



An
Bord
Pleanála

Inspector's Report ABP-305106-19

Development	Electricity development (110kV 4-bay substation & loop-in infrastructure)
Location	Tullamore, Listowel, Co. Kerry
Planning Authority	Kerry County Council
Applicant(s)	Terra Solar II Ltd.
Type of Application	Permission
Type of Case	SID
Observer(s)	Kerry County Council Transport Infrastructure Ireland Tullamore Action Group John O'Sullivan
Date of Site Inspection	20 th November 2019
Inspector	Karla Mc Bride

1.0 Site Location and Description

- 1.1. The site is located to the N of Listowel in County Kerry and the surrounding area is agricultural in character. The site is located to the W of the N69 which connects Listowel and Tarbert and to the E of the R552 road that connects Listowel with Ballylongford, and the site is accessed off the L-1009 which is a narrow county road.
- 1.2. The gently sloping rural site comprises a series of agricultural fields that are defined by mature trees and hedgerows, and several streams and ditches traverse the site. The lands slope down towards the River Galey which flows to the SE and SW of the site and drains to the River Feale to form part of the Lower River Shannon SAC (site code 002165). The River Galey is prone to flooding. The site is also traversed by an existing 110kV line from SW to NE.
- 1.3. The surrounding area is sparsely populated with several farm buildings and detached houses in the vicinity. There is one recorded archaeological site (Ringfort) to the SW of the site and there are several other heritage features in the surrounding area.
- 1.4. There is a permitted but not yet constructed 50MW solar farm (ABP-302681-18) on the overall lands that extend to c.99ha and there are several operational and permitted windfarms in the wider area.
- 1.5. Photographs and maps contained in Appendix 1 describe the site and location in some detail.

2.0 Proposed Development

- 2.1. This SID application relates to the erection of a 110kV, 4-bay, C-type electricity substation (with a 33kV customer compound) and associated loop-in infrastructure to tie into existing 110kV transmission line.
 - The overall solar farm site is c.99ha with a permanent footprint of c.35ha, this includes c. 228,906 solar panels & c.6,000m of internal access
 - The proposed substation development (including customer compound & buildings) would be c.9,000sq.m.

- Vehicular access would be off the L-1009 local road and the permitted solar farm works also comprise the upgrading of the existing vehicular access, along with the provision of new internal access tracks.
- The proposed loop-in infrastructure to the existing overhead 110kV transmission line would comprise the construction of two new end lattice steel line/cable interface towers (c.20m high) between two existing pole sets and associated underground cables.
- Ancillary works would comprise the construction of a temporary work compound (c.1,510sq.m.).

2.2. The application was accompanied by the following documents:

- Planning Report
- EIA Screening report
- Screening for AA & NIS report,
- Ecological Impact Assessment report
- Aquatic Ecological Impact Assessment report
- Archaeological Impact Assessment report
- Landscape & Visual Impact Assessment report & Photomontages
- Traffic & Transportation report
- Drainage report
- Flood Risk Assessment report
- Outline CMEM Plan

3.0 **Observers**

3.1. **Prescribed Bodies**

TII stated that regard should be had to all relevant guidance including Ch.3 of the DoECLG Spatial Planning & National Roads Guidelines; that the planning details of the solar farm (ABP-302681-18) were not circulated to TII; and the Board should be satisfied that that the development can be accommodated complementary to safeguarding the safety and strategic function of the national road network.

3.2. **Planning Authority Report**

The report from Kerry County Council stated that the Council had no objection to the proposed development subject to several conditions. This includes conditions related to the duration of the permission, design, undergrounding of cables, drainage, flooding, road safety, lighting and reinstatement.

3.3. **Tullamore Action Group (Noonan Linehan Carroll Coffey Solicitors)**

The main concerns raised relate to:

- Project splitting, EIAR required & non-compliance with S.182A.
- Material contravention of Development Plan objective to conserve & preserve a European site, and the zoning objective for the lands.
- Adverse impacts on visual amenity & landscape character
- Adverse residential impacts (visual, overlooking, noise & health)
- Traffic generation, road safety & traffic congestion
- Located in area at risk of flooding.
- Adverse effects Lower River Shannon SAC & water quality
- Risk of major accident, danger to human health.
- Prejudicial to public health
- Property devaluation
- The submission included copies of the objections made in relation to the solar farm application (18/720 & ABP-302681-19).

3.4. **John O'Sullivan**

The main concerns raised relate to:

- Adverse impacts on visual amenity & landscape character
- Conflicting objectives in Dev. Plan (LCA v Core Objectives & Values)
- Project splitting & EIAR required (substation & pylons are an integral part of the solar farm).
- Fire & explosion hazard associated battery storage & lack of details.
- Proximity to SAC & inappropriate use of mitigation measures.
- Conflicting government policies (renewable energy & carbon reduction)

3.5. Applicant's response to observers

The applicant responded to the concerns raised by the Observers and no new issues were raised. The response stated that the proposed development would comply with the EU EIA Directive, national legislation (including 182A of the P&D Act, 2000, as amended), national, regional and local policy energy and planning policy, and the Flood Risk and TII Guidelines. It noted that some of the Observers expressed concerns about aspects of the solar farm development which already has a grant of planning permission. It confirmed that the construction phase access road would not trigger a sub-threshold EIA, that the proposed development would not encroach into the SAC, and that the mitigation measures are correctly contained in the Stage 2 NIS. It further confirmed that the excavated soil from the onsite construction works would be re-used to provide berms in the interest of visual amenity. The response referred the Councils' suggested condition in relation to the restoration of the site following decommissioning of the solar farm and noted that the sub-station would remain in-situ as part of the electricity network.

4.0 Planning History

ABP-302516-18: Following one pre-application consultation meeting, the Board decided that the proposed development of a 110kV 4-bay C-Type electricity substation, cable end masts & overhead line in the townland of Tullamore, Listowel, Co. Kerry falls within the scope of section 182A of the Planning and Development Act 2000, and that a planning application should be made directly to the Board.

ABP-302681-19: Planning permission granted by ABP for a 50MW solar farm (including the c. 228,906 solar panels, c.6,000m of internal access tracks & underground cabling) on the c.99.2ha site with a c.35.7ha footprint, subject to 15 standard conditions. The Board also carried out an Appropriate Assessment which concluded that the proposed development, by itself or in combination with other plans or projects, would not adversely affect the integrity of the European Site, in view of the site's conservation objectives.

5.0 Policy and Context

5.1. National and Regional policy

EU Directive - Energy from Renewable Resources

EU Directive (2009/28/EC) sets a target of 20% of EU energy consumption from renewable sources and a 20% cut in greenhouse gas emissions by 2020.

National Planning Framework, 2018 (NPF)

NFP seeks to harness the country's renewable energy potential, achieve a transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050, and promote new energy systems & transmission grids.

National Renewable Energy Action Plan (NREAP)

The NREAP was submitted to the European commission in 2010. It sets out Ireland's approach to achieving its legally binding targets, with a target of 40% of electricity consumption to be from renewable sources by 2020. A third progress report on the NREAP was submitted to the European commission in April 2016 which detailed installed capacity of solar power to be 1.38 MW.

Ireland's Transition to a low carbon Energy Future 2015-2030

This White paper on Energy policy (Department of Communications, Energy and Natural Resources) – December 2015 sets out a vision to reduce greenhouse gas (GHG) emissions by between 80% and 95% compared to 1990 levels, by 2050, falling to zero or below by 2100. It states that new energy solutions such as bioenergy, solar photovoltaic (PV) and offshore energy mature and become more cost effective they will be included in the renewable energy mix.

Flood Risk Management Guidelines for Planning Authorities 2009:

These Guidelines seeks to avoid inappropriate development in areas at risk of flooding and avoid new developments increasing flood risk elsewhere and they advocate a sequential approach to risk assessment and a justification test.

Regional Planning Guidelines for the South West Region 2010-2022:

These Guidelines seek to facilitate the sustainable development of additional electricity generation capacity throughout the region and to support the sustainable expansion of the transmission network. National grid expansion is identified as important for ensuring adequacy of supply. This expansion will also provide a means for facilitating the development and connectivity of sustainable renewable energy resources at both a national and regional level. The Regional Authority seeks to ensure that future strategies and plans for the development of renewable energy, and associated infrastructure development, will promote the development of renewable energy resources in a sustainable manner.

5.2. County Kerry Development Plan 2015-2021

Core Objective CS-11: seeks to Support the National Climate Change Strategy and the National Climate Change Adaptation Framework, Building Resilience to Climate Change on an ongoing basis through implementation of supporting objectives in this Plan, particularly those supporting use of alternative & renewable energy source subject to compatibility with environmental designations & legislative requirements.

Energy Provision AIM: to support and provide for the sustainable development of indigenous energy resources, with an emphasis on renewable energy supplies.

Energy objective EP-1 seeks to support and facilitate the sustainable provision of a reliable energy supply in the County, with emphasis on increasing energy supplies derived from renewable resources whilst seeking to protect & maintain biodiversity, archaeological and built heritage, the landscape and residential amenity.

Energy objective EP-3: seeks to facilitate sustainable energy infrastructure.

Energy objective EP-7: seeks to facilitate the sustainable development of additional electricity generation capacityand the sustainable expansion of the network.

Energy objective EP-8: seeks to ensure that the siting of electricity power lines is managed in terms of the physical and visual impact of these lines on both the natural and built environment, the conservation value of Natura 2000 sites and especially in sensitive landscape areas.

Energy objective EP-11: seeks to implement the Renewable Energy Strategy for County Kerry (KCC 2012).

Rural landscape type: the site is located within a Rural General area which constitutes the least sensitive landscapes throughout the County.

Landscape Objective VL-1: seeks to protect the landscape of the county as a major economic asset and invaluable amenity.

Landscape Objective VL-3: seeks to determine the zoning of lands in rural areas having regard to the sensitivity of the landscape.

Heritage Objectives H-25, 26 & 28: seek to secure the protection and or preservation of archaeological monuments and features.

Heritage Objectives H-34 & 45: seek to protect architectural heritage.

Archaeology: Archaeological site (ringfort) located nearby.

5.3. **Natural Heritage Designations**

Lower River Shannon SAC (002165) is located to the SE.

River Shannon & River Fergus Estuaries SPA (004077) is located within 5 km.

Moanveanlagh Bog SAC (002351) is located within 5.8Km.

Stacks to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA (004161) is located within 9km.

5.4. **EIA Screening**

The proposed development is not of any type included in Schedule 5 of the Planning and Development Regulations 2001 (as amended) and it does not meet any of the criteria set out in schedule 7 of the Regulations for determining whether a sub-threshold development would be likely to have significant effects on the environment, with regard to the characteristics of the proposed development, its location and the characteristics of potential impacts. An EIA is therefore not required.

6.0 Planning Assessment

- Principle of development
- Visual amenity
- Residential amenity
- Movement & access
- Flood risk & drainage
- Biodiversity & ecology
- Other issues

6.1. Principle of development

The proposed development would comprise the construction of an electrical substation (110kV), a customer compound building (33kV) and a loop-in to the existing overhead 110kV transmission line, along with associated site works. The proposed substation facility would operate in conjunction with a permitted solar farm on the surrounding lands which was granted permission by the Board under ABP-302681-18 (comprising c.37.5ha of solar panels on a c.99.2ha site with battery storage containers). A 10-year planning permission now is being sought.

The applicant has an agreement with EirGrid for the provision of a facility to facilitate the export of the electricity generated from the permitted solar farm development to the national grid. The 110kV substation will serve the electrical transmission needs of the solar farm for c.25 years and after the windfarm has been decommissioned the substation will be retained to fulfil future transmission requirements in the area.

The proposed development would be located on agricultural lands that are currently used for grazing and it is noted that national policy seeks to increase agricultural productivity. However, having regard to the scale of the permitted c.37.5ha solar farm on the c.99.2ha site, the proposed c.9,000sq.m. substation would not result in a significant additional loss of agricultural lands relative to the overall scale of the permitted solar farm. At local level, Energy objectives EP-1, EP-3 and EP-7 of the Development Plan seek to encourage and promote sustainable energy production,

whist Energy objective EP-8 seeks to ensure that the siting of electricity power lines is managed in terms of the physical and visual impact of these lines on both the natural and built environment.

Having regard to the foregoing, I am satisfied that the proposed development, which would operate in conjunction with a permitted solar farm, would comply with relevant EU, national, regional and local planning and energy policy, would therefore be acceptable in principle.

6.2. Visual amenity

The proposed development would be located within a rural area that is characterised by agricultural grazing fields which are defined by mature hedges and trees. The fields slope down gently from NW to SE towards the River Galey and the proposed development would occupy a low-lying section of the overall lands. The surrounding area is sparsely populated although there are several detached houses and farm buildings located along the local road network to the W and N and of the site. The site and surrounding lands are not covered by any sensitive landscape or scenic amenity designations and there are no protected views or prospects in the vicinity.

The proposed development would comprise the construction of a 110kV, 4-bay, C-type electricity substation, 33kV customer compound and associated loop-in infrastructure to tie into an existing 110kV transmission line in the central low-lying portion of a permitted solar farm site. The overall site is c.99.2ha, the permanent footprint of the permitted solar farm is c.35ha, and the proposed substation development (including customer compound) would be c.9,000sq.m. The proposed loop-in infrastructure to the existing overhead 110kV transmission line would comprise the construction of two new end lattice steel line/cable interface towers (c.20m high) between two existing pole sets. The proposed development would be bounded by landscape berms (c.1.5m high) constructed from the material excavated to level the sloping site.

The application was accompanied by a Landscape and Visual Impact Assessment report (LVIA) and Photomontages which assessed potential visual impacts within a 5km radius, and from 9 viewpoints which are mainly located to the SE, E and NE of the site that encompass sensitive receptors (including the road network and nearby houses). The study also included an assessment of cumulative impacts in combination with the permitted solar farm. It concluded that the proposed substation and landscape berms would be well assimilated within the context of the permitted solar farm and would not conflict with the prevailing pattern of rural land uses in the surrounding area.

Having regard to :- the low sensitivity rating of the surrounding landscape; the size, scale and extent of the permitted solar farm on the overall c.99.2ha site; the design, height and location of the proposed substation within a low-lying part of the site and the screening properties of the associated landscape berms; and the presence of an existing 110kV transmission line and supporting poles in the vicinity of the proposed development; I am satisfied that the proposed substation and loop-in infrastructure would not have an adverse visual impact on the landscape character of the rural area. Furthermore, the proposed development would not adversely affect the visual amenities of the surrounding area to any significant extent, when viewed from the surrounding road network or any nearby houses or farm buildings.

6.3. Residential amenity

The surrounding area is sparsely populated although there are several detached houses located along the local road network to the W and N of the site, and the nearest houses are in excess of 750m from the proposed development. These houses which would not be overlooked or overshadowed by the proposed substation or loop-in infrastructure. Furthermore, the proposed development would not be visually obtrusive or overbearing having regard to its scale, height and location within a low-lying section of the site and the construction of c.1.5m high landscape berms. The proposed substation would also be located c.350 and c.170m respectively from the neighbouring farm buildings to the NW and S, and it is noted that the buildings to the S lie within the overall permitted solar farmlands.

Having regard to the foregoing, I am satisfied that the proposed development, which would occupy a low lying position in the approximate centre of a permitted solar farm, would not seriously injure the residential amenities of houses in the surrounding area, to any significant extent.

6.4. Movement & access

The application was accompanied by a Traffic & Transportation Assessment Report which assessed the construction and operational traffic associated with the proposed substation and permitted solar farm. The report described the existing traffic environment, it estimated future growth and trip generation rates, and predicted the cumulative impact of the proposed substation in combination with the permitted solar farm on the road network, junctions and bridges.

Vehicular access to the site would be off the local road (L-1009) to the W and via the arrangements for the solar farm on the overall c.99.2ha site that was permitted by the Board under ABP-302681-19. This shared access will enable construction and maintenance vehicles to access the solar farm and substation, however it would not constitute a road as it would only serve the internal development site and it would not be used by any other unrelated vehicles. The access provides for sightlines of 120m in each direction from a 3m setback from the roadside edge, junction corners that can accommodate large articulated vehicles (c.15.4m), advance warning signs before the entrance (50m, 100m & 159m) and a booking management system for traffic entering and leaving the site.

Construction traffic would access the site via a dedicated haul route along the R552 to the E and along the L-1009. It is anticipated the construction phase would result in an average of 16 vehicles per working day over the c.75 week period for the overall project (solar farm & substation) with a peak of 31 vehicles during Week 65. The traffic report indicated that the road network has enough spare capacity to accommodate this temporary increase in volumes. The operational traffic, which would use the same entrance off the L-1009 and be in the order of 2 to 4 vehicle visits per month.

Having regard to the foregoing, I am satisfied that the proposed development, which would utilise the same haul routes and access arrangements as the permitted solar farm development, would not give rise to an excessive level of traffic generation or disturbance along the local road network during the constructional phase. The road network and junctions have sufficient capacity to accommodate additional traffic, and the previously permitted vehicular access off the L-1009 will have adequate visibility in either direction, and sufficient space to accommodate the largest of the construction vehicles. The modest vehicular movements generated during the operational stage would have no discernible impact on the road network. The proposed development, taken in combination with the previously permitted solar farm, would therefore not give rise to a traffic hazard or endanger the safety of other road users.

6.5. Flood risk and drainage

The application was accompanied by a site specific Flood Risk Assessment Report (FRA) which described the receiving environment and calculated the risk of the proposed development contributing to, or being affected by fluvial flooding, along with a Drainage Report which described the drainage proposals for the site.

The River Galey is located to the S and SE of the solar farm site and the overall lands slope down towards the river from c.50mOD to 21mOD whilst the proposed substation compound would be set back from the river by c.450m. The river has an upstream catchment of c.184sq.km which mainly comprises agricultural lands and the 3 x main land drains/watercourses that traverse the overall solar farmlands discharge to this river along with a series of smaller drains. OPW records indicate that no flood events were recorded on the overall lands but that 2 x events previously occurred upstream of the site. OSi Historic Flood Maps indicate that an area parallel to the river and to the E of the site may have been flooded in the past. The OPW's Preliminary Flood Risk Assessment (PFRA) indicates that there is a risk of fluvial flooding along the River Galey although the study did not identify the area in the vicinity of the site as being an Area for Further Assessment (AFA).

The applicant's site specific FRA report compared the site boundary with the OPW's PFRA mapping. It concluded that the permitted solar farm and proposed substation are located outside Flood Zone A (1:100 year return), the permitted solar farm site boundary is slightly within Flood Zone B (1:1000 year return) and that the proposed substation compound is located within Flood Zone C where there is a low probability of fluvial flooding (even when Climate Change is factored into the equation).

Having regard to the foregoing, I am satisfied that the proposed development (and associated hard surfaces), which would implement similar drainage arrangements as the permitted solar farm development, would not give rise to a flood risk downslope of the works. Furthermore, the proposed development would not be vulnerable to fluvial flooding because of its location with Flood Zone C, the separation distance with the River Galey and the significant change in site levels between the proposed substation and the riverbank.

6.6. **Biodiversity & ecology**

The application was accompanied by two Ecological Impact Assessment reports (Terrestrial & Aquatic).

Terrestrial ecology:

The Terrestrial report described the receiving environment (agriculturally improved grassland, hedgerows & trees, drainage ditches and various related bird species), the various project elements, the nature of the survey work (desk study & field surveys), designated sites within 15km (including the Lower River Shannon SAC which has a direct aquatic connection to the site), rare or protected species within a 2km radius (common frog, hen harrier, otter & a badger sett were recorded within the past c.5 years) and an invasive species record (Indian Balsam c.2007).

Having regard to the nature of the receiving environment for the proposed substation and permitted solar farm, the report did not identify any significant potential adverse impacts on habitats and species as a result of the construction works or during the operational phase.

The landscaping plan would ensure the protection of mature trees, the replacement and enhancement of hedgerows, and the berms would be planted with native species, all of which would have a positive impact on biodiversity (including foraging & nesting birds and foraging bats). The berms would be constructed c.30m from a known a badger sett and no works would take place within c.150m of any active otter holt at which breeding females or cubs are present. Preconstruction surveys would be undertaken, and the relevant Derogation Licences would be sought from NPWS as required. An invasive species plan should be put in place for dealing with any invasive species present on the site. These concerns could be addressed by way of a planning condition.

Having regard to the foregoing, I am satisfied that the proposed development would not have an adverse impact on terrestrial habitats, or any rare or protected species present within the proposed substation site or the surrounding solar farmlands.

Aquatic ecology:

A similar range of surveys were undertaken in relation to aquatic ecology as for terrestrial ecology. The Aquatic report also described the aquatic receiving environment of the River Galey including river substrate, flow types, aquatic vegetation, fisheries (brown trout, salmon & sea trout) and water quality (EPA Q3-4 - Moderate to Good status), and the presence of field drains that connect the site to the river which in turn drains to the Lower River Shannon SAC via the River Feale. No suitable fisheries spawning/nursery or freshwater pearl mussel habitats were identified which would accord with the Q3-4-status of the river and previous arterial drainage works, however it provides a potential migration route for fish.

The report identified potential adverse impacts on water quality and aquatic life as a result of sedimentation during the construction phase and contaminated run-off during the operational phase. However, the proposed mitigation measures for the construction phase (management of sediment loss, hydrocarbons & concrete) and operational phases (sediment loss & herbicide control) and the on-site drainage arrangements would ensure that both the on-site watercourses and the River Galley would be protected.

Having regard to the foregoing, I am satisfied that the proposed development, which would implement similar mitigation measures and drainage arrangements as the permitted solar farm development, would not have an adverse impact on water quality of aquatic life.

Conclusion:

Having regard to the foregoing, I am satisfied that the proposed development, which would implement similar mitigation measures and drainage arrangements as the permitted solar farm development, would not have an adverse impact on biodiversity and ecology either on its own or in combination with the permitted solar farm on the overall c.99.2ha site.

6.7. Other issues

Archaeology: The site is located within a landscape that has a rich archaeological heritage. There is one Recorded Monument (Ringfort) on the overall c.99.2ha landholding (which is not located within or close to the subject site), and there are several Recorded Monuments and features of archaeological interest in the wider area. Pre-development testing and site monitoring should therefore be required.

Construction works: The proposed works would be carried out in association with the development of the permitted solar farm on the overall lands over a c.75 week period, and in accordance with the submitted Outline Construction Methodology and Environmental Management Plan. This plan contains a construction methodology, environmental mitigation measures (for the management of ecology, hydrocarbons concrete works, sediment control, invasive species, archaeology, construction waste, air & dust and noise & vibration), all of which are acceptable.

Environmental Impact Assessment: The concerns raised by the Observers in relation to this matter are noted and screening was carried out in section 5.4 above.

Fire & explosion hazard: The concerns raised by the Observers in relation to battery storage facilities, explosion risk and public health are noted however, this application does not contain an energy storage facility.

Material contravention: The concerns raised by the Observers in relation to this matter are noted and the principle of development has been assessed in section 6.1 which concluded that the proposed development is acceptable.

Planning & Development Act (S.182A): The concerns raised by the Observers in relation to this matter are noted and I am satisfied that the proposed development does come within the scope of this section which relates to “development comprising or for the purposes of electricity transmission”. This was confirmed by the Board under ABP-302516-18 on conclusion of the SID pre-application consultations.

Project splitting: The concerns raised by the Observers in relation to matter are noted however I am satisfied that the separate applications for the solar farm development and the substation do not give rise to project splitting.

Property devaluation: The concerns raised by the Observers in relation to this matter noted however, no evidence has been provided to substantiate this claim.

7.0 Appropriate Assessment

7.1. Compliance with Articles 6(3) of the EU Habitats Directive

The Habitats Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) of this Directive requires that any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. The competent authority must be satisfied that the proposal will not adversely affect the integrity of the European site.

7.2. The Natura Impact Statement

The application was accompanied by a Stage 1 AA Screening Report and a Stage 2 Natura Impact Statement (NIS). These reports described the site and the proposed development, and they utilised the results of the desk studies and field surveys that accompanied the application. The NIS and AA Screening reports confirmed that the proposed development would not be located within any European site. The AA screening exercise identified 4 European sites within a 15km radius of the proposed works, it had regard to the submitted ecological desk studies and field surveys (water quality, aquatic wildlife, terrestrial habitats and rare & protected species), and it screened out the sites which would not be affected by the proposed development.

The NIS identified the Lower River Shannon SAC (Site code: 002165) as the only European site that has the potential to be affected by the proposed development and it listed the Qualifying Interests and Conservation Objectives for this site. The NIS identified the potential sources of direct and indirect impacts on this site, assessed the potential impacts relative to its Conservation Objectives, had regard to the relevant desk surveys and field studies and concluded that the risk for the habitats and species which are designated as Qualifying Interests for the SAC was minimal subject to the implementation of a series of mitigation measures to protect water quality.

The NIS concluded that with the implementation of best practice and the recommended mitigation measures there will be no potential for direct, indirect or cumulative impacts arising from the proposed development, either alone or in combination with any other plans or projects. The integrity of the Lower River Shannon SAC will not be adversely affected. No reasonable scientific knowledge doubt remains as to the absence of such adverse effects.

7.3. AA Screening Assessment

The main issues related to ecology and the Observer’s concerns are summarised and assessed in Section 3.0 (Observers) and Section 6.6 (Planning Assessment- Biodiversity & Ecology) of this report. These sections should be read in conjunction with this assessment.

The proposed substation compound would not be located within an area covered by a European site designation and the proposed development is not relevant to the maintenance of any such European site. The following European sites are located within a 15km radius of the substation compound and their relevant Qualifying Interests, separation distances from the site boundary and the likelihood of a significant effects by way of a connecting pathway are listed below.

SACs & site codes	Qualifying Interests	Distance to SAC boundary	Likelihood of significant effect
Lower River Shannon SAC (002165)	Freshwater Pearl Mussel Sea, Brook & River Lamprey Atlantic Salmon Otter Floating river vegetation Molinia meadows Alluvial forests Sandbanks Estuaries Mudflats & sandflats Coastal lagoons Large shallow inlets & bays Reefs Perennial vegetation (stony banks)	c.400m SE	Connecting pathway via on site steams & ditches

	Vegetated sea cliffs Salicornia & other annuals Atlantic salt meadows Mediterranean salt meadows Bottlenose Dolphin		
<i>Moanleanvagh Bog SAC (002351)</i>	Active raised bogs Degraded raised bogs Depressions of peat substrates	c.5.5km E	No connecting pathway
SPAs	Relevant Qualifying Interests	Distance to SAC boundary	Likelihood of significant effect
<i>River Shannon & River Fergus Estuaries SPA (004077)</i>	Several species of bird Wetlands & waterbirds	c.5.5km N	No connecting pathway
<i>Stacks to Mullaghareirk Mountains, W Limerick Hills & Mount Eagle SPA (004161)</i>	Hen harrier	c.9.5km SW	No connecting pathway

I am satisfied that all but 1 of these sites can be screened out of any further assessment because of the nature of the European site, the absence of relevant Qualifying Interests downstream or in the vicinity of the works, the absence of an aquatic or any other connection between the European site and the proposed substation compound, or the location of the European site significantly outside of the core foraging range of birds identified in the SNH Guidance Assessing Connectivity with SPAs Version 3 (2016) document. The relevant European site that remain after the AA Screening exercise is the Lower River Shannon SAC (Site code: 002165).

7.4. **AA Screening Conclusion**

In conclusion, having regard to the nature and scale of the proposed development, to the separation of the proposed substation site from the European site, to the nature of the qualifying interests and conservation objectives of the European sites and to the available information as presented in the submitted documents regarding ground and surface water pathways between the application site and the European sites and other information available, it is my opinion that the proposed development has the potential to affect 1 of the European sites having regard to the conservation objectives of the relevant site, and that progression to a Stage 2 Appropriate Assessment is required.

7.5. **Appropriate Assessment:**

According to the NPWS Conservation Objective Series the Lower River Shannon SAC (Site code: 002165) stretches along the Shannon valley from Killaloe in Co. Clare to Loop Head in Kerry Head for c.120 km and it encompasses the Shannon, Feale, Mulkear and Fergus estuaries. The rivers within the Feale sub-catchment include the River Galey which is located to the S and SE of the permitted solar farm and proposed substation compound. The Feale catchment contains semi-natural habitats, such as wet grassland, wet woodland, marsh and floating river vegetation. Sea Lamprey, Brook Lamprey, River Lamprey and Salmon are found within this SAC including the River Feale which is also a designated Salmonid Water. Freshwater Pearl Mussel is present in the N section of the SAC in the River Cloon in County Clare. The watercourses within the SAC are at risk from poaching, land reclamation, flood relief works such as dredging and gravel extraction poses a major threat on the River Feale.

Based on the information contained in the NPWS Conservation Objective Series document for the Lower River Shannon SAC (including the Notes section for each habitat or species and the accompanying Maps) and my examination of the site and surrounding area, I am satisfied that all but 5 of the Qualifying Interests for this SAC can be screened out of any further assessment because of the nature or location of the Qualifying Interest, its absence downstream or in the vicinity of the works, and

the EPA Q3-4 water quality status and nature of the substrate in the River Galey in the vicinity of the site. The relevant details for the remaining Qualifying Interests for the Lower River Shannon SAC are summarised below.

Qualifying Interests	Conservation Objective	Attributes
<p><i>Sea Lamprey</i> <i>Brook Lamprey</i> <i>River Lamprey</i></p>	<p>To maintain the favourable conservation condition of these species.</p>	<p>Distribution, population structure & density of juveniles, extent & distribution of spawning habitat & availability of juvenile habitat.</p>
<p><i>Atlantic Salmon</i></p>	<p>To maintain the favourable conservation condition of this species.</p>	<p>Distribution, number of adult spawning fish, salmon fry abundance, out-migrating smolt abundance and number & distribution of redds.</p>
<p><i>Otter</i></p>	<p>To maintain the favourable conservation condition of this species.</p>	<p>Distribution, extent of habitat, couching sites & holts, available fish prey & barriers.</p>

The potential direct effects relate to:

- Loss of Qualifying Interest habitat and/or species.

The potential indirect effects relate to:

- Transport of sediments and pollutants in ground or surface water flowing into the SAC via on-site tributaries which could affect water quality and riverbed substrates, with a resultant impact on the life cycles and populations of the qualifying interest species of Lamprey & Salmon.

- Transport of sediments and pollutants in ground or surface water flowing into the SAC via on-site tributaries which could affect water quality and riverbed substrates, with a resultant impact on the availability of prey species for Otter.
- Barriers to movement along watercourses and tributaries, and construction works close to holts could affect Otter populations.

The River Galey which is located to the immediate S and SE of the site boundary of the permitted c.99.2ha solar farm, and c.400m to the S of the proposed substation compound. The proposed development would therefore be located c.400m from the boundary with the Lower River Shannon SAC and there would be no loss of habitat or any other significant **direct** effects as a result of the proposed works.

The substation compound would be located within a permitted c.99.2ha solar farm and the lands are connected to the SAC via on-site drainage ditches and watercourses and there is potential for **indirect** effects on water quality during the construction and operational phases. However, the construction phase mitigation measures would ensure that any fine sediments released during the excavation and construction works, or any contaminants resulting from accidental spills or accidents, or future use of herbicides on the lands would not reach the SAC. Pre-construction surveys would be undertaken, and no works would take place within c.150m of any active otter holt at which breeding females or cubs are present. The network of drains and watercourses that traverse the overall lands would ensure that the commuting patterns of otters would not be adversely affected. The post-construction monitoring during the operational phase would continue to protect water quality, although this is not required to reach a conclusion of no adverse effect.

It can be reasonably concluded on the basis of best scientific knowledge therefore that the proposed development, both on its own and in-combination with the previously permitted solar farm, will not adversely affect the integrity of the Lower River Shannon SAC (Site code: 002165) in view of the sites' Conservation Objectives.

Conclusions:

I concur with the conclusions reached in the NIS Statement that the proposed substation will have no significant adverse effects (direct, indirect or in-combination) on the Conservation Objectives or Qualifying Interests for the Lower River Shannon SAC (Site code: 002165) or for any other European Site.

7.6. Appropriate Assessment conclusion:

I consider it reasonable to conclude on the basis of the information on the file, which I consider adequate in order to carry out a Stage 2 Appropriate Assessment, that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the European site No. 002165 or any other European site, in view of the site's Conservation Objectives.

8.0 Recommendation

Arising from my assessment of this appeal case I recommend that planning permission should be granted for the proposed development for the reasons and considerations set down below, and subject to the attached conditions.

9.0 Reasons and Considerations

Having regard to the provisions of national and regional policy objectives in relation to renewable energy, to the "Rural General" designation of the area in the current Kerry County Development Plan 2015 – 2021, the nature and scale of the proposed development, it is considered that, subject to compliance with the conditions set out below, the development would not conflict with the provisions of the Development Plan, would not seriously injure the residential amenities of property in the vicinity, would not have unacceptable impacts on the visual amenities of the area, would not result in a serious risk of pollution, would be acceptable in terms of traffic safety and convenience, and would, therefore, be in accordance with the proper planning and sustainable development of the area.

10.0 Proper Planning and Sustainable Development

It is considered that subject to compliance with the conditions set out below the proposed development would accord with European, national, regional and local planning and related policy, it would not have an unacceptable impact on the landscape or ecology, it would not seriously injure the visual or residential amenities of the area or of property in the vicinity, and it would be acceptable in terms of traffic safety and convenience. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

11.0 Appropriate Assessment

Appropriate Assessment Stage 1

The Board considered the Screening Report for Appropriate Assessment, the Natura Impact Assessment and all the other relevant submissions and carried out both an appropriate assessment screening exercise and an appropriate assessment in relation to the potential effects of the proposed development on designated European Sites. The Board agreed with the screening assessment and conclusion carried out in the Inspector's report that the Lower River Shannon candidate Special Area of Conservation (Site Code 002165) is the only European Site in respect of which the proposed development has the potential to have a significant effect.

Appropriate Assessment Stage 2

The Board considered the Natura impact Statement and all other relevant submissions and carried out an appropriate assessment of the implications of the proposed development for the European Site, namely, the Lower River Shannon candidate Special Area of Conservation (Site Code 002165), in view of the site's conservation objectives. The Board considered that the information before it was adequate to allow the carrying out of an Appropriate Assessment. In completing the appropriate assessment, the Board considered, in particular, the following:

- (i) the likely direct and indirect impacts arising from the proposed development both individually or in combination with other plans or projects,

- (ii) the mitigation measures which are included as part of the current proposal, and
- (iii) the conservation objectives for the European Site.

In completing the Appropriate Assessment, the Board accepted and adopted the appropriate assessment carried out in the Inspector's report in respect of the potential effects of the proposed development on the aforementioned European Sites, having regard to the site's conservation objectives.

In overall conclusion, the Board was satisfied that the proposed development, by itself or in combination with other plans or projects, would not adversely affect the integrity of the European Site, in view of the site's conservation objectives.

12.0 Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity.

2. The period during which the development may be carried out shall be 10 years from the date of this Order.

Reason: In the interest of clarity and having regard to the scale and nature of the proposed development.

3. The mitigation measures identified in the Natura Impact Statement and other plans and particulars submitted with the planning application, shall be implemented in full by the developer, except as may otherwise be required in order to comply with the conditions of this permission.

Reason: In the interest of clarity and protection of the environment during the construction and operational phases of the proposed development.

4. The roofs of the substation structures shall be covered with slates or slate effect tiles which shall be either black, dark-grey or blue-black and the colour of the ridge tiles shall match the colour of the roofs, and the VAR container and all fencing shall be dark green in colour.

Reason: In the interest of the visual amenity of the area.

5. The developer shall comply with the following requirements:
 - (a) No artificial lighting shall be installed or operated on site unless authorised by a prior grant of planning permission.
 - (b) CCTV cameras shall be fixed and angled to face into the site and shall not be directed towards adjoining property or the road.
 - (c) Each fencing panel shall be erected such that for a minimum of 300 millimetres of its length, its bottom edge is no less than 150 millimetres from ground level.
 - (d) Cables within the site shall be located underground.

Reason: In the interest of clarity, of visual and residential amenity, to allow wildlife to continue to have access to and through the site, and to minimise impacts on drainage patterns and surface water quality.

6. The landscaping proposals shall be carried out within the first planting season following commencement of construction of the proposed development. All existing hedgerows (except at access track openings) shall be retained. The landscaping and screening shall be maintained at regular intervals. Any trees or shrubs planted in accordance with this condition which are removed, die, become seriously damaged or diseased within two years of planting shall be replaced by trees or shrubs of similar size and species to those original required to be planted.

Reason: To assist in screening the proposed development from view and to blend it into its surroundings in the interest of visual amenity.

7. The developer shall comply with the transportation requirements of the planning authority for such works and services as appropriate.

Reason: In the interest of traffic and pedestrian safety.

8. Water supply and drainage arrangements, including the attenuation and disposal of surface water, shall comply with the requirements of Irish Water and the planning authority for such works and services as appropriate.

Reason: In the interest of public health and to ensure a proper standard of development.

9. The construction of the development shall be managed in accordance with a Construction Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall provide details of intended construction practice for the development, including hours of working, noise management measures, invasive species management plan and off-site disposal of construction /demolition waste.

Reason: In the interests of public safety and residential amenity.

10. The site development and construction works shall be carried out such a manner as to ensure that the adjoining streets are kept clear of debris, soil and other material and cleaning works shall be carried on the adjoining public roads by the developer and at the developer's expense on a daily basis.

Reason: To protect the residential amenities of property in the vicinity.

11. The developer shall comply with the following archaeological requirements:

- (a) Pre-development archaeological testing shall be undertaken by a suitably qualified archaeologist, licensed under the National Monuments Acts 1930-2004. No sub-surface work shall be undertaken in the absence of the archaeologist without his/her written consent.
- (b) A report, containing the results of the assessment, shall be submitted to the planning authority and, arising from this assessment, the developer shall agree in writing with the planning authority details regarding any further archaeological requirements (including, if necessary, archaeological excavation) prior to commencement of construction works. A copy of the report shall be submitted to the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

- (c) The planning authority and the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs shall be notified in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development.

In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

Reason: In order to conserve the archaeological heritage of the area and to secure the preservation (in-situ or by record) and protection of any archaeological remains that may exist within the site.

12. Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to secure the upgrading of the section of public road from the junction of the R-552/L-1009 to the proposed site entrance and reinstatement of public roads that may be damaged by construction transport coupled with an agreement empowering the planning authority to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

Reason: To ensure the reinstatement of public roads that may be damaged by construction transport.

13. The developer shall pay to the planning authority a financial contribution of twelve thousand euro (€12,000) in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of

payment. The application of any indexation required by this condition shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine.

Reason: It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.

Karla Mc Bride

Senior Planning Inspector

24th January 2020