevailing and characteristic land uses in this area, i.e. they are the baseline land cover, rather than other sources of impact.
24: Agriculture	Scoped Out	Agriculture activities form part of the baseline, with normal agricultural activities not of a scale to cause noticeable cumulative impacts.

A2.1 .5 List of Projects or Activities Scoped-Out from the EIAR

Table 2: Other Projects Scoped Out from all Environmental Factor topics

Other Project or Activity Map ID	Industry	Name
6	Renewable Energy	Garracummer Windfarm (<i>included as 26: All operating wind turbines in the Irish Stage for the Climate cumulative evaluation</i>)
7	Renewable Energy	Hollyford Windfarm (<i>included as 26: All operating wind turbines in the Irish Stage for the Climate cumulative evaluation</i>)
8	Renewable Energy	Knockastanna Windfarm (<i>included as 26: All operating wind turbines in the Irish Stage for the Climate cumulative evaluation</i>)
9	Renewable Energy	Gortnahalla Turbine (<i>included as 26: All operating wind turbines in the Irish Stage for the Climate cumulative evaluation</i>)
13	Utility	Newport Regional Water Supply
14	Utility	Thurles Regional Water Treatment Works
15	Utility	Waste Management Facility, Thurles
16	Forestry	Forestry entrance, Cappamore
17	Forestry	Forestry entrance, CummerBeg
18	Forestry	Forestry entrance, Knockshanbrittas
20	Utility	Biorefinery Facility Moyne Thurles
22	Tourism	Proposed Lackamore Glamping Site

A2.1 .6 Projects Scoped In for further evaluation in the EIAR

In total 11 Other Projects and 3 activities were scoped in for cumulative evaluation in the EIAR, as outlined in Table 3.

Table 3: Other Projects or Activities Scoped In for Cumulative Evaluation

ID	Other Project or Activity (These projects are identified on Figure CE 2.1: Other Projects or Activities Scoped In for Evaluation in the Environmental Factor Topic Chapters and are identified using the ID number on the mapping)	6. Population	7. Human Health	8. Biodiversity	9. Land	10. Soils	11. Water	12. Air	13. Climate	14. Material Assets: Built Services	15. Material Assets : Roads	16. Cultural Heritage	17. Landscape
1	Killonan to Nenagh 110kV Overhead Line												
2	Shannonbridge – Killonan 220kV Overhead Line												
3	Potential Bunkimalta Windfarm and Consented Grid Connection												
4	Consented Castlewaller Windfarm and Potential Grid Connection												
5	Existing Milestone Windfarm												
10	Existing Rear Cross Quarry												
11	Existing Foilnaman Mast												
12	Existing Cummermore Communications Pole												
19	Proposed Quarry at Curraghduff												
21	Consented Newport Town Park												
23	Activity – Forestry												
24	Activity – Agriculture												
25	Activity – Turf Cutting												
26	All operating wind turbines in the Irish State												

