



Appropriate Assessment Screening Determination

CP1316 Battery Upgrades/Diesel Generator Upgrades at 19 stations [Exempted Development]

In accordance with Article 6(3) of the EU Habitats Directive (Directive 92/43/EEC) and Regulation 42(1) of the European Communities (Birds and Natural Habitats) Regulations 2011 as amended ('the Regulations'), EirGrid has undertaken Appropriate Assessment (AA) Screening to assess, in view of best scientific knowledge and the Conservation Objectives of relevant European sites, if the CP1316 Battery Upgrades/Diesel Generator Upgrades [Exempted Development] ('the Development') individually or in-combination with other plans or projects will result in likely significant effects on a European site(s).

The Development comprises works at 19 substations comprising battery upgrades, battery charger replacements and diesel generator upgrades. All works are to be carried out entirely within the boundaries of the following stations:

1. Flagford 220kV;
2. Glanagow 220kV;
3. Huntstown 220kV;
4. Knockraha 220kV;
5. Longpoint 220kV;
6. Cashla 220kV;
7. Clashavoon 220kV;
8. Raffeen 220kV;
9. Kellis 220kV;
10. Whitegate 220kV;
11. Woodland 400kV;
12. Irishtown 220kV;
13. Maynooth 220kV;
14. Finglas 220kV;
15. Prospect 220kV;
16. Rathrussan 110kV;
17. Cullenagh 220kV;
18. Cushaling 110kV; and
19. Arklow 220kV.

Analysis of Pathways to European Sites

Flagford 220kV Station

There are no waterbodies within Flagford 220kV Station. The River Killukin is situated c.26m from the substation perimeter. There is no possibility for significant overland flow to reach this river due to distance and topography.

The closest European site to the substation is Annaghmore Lough (Roscommon) Special Area of Conservation (SAC) (site code 001626)¹, which is 11.8km south of the substation with no hydrological connection. This SAC is designated for its Geyer's whorl snail *Vertigo geyeri* and alkaline fens. There is no pathway for likely significant effects to occur.

¹ NPWS (2019) Conservation Objectives: Annaghmore Lough (Roscommon) SAC 001626. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.

Three Special Protection Areas (SPAs) (Lough Gara SPA (site code 004048)²; Bellanagare Bog SPA (site code 004105)³; and Ballykenny-Fisherstown Bog SPA (site code 004101)⁴) are situated 19-20km from the substation. All three are designated for Greenland white-fronted goose *Anser albifrons flavirostris*, and Lough Gara SPA is additionally designated for whooper swan *Cygnus cygnus*. Greenland white-fronted goose has a core foraging range of 5-8km⁵, and whooper swan of less than 5km⁵, and the substation site consists of hardstanding habitat which is unsuitable for both species. Therefore, there no likelihood for significant effects on the Special Conservation Interests (SCI) of these SPAs as they are highly unlikely to occur in the vicinity of the substation given the intervening distance and presence of more suitable habitats between the substation and the SPAs.

There are no other European sites nearby, or potentially connected to the substation via a source-pathway-receptor link that may result in likely significant effects in view of the applicable site Conservation Objectives.

Glanagow 220kV Station

The closest SAC is approximately 23km north with no ecological pathway. Cork Harbour SPA (site code 004030)⁶ is, at closest, 1km distant from the substation. It is designated for various waterbirds. The hardstanding habitat of the substation does not offer suitable habitat. Existing noise and visual disturbance associated with maintenance activities and human presence is already part of the baseline disturbance regime at the existing operational substation, such that any ex-situ populations present in adjoining agricultural land would be habituated to a level of existing disturbance. The existing substation fenced perimeter additionally forms a clear physical barrier between the temporary construction works, and habitats potentially used by wintering birds, which further determines there will be no likely significant disturbance effects, to any SCI birds present within the zone of influence of works.

There are no other European sites potentially connected to the substation via a source-pathway-receptor link that may result in likely significant effects in view of the applicable site Conservation Objectives.

Huntstown 220kV Station

There are no waterbodies within or in proximity to Huntstown 220kV Station and thus no hydrological connectivity to any European sites. The closest SAC (Rye Water Valley/Carton SAC (site code 001398)⁷) is 11.9km west and is designated for its petrifying springs with tufa formation, narrow-mouthed whorl snail *Vertigo angustior*, and Desmoulin's whorl snail *Vertigo moulinsiana*. There is no ecological pathway to this site and no possibility of the Qualifying Interests (QIs) being within the vicinity of the substation.

² NPWS (2022) Conservation objectives for Lough Gara SPA [004048]. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.

³ NPWS (2022) Conservation objectives for Bellanagare Bog SPA [004105]. First Order Sitespecific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.

⁴ NPWS (2022) Conservation objectives for Ballykenny-Fisherstown Bog SPA [004101]. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.

⁵ Scottish Natural Heritage (June 2016) Assessing connectivity with Special protection Areas (SPAs) Guidance. 4pp.

⁶ NPWS (2014) Conservation Objectives: Cork Harbour SPA 004030. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

⁷ NPWS (2021) Conservation Objectives: Rye Water Valley/Carton SAC 001398. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

Several SPAs (including Malahide Estuary SPA (site code 004025)⁸ and South Dublin Bay and River Tolka Estuary SPA (site code 004024)⁹ exist within the potential Zone of Influence (Zoi) as they are within 20km of the substation; however, these are all a minimum of 8.6km distant from the substation, which consists of hardstanding habitat in a wider urban and agricultural landscape. Therefore, it is highly unlikely that these SCI would ever forage/roost in the vicinity of the substation.

There are no other European sites nearby, or potentially connected to the substation via a source-pathway-receptor link that may result in likely significant effects in view of the applicable site Conservation Objectives.

Knockraha 220kV Station

There are no waterbodies within or in proximity to Knockraha 220kV Station and thus no hydrological connectivity to any European sites. Great Island Channel SAC (site code 001058)¹⁰ is 4.7km south of the substation and is designated for coastal habitats (mudflats and sandflats not covered by seawater at low tide; and Atlantic salt meadows), for which there is no ecological pathway. Blackwater River (Cork/Waterford) SAC (site code 002170)¹¹ is 9km north of the station and designated (in part) for various habitats and plants to which there is no ecological pathway. It is additionally designated for otter *Lutra lutra* and various fish species; however, given that the nearest water body is 780m from the station, there is no means by which these QIs could be impacted by the Development.

Cork Harbour SPA (site code 004030)⁶ is 4.6km south of the substation. The agricultural fields surrounding the (upland) substation location are not functionally-linked habitat for SCI species, with SCI populations well known and long established to use the abundant lower-lying fields in the immediate vicinity of Cork Harbour.

There are no other European sites nearby, or potentially connected to the substation via a source-pathway-receptor link that may result in likely significant effects in view of the applicable site Conservation Objectives.

Longpoint 220kV Station

The closest SAC is approximately 21km north with no ecological pathway.

Cork Harbour SPA (site code 004030)⁶ is, at closest, 10m from the station. The hardstanding habitat of the substation does not offer suitable habitat. Existing noise and visual disturbance associated with maintenance activities and human presence is already part of the baseline disturbance regime at the existing operational substation, such that any ex-situ populations present in adjoining agricultural land would be habituated to a level of existing disturbance. Additionally, there is vegetation and buildings physically separating and screening the Development from the SPA, such that non likely significant disturbance effects will arise on SCI bird populations.

There are no other European sites nearby, or potentially connected to the substation via a source-pathway-receptor link that may result in likely significant effects in view of the applicable site Conservation Objectives.

⁸ NPWS (2013) Conservation Objectives: Malahide Estuary SPA 004025. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

⁹ NPWS (201q) Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 004024. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

¹⁰ NPWS (201x) Conservation Objectives: Great Island Channel SAC 001058. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

¹¹ NPWS (2012) Conservation Objectives: Blackwater River (Cork/Waterford) SAC 002170. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

Cashla 220kV Station

There are no waterbodies within or in proximity to Cashla 220kV Station, thus no hydrological connectivity to any European sites. The closest European site to the substation is Lough Corrib SAC (site code 000297)¹³ which is 3.8km from the substation with no hydrological connectivity between the SAC and the substation. Although the SAC is designated for lesser horseshoe bat *Rhinolophus hipposideros*, the substation site consists of hardstanding habitat which is unsuitable for foraging bats. The substation is also outside the core sustenance zone for the species¹⁴, thus there is limited potential to impact them as they are unlikely to occur regularly in the vicinity of the substation.

The closest SPA to the substation is Inner Galway Bay SPA (site code 004031)¹⁵ which is 6.5km from the substation. Other European sites identified to be within the potential Zol of the Development are Cregganna Marsh SPA (site code 004142)¹⁶, Lough Corrib SPA (site code 004042)¹⁷, Rahasane Turlough SPA (site code 004089)¹⁸ and Slieve Aughty Mountains SPA (site code 004168)¹⁹. The primary sensitivities of the SCI species of these SPAs relate to loss of functionally-linked habitat and noise and visual disturbance. However, there will be no loss of functionally-linked habitat for SCI bird species as the substation comprises hardstanding and there are plentiful other habitats in the surrounding area which SCI species could use. There are no other European sites nearby, or potentially connected to the substation via a source-pathway-receptor link that may result in likely significant effects in view of the applicable site Conservation Objectives.

There are no other European sites nearby, or potentially connected to the substation via a source-pathway-receptor link that may result in likely significant effects in view of the applicable site Conservation Objectives.

Clashavoon 220kV Station

There are no waterbodies within Clashavoon 220kV Station; however, an unnamed stream runs along the substation perimeter. It drains into Inniscarra Reservoir approximately 10km downstream, and is not directly connected to any European sites.

The Gearagh SAC (site code 000108)²⁰ is the closest SAC at 5.9km south-west of the Development. It is designated for various habitats, for which no ecological pathway exists. It is additionally designated for its otter population. Otter have large home ranges in Ireland (approximately 6.5 km - 13.2 km²¹). The SAC is approximately 12km downstream of the Development, within commuting distance of otter. However, given the extensive areas of more suitable foraging and refuge habitats closer to the SAC, the vicinity of the substation is not of importance to QI otter of this or any other SAC. The works associated with the Development are of a short duration and are minor in nature, and there will be no likely significant effects on otter.

¹³ NPWS (2017) Conservation Objectives: Lough Corrib SAC 000297. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

¹⁴ Bat Conservation Trust (2020). Core Sustenance Zones and habitats of importance for designing Biodiversity Net Gain for bats.

¹⁵ NPWS (2013) Conservation Objectives: Inner Galway Bay SPA 004031. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

¹⁶ NPWS (2023) Conservation Objectives: Cregganna Marsh SPA 004142. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

¹⁷ NPWS (2023) Conservation Objectives: Lough Corrib SPA 004042. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

¹⁸ NPWS (2023) Conservation Objectives: Rahasane Turlough SPA 004089. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

¹⁹ NPWS (2022) Conservation Objectives: Slieve Aughty Mountains SPA 004168. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

²⁰ NPWS (2016) Conservation Objectives: The Gearagh SAC 000108. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

²¹ Reid, N., Hayden, B., Lundy, M.G., Pietravalle, S., McDonald, R.A. & Montgomery, W.I. (2013). National Otter Survey of Ireland 2010/12. Irish Wildlife Manuals No. 76. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.

Mullaghanish to Musheramore Mountains SPA (site code 004162)²² is 5.4km north-east of the substation and is designated for hen harrier *Circus cyaneus*. Hen harrier has a 2km core foraging range⁵ and so the substation is outside of the core range of the species. It is therefore unlikely that hen harrier would occur regularly in the vicinity of the substation and there will be no significant effects on the species.

Gearagh SPA (site code 004109)²³ is 6.7km south-west of the substation and designated for its waterbirds. The hardstanding habitat of the substation does not offer suitable habitat. Existing noise and visual disturbance associated with maintenance activities and human presence is already part of the baseline disturbance regime at the existing operational substation, such that any ex-situ populations present in adjoining agricultural land would be habituated to a level of existing disturbance. The existing substation fenced perimeter additionally forms a clear physical barrier between the temporary construction works, and habitats potentially used by wintering birds, which further determines there will be no likely significant disturbance effects, to any SCI birds present within the zone of influence of works.

There are no other European sites nearby, or potentially connected to the substation via a source-pathway-receptor link that may result in likely significant effects in view of the applicable site Conservation Objectives.

Raffeen 220kV Station

Cork Harbour SPA (site code 004030)⁶ is 1km south and 1.4km north-east of the substation. The hardstanding habitat of the substation does not offer suitable habitat. Existing noise and visual disturbance associated with maintenance activities and human presence is already part of the baseline disturbance regime at the existing operational substation, such that any ex-situ populations present in adjoining agricultural land would be habituated to a level of existing disturbance. The existing substation fenced perimeter additionally forms a clear physical barrier between the temporary construction works, and habitats potentially used by wintering birds, which further determines there will be no likely significant disturbance effects, to any SCI birds present within the zone of influence of works.

There are no other European sites nearby, or potentially connected to the substation via a source-pathway-receptor link that may result in likely significant effects in view of the applicable site Conservation Objectives.

Kellis 220kV Station

There are no waterbodies within or in proximity to Kellis 220kV Station, with the exception of a drainage ditch 24m from the substation, that is not connected to any European sites.

The closest European site to the substation is Slaney River Valley SAC (site code 000781)²⁴ which is 4.9km east of the substation. There is no ecological pathway between the substation and the SAC.

There are no other European sites nearby, or potentially connected to the substation via a source-pathway-receptor link that may result in likely significant effects in view of the applicable site Conservation Objectives.

Whitegate 110kV Station

The closest SAC is approximately 22.7km north with no ecological pathway.

²² NPWS (2022) Conservation Objectives: Mullaghanish to Musheramore Mountains SPA 004162. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

²³ NPWS (2022) Conservation objectives for The Gearagh SPA [004109]. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.

²⁴ NPWS (2011) Conservation Objectives: Slaney River Valley SAC 000781. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

Cork Harbour SPA (site code 004030)⁶ is, at closest, 480m distant from the substation. The hardstanding habitat of the substation does not offer suitable foraging habitat. Existing noise and visual disturbance associated with maintenance activities and human presence is already part of the baseline disturbance regime at the existing operational substation, such that any ex-situ populations present in adjoining agricultural land would be habituated to a level of existing disturbance. The existing substation fenced perimeter additionally forms a clear physical barrier between the temporary construction works, and habitats potentially used by wintering birds, which further determines there will be no likely significant disturbance effects, to any SCI birds present within the zone of influence of works.

There are no other European sites nearby, or potentially connected to the substation via a source-pathway-receptor link that may result in likely significant effects in view of the applicable site Conservation Objectives.

Woodland 400kV Station

The nearest European site to Woodland 400kV Station is Ballynafagh Lake SAC (site code 001387)²⁵ which is 28km away with no hydrological link or ecological pathway connecting Woodland 400kV Station to the SAC. The closest SPA to the Development is Malahide Estuary SPA (site code 004025)²⁶ which is 24km away with no hydrological link or ecological pathway linking the substation to the SPA.

There are no other European sites nearby, or potentially connected to Woodland 400kV Station via a source-pathway-receptor link that may result in likely significant effects in view of the applicable site Conservation Objectives.

Irishtown 220kV Station

The closest SAC is 8.4km north with no ecological pathway.

South Dublin Bay and River Tolka Estuary SPA (site code 004024)²⁷ is, at closest, 240m from the substation, and North Bull Island SPA (site code 004006)²⁸ is, at closest 2.6km from the substation. Existing noise and visual disturbance associated with maintenance activities and human presence is already part of the baseline disturbance regime at the existing operational substation, such that any ex-situ populations present in adjoining agricultural land would be habituated to a level of existing disturbance. The existing substation fenced perimeter additionally forms a clear physical barrier between the temporary construction works, and habitats potentially used by wintering birds, which further determines there will be no likely significant disturbance effects, to any SCI birds present within the zone of influence of works.

There are no other European sites nearby, or potentially connected to the substation via a source-pathway-receptor link that may result in likely significant effects in view of the applicable site Conservation Objectives.

Maynooth 220kV Station

²⁵ NPWS (2021) Conservation Objectives: Ballynafagh Lake SAC 001387. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

²⁶ NPWS (2013) Conservation Objectives: Malahide Estuary SPA 004025. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

²⁷ NPWS (2015) Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 004024. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

²⁸ NPWS (2015) Conservation Objectives: North Bull Island SPA 004006. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

The nearest European site to Maynooth 220kV Station is Rye Water Valley/Carton SAC (site code 001398)²⁹ which is 4.7km distant, with no hydrological link or ecological pathway linking the substation to the SAC. The closest SPA to the substation is Poulaphouca Reservoir SPA (site code 004063)³⁰ which is 19.7km away from the substation boundary. The Development lies at the outermost edge of the maximum foraging distance of 15-20km reported for greylag goose *Anser anser*⁵, an SCI species of this SPA. Additionally, all works will be carried out within the existing substation boundary containing hardstanding and electrical installations, an area containing no habitats that are suitable for foraging/loafing SCI greylag goose. Lesser black-backed gull *Larus fuscus*, the other SCI species, are habitat generalists for which loss of functionally-linked habitat is not a primary concern. At 19.7km distance, the Poulaphouca Reservoir SPA lies beyond the impact buffer zone for visual and noise disturbance, and there is no direct disturbance potential for SCIs within the designated site boundary. There are no other European sites nearby, or potentially connected to the substation via a source-pathway-receptor link that may result in likely significant effects in view of the applicable site Conservation Objectives.

Finglas 220 kV Station

South Dublin Bay and River Tolka Estuary SPA (site code 004024)³¹ is, at closest, 7.4km from the substation. There are no known inland urban feeding sites for light-bellied Brent goose *Branta bernicla horta* within the zone of influence of disturbance from works at the station. Existing noise and visual disturbance associated with maintenance activities and human presence (and the adjacent M50 motorway) is already part of the baseline disturbance regime at the existing operational substation, such that any other ex-situ populations potentially present in adjoining agricultural land would be habituated to a level of existing disturbance. The existing substation fenced perimeter additionally forms a clear physical barrier between the temporary construction works, and habitats potentially used by wintering birds, which further determines there will be no likely significant disturbance effects, to any SCI birds present within the zone of influence of works.

There are no other European sites nearby, or potentially connected to the substation via a source-pathway-receptor link that may result in likely significant effects in view of the applicable site Conservation Objectives.

Prospect 220 kV Station

River Shannon and River Fergus Estuaries SPA (site code 004077)³² and Lower River Shannon SAC (site code 002165)³³ are 714m from the substation boundary. Existing noise and visual disturbance associated with maintenance activities and human presence is already part of the baseline disturbance regime at the existing operational substation, such that any ex-situ populations present in adjoining agricultural land would be habituated to a level of existing disturbance. The existing substation fenced perimeter additionally forms a clear physical barrier between the temporary construction works, and habitats potentially used by wintering birds, which further determines there will be no likely significant disturbance effects, to any SCI birds present within the zone of influence of works.

²⁹ NPWS (2021) Conservation Objectives: Rye Water Valley/Carton SAC 001398. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

³⁰ NPWS (2022) Conservation objectives for Poulaphouca Reservoir SPA [004063]. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.

³¹ NPWS (2015) Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 004024. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

³² NPWS (2012) Conservation objectives: River Shannon and River Fergus Estuaries SPA [004077]. Version 1.0. Department of Housing, Local Government and Heritage.

³³ NPWS (2012) Conservation objectives: Lower River Shannon SAC [002165]. Version 1.0. Department of Housing, Local Government and Heritage.

Additionally, there is vegetation and buildings separating the Development from the European sites. The vegetation and hardstanding would act as a buffer for any noise and visual disturbance.

There are no other European sites nearby, or potentially connected to the substation via a source-pathway-receptor link that may result in likely significant effects in view of the applicable site Conservation Objectives.

Rathrussan 110 kV Station

There are no waterbodies or drainage ditches within or surrounding the substation. There are no European sites nearby, or potentially connected to the substation via a source-pathway-receptor link that may result in likely significant effects in view of the applicable site Conservation Objectives.

Cullenagh 220 kV Station

There are no waterbodies or drainage ditches within or surrounding the substation. There are no European sites nearby, or potentially connected to the substation via a source-pathway-receptor link that may result in likely significant effects in view of the applicable site Conservation Objectives.

Cushaling 110 kV Station

There are no waterbodies or drainage ditches within the substation. There are drainage ditches surrounding the substation but all works will be confined to the substation boundary so there is no potential for impact to the water environment. There are no European sites nearby, or potentially connected to the substation via a source-pathway-receptor link that may result in likely significant effects in view of the applicable site Conservation Objectives.

Arklow 220 kV Station

There are no waterbodies or drainage ditches within the substation. There are drainage ditches surrounding the substation but all works will be confined to the substation boundary so there is no potential for impact to the water environment. There are no European sites nearby, or potentially connected to the substation via a source-pathway-receptor link that may result in likely significant effects in view of the applicable site Conservation Objectives.

AA Screening Statement

In accordance with Regulation 42(7) of the European Communities (Birds and Natural Habitats) Regulations 2011 SI 477 as amended, EirGrid has made a Determination following Screening that an Appropriate Assessment is not required as the project individually or in combination with other plans or projects is not likely to have a significant effect on any European sites. The risk of likely significant effects on European sites can be excluded on the basis of objective evidence.

This Determination is based on the location, scale, extent and duration of the Development, including the temporary nature of works, and has not taken account of mitigation measures intended to avoid or reduce significant effects on European sites.

Signed:



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1 October 2024