

Inspector's Report ABP-306685-20

Development Construction and operation of solar

PV panels, including an electrical

substation compound, control building, up to 9 inverter units, underground

cable ducts. The planning application is accompanied by a Natura Impact

Statement.

Location Cloonascragh, Tuam, Co Galway

Planning Authority Galway County Council

Planning Authority Reg. Ref. 191315

Applicant(s) WED Renewables

Type of Application Permission

Planning Authority Decision Grant

Type of Appeal Third Party

Appellant(s) Bridget Brady

Observer(s) None

Date of Site Inspection 5th May 2020

Inspector Irené McCormack

1.0 Site Location and Description

- 1.1.1. The subject site is located in the townland of Cloonascragh, Tuam, Co. Galway approx. 3.km south of Tuam. The proposed Solar Array is split into two sites separated by the R347.
- 1.1.2. The area is characterised by agricultural lands with associated farm buildings and houses. In addition to quarrying, peat-cutting and industrial uses, such as the adjacent Moylough Concrete Products. The site has a stated area of 43ha. and comprises agricultural lands. There are existing overhead power lines running along the western portion of the site.
- 1.1.3. The topography of the area is characterised by low-lying, undulating terrain. The lands in the immediate vicinity of the site reflect a mix of agricultural lands and cut over bog with areas of transitional scrub and hedgerows
- 1.1.4. The topography of the two land parcels differ. The northern part of the site (to the west of the R347 is uniformly flat with the lowest point in the north-western corner and the highest site level is southeast of the centre of the northern part ca. 6m higher. This area reflects a mixture of grassed pastoral fields and some unused fields. Dense hedgerow and treelines form field boundaries.
- 1.1.5. The southern site to the east of the R347 reflects a more noticeable level difference due to gradients in the narrower parts and reflect an overall level difference of 8m. The area is characterised by agricultural lands with associated farm buildings and houses. This area is dominated by improved agricultural grassland with sparse intermittent shrubs at the edge of fields. The immediate south of the site is in active use for turf cutting.
- 1.1.6. Access to the northern portion of the site west of the R347 is via local road L-6141 site is located along the southern boundary of the site. Access to the southern portion of the site to the east of the R347 is via a private road used to access the quarry lands and by locals to access the adjacent bog for turf.

2.0 **Proposed Development**

- 2.1. This is an application for a 10-year permission for development at Cloonascragh, Tuam. The development will consist of:
 - the construction and operation of solar PV panels mounted on metal frames on a site extending to approximately 43ha and associated ancillary development including:
 - an electrical substation compound, control building (70 m2), up to 9 no.
 inverter units, underground cable ducts, hardstanding area, boundary security
 fence, site entrance, access track, landscaping, CCTV and all associated
 enabling works. Gross floor space of proposed works: 92 sqm.
 - The development would be connected to the national grid and has a lifespan of approx. 30 years.
- 2.2. The development involves the provision of up to 238,537sqm of solar PV Modules. The modules are ground mounted on galvanised steel support structures/frames. The frame structures will consist of aluminium cross bars and steel uprights. The photovoltaic panels are to be ordinated in a south facing direction and will remain in a fixed positions. They will not rotate to track the sun. The solar panels will be arranged in rows approx. 7.6-9m apart and will measure 1640mm x 992mm in size. The panels will be a maximum height of 2.2m above the terrain and will be tilted up to 20 degrees from horizontal towards the south. The structures will be set to a depth of 1.6, depending on ground conditions. It is noted that the final design may be subject to standards micro-siting arising from site survey work.
 - 2.3. The nine inverter / transformer stations would convert direct current generated by the PV panels into alternation current which could be used by the electricity network. The grid connection process undertaken under a separate process. The route is proposed to have an overall length of 500m and will run underground in the road curtilage of the R347, then running north-west along the local road to the Cloon 110 kV substation.
 - 2.4. The works also include the provision of a 2.8m high security fence, a satellite pole, CCTV, landscaping and all associated works. Once operational the substation would be managed by ESB Networks.

- 2.5. Further information was requested on 16th October 2019 to include detail design of panels, impact on the stability of the adjoining quarry wall, noise mitigation measures during construction and construction details of permitted tracks, ecological and bio-diversity enhancements, land owner consent, connection route to Cloon substation, additional LVIA, site specific details of drainage works and an Otter survey. Unsolicited further information was submitted on 17th October 2010 addressing third party submission made in respect of the planning application.
 - 2.6. The application included a Natura Impact Statement, Ecological Assessment, Planning and Environment Report, Construction and Environmental Management Plan, a Construction Methodology, Flood Risk Assessment, Glint and Glare Assessment, An Archaeological and Cultural Heritage Impact Assessment, Traffic and Transport Assessment and Photomontages.

3.0 Planning Authority Decision

3.1. Decision

3.1.1. Permission was granted subject to 11 no conditions. The relevant conditions are noted below: -

Condition 3: (a) stipulated that planning permission is for a period of 25 years (b) required detailed restoration plan, (c) stipulated site restoration in accordance with detailed plan.

Condition 4: stipulated final format of development works to the submitted and agreed prior to the commencement of development.

Condition 8: enhanced measures of address Glint and Glare to be implemented if evident during operation phase.

Condition no.10: Mitigation measures set of in NIS to be implemented.

3.2. Planning Authority Reports

3.2.1. Planning Reports

3.3. The final report (dated 27/01/2020) raised no concerns regarding the proposed development and recommended that permission be granted subject to conditions.

3.3.1. Other Technical Reports

Roads Department report: No objection subject to conditions

Environment report: No objection subject to conditions

3.4. Prescribed Bodies

None

3.5. Third Party Observations

A total of 10 submissions were made in relation to the development. A brief summary of the issues raised in the submission to the Planning Authority are set out below:

- Damage to the environment, habitat, and biodiversity
- Threat to public health
- Visual impact
- Intensification of this type of development noting ESB infrastructure
- Adversely impact property values
- Invasive species on site

4.0 Planning History

Site

Note: The following applications traverse a portion of the western site boundary (northern site -west of the R347).

Galway County Council Reg Ref No 18/896 - Planning permission granted by Galway Co. Council for the refurbishment of the section of the Cloon to Lanesborough 110kV line within its administrative boundary subject to conditions.

ABP 302597/18 / Roscommon County Council 18/320 – Permission granted for the refurbishment of the existing Cloon to Lanesborough 110Kv overhead line.

*The line extends over three counties (Galway, Roscommon and Longford) and is approximately 65km in extent.

5.0 Policy Context

5.1. National Planning Framework

National Strategic Outcome 8 – Transition to a Low Carbon and Climate Resilient Society, Policy Objectives 21 and 23 which relate to the rural economy and Policy Objective 55 which relates to renewable energy are considered relevant.

5.2. Ireland's Transition to a Low Carbon Energy Future 2015-2030

The white paper sets out a framework to guide energy policy. Section 137 notes that the deployment of solar in Ireland has the potential to increase energy security, contribute to our renewable energy targets, and support economic growth and jobs. Solar also brings a number of benefits like relatively quick construction and a range of deployment options, including solar thermal for heat and solar PV for electricity

5.3. Regional and Spatial Economic Strategy for the Northern and Western Regional Assembly.

Section 4.5.2 relates to renewable energy and low carbon future.

The following objectives are considered relevant.

- RPO 4.18 Support the development of secure, reliable, and safe supplies of renewable energy, to maximise their value, maintain the inward investment, support indigenous industry, and create jobs
- RPO 5.23 To establish a Regional Fora that shall prepare an audit of worked out Bog's and peatlands within our Region and to identify strategic sites and propositions of regional value, including but not limited to areas such as renewable energy, tourism, biodiversity, climate mitigation, education, recreation and amenity
- RPO 8.3 The Assembly support the necessary integration of the transmission network requirements to allow linkages with renewable energy proposals at all levels to the electricity transmission grid in a sustainable and timely manner.

5.3.1. Galway County Development Plan 2015-2021

Section 7 relates to Energy and Renewable Energy

The following objectives are considered relevant: -

- Policy ER 1 Sustainable Energy Policy Targets
- Policy ER 2 Development of Renewable Energy
- Policy ER 3 Security of Supply
- Policy ER 4 Sustainable Development and Energy Efficiency
- Objective ER1 = Electricity and Renewable Energy Infrastructure
- Objective ER 3 Low Carbon County
- Objective ER4 Renewable Energy
- Objective ER 8 Promoting Energy Hubs including Tuam Town.

5.3.2. Landscape Classification

Class 1 – Low landscape sensitivity

5.4. Natural Heritage Designations

The site is not located within or directly adjacent to any Natura 2000 sites. The site is located 0.14km north of Lough Corrib SAC (site code 000297).

5.5. EIA Screening

The construction of a solar farm does not involve a class of development which is prescribed for the purpose of Section 176 of the Planning and Development Act, 2000 (as amended), as set out in Parts 1 and 2 of Schedule 5 of the Planning and Development Regulations, 2001 (as amended). Accordingly, there is no requirement for the applicant to submit an Environmental Impact Assessment Report in this instance. An EIA - Preliminary Examination form has been completed and a screening determination is not required.

6.0 The Appeal

6.1. Grounds of Appeal

- It is set out that the development forms part of an larger development and that there has been negligible community consultation.
- It is set out that the applicant has not undertaken a detailed investigation of the overburden material and geology of the site.

- It is set out that there are shortcomings in the Council assessment in so far as
 the development was not screened for EIA, no financial contribution or
 development bond were attached, no restriction on working hours, no weed
 control measures, no archaeology conditions and no landscape mitigation
 measures included in the recommendation to grant.
- It is argued that attitudes have changed towards peatland development in line with Climate Change and peatlands are acknowledged as productive ecosystems. Reference is made to the National Peatlands Strategy (NPWSs, 2015) and the Climate Action Plan (Govt. of Ireland, 2019).
- It is set out that the Glint and Glare report is unclear in terms of whether the conclusion makes allowances for effect on overtaking manoeuvres or for impact on motorists turning onto or off the R347.
- There are 10 residential properties within 60metres of the site. The
 development will impact negatively on residential amenity in terms of loss of
 visual amenity, noise and dust during the seven-month construction phase
 and loss of property value.
- The site boundaries proposed offer no visual screening and there is
 insufficient space between the boundary and internal roads to plant a
 hedgerow. It is argued that the sensitivity of the receptor (local resident) is
 high and not medium as set out the Landscape and Visual Impact
 Assessment submitted. The solar farm will transform the character of the view
 and while the impact might be described as short term and reversible, the
 lifetime of the permission is significant.

6.2. Applicant Response

Visual Impact

- A Landscape and Visual Impact Assessment (LVIA) and photomontages accompanied the planning application. The magnitude of change and visual effect was found to be low to medium
- The landscaping plan submitted includes tree planting and hedgerow enhancement.

- It is set out that the site is screened by existing hedgerows and the natural landcover reduces site visibility.
- An appropriate buffer distance between the development and neighbouring residential properties has been observed in accordance with best practice measurers. The location height and orientation of the panels have been considered to ensure there is not impact on existing residential amenity.

Environmental Impact

 It is set out that the is no requirement for EIA to be carried out for solar development in Ireland in accordance with planning legislation.

Glint and Glare

- A Glint and Glare Assessment (GGA) accompanied the planning application and examined the impacts on local receptors including 146 no. road receptor points.
- It is noted that there is potential for glare from certain road receptors, but the level of glare will not be hazardous to vehicle users, pedestrians, or cyclists.
- It is further noted that glare is temporal in nature and is associated with the track of the sun.

Biodiversity, Water Quality, Pollution and Disposal

- A biodiversity Management Plan accompanied the planning application. It
 is set out that the additional planting and grassland management and
 faunal habitat enhancement will result in a biodiversity net gain.
- It is noted that there is no Japanese knotweed on the site.
- A construction and Environmental Management Plan accompanied the planning application. The site will be subject to frequent monitoring and maintenance. Damage or degradation of, any project component will be identified at an early stage and the relevant component will be repaired /replaced. After 30 years the site will be decommissioned and restored in accordance with best practice.

Note: The issue of *Biodiversity, Water Quality, Pollution and Disposal* were issued raised by two other appellants who subsequently withdrew their appeal. I have included reference to the above for clarity.

Devaluation of Property

 It is set out that there is no evidence to suggests that solar farms impact on property value.

Public Consultation

It is set out that the applicant did engage with the public in advance of the
planning application by means of hand delivering an information booklet.
 In addition, the public were afforded their statutory right to make
comments under the Planning ang Development Act 2000 (as amended)

Community Gain

 The site will not be used for agricultural purposes and therefore will not be subject to artificial fertilisers or slurry spreading etc.

Site Conditions

It is set out that the development will undertake a detailed site
investigation survey which will inform construction methodology. The
proposed layout and elevations are based on informed assumptions.
However, this may change because of the availability of equipment and
technological advances. In this regard it is stated that the applicant will
accept a condition that final detailed design layout and elevation be
submitted for approval prior to construction.

Carbon Budget Assessment

 Ireland has a commitment to meeting its targets for reducing the Country's carbon footprint and a key component of this strategy is renewable energy generation.

Conclusion

In addition to the above, it is noted that the development complies with the relevant provisions of the Galway County Development Plan 2015-2021 and national and local planning policies and objectives.

6.3. Planning Authority Response

None

7.0 Assessment

- 7.1. The main issues in this appeal relate to the grounds of appeal. Appropriate Assessment requirements are also considered. I am satisfied that no other substantial planning issues arise. The main issues can be dealt with under the following headings:
 - Principle of Development
 - Soil topology, Construction Methodology and Maintenance
 - Visual Amenity
 - Glint and Glare
 - Residential Amenity
 - Other Matters
 - Appropriate Assessment

7.2. Principle of Development

- 7.2.1. The Galway County Development Plan, 2015 states that it is the policy of Galway County to support the implementation of the *Governments White Paper Delivering a Sustainable Energy Future for Ireland.* Section 7.4.6 Solar Energy of the Development Plan sets out that the Council will encourage solar farm initiatives. This is reinforced under Policy ER1, ER2 and Objectives ER1 and ER4.
- 7.2.2. The National Planning Framework, Irelands Transition to a Low Carbon Energy Future 2015-2030 (White Paper), the Regional Spatial and Economic Strategy for the Northern and Western Regional Assembly is supportive of the development of renewable energy technology particularly in the context of reducing the carbon emission of the country and meeting renewable energy production targets. The appellant has expressed concern that there is no carbon budget assessment as part of the application. The development is a renewable energy source and as such is in accordance with Ireland's commitment to meeting its targets for reducing the County's carbon footprint, a key component of this strategy is renewable energy generation. The proposed development is therefore supported by national, regional, and local policies in terms of renewable energy and in my opinion would contribute to the diversity of sources of energy supply and the security of supply.

- 7.2.3. The subject site is located on unzoned lands ca. 3km south of Tuam. The general area is rural in character however there are an number of commercial activities in the vicinity of the site including an active quarry and Moylough Concrete Products. The site constitutes two land parcels located to the east and west of the R347. The lands to the west of the R347 proposes access form L6141 with the section to the east of the R347 accessing from an existing private road and running long the entirety of the northern section of the site. Internal access tracks will be approx. 4m in width. A Traffic and Transport Assessment accompanied the planning application. All significant traffic generated will be during the construction phase of the development which is indicated as 32 weeks (7 months) with an average of 6 HGV movements to and from the site on any one day. It is estimated that the increase in traffic will be slight and temporary. I note the planning authority raised no concerns in terms of site access and traffic movements associated with the development. I have no concerns in this regard.
- 7.2.4. In my view having regard to the temporary nature and the design and layout of the proposed development it would be appropriate at this location and would be compatible with policy objectives.

7.3. Soil Typology, Construction Methodology and Maintenance

- 7.3.1. The appellant argues that the applicant has not undertaken a detailed investigation of the overburden material and geology to determine suitable method of construction.
- 7.3.2. Following a request for further information the applicant indicated that the site is suitable for standard screw piles at approx. 1.6m because the soils are clay and as such the ground has good soil cohesiveness. The appellant argues that this implies that soils and subsoil depths are standard across the site which is unlikely.
- 7.3.3. The southern part of the site to the east of the R347 and north of the turf bog is dominated by improved agricultural grasslands with sparse intermittent shrubs at the edge of the fields. The northern part of the site to the west of the R347 is a mixture of grassed pastoral fields and some unused fields that have started to revert to scrubland. Mainly hedgerow and tree lines form the field boundaries. The Flood Risk Assessment submitted with the application identifies that site within Flood Zone C and sets out that the site is not at risk of flooding and is likely to have negligible

- impact on flood storage in the area. The ground conditions would therefore appear suitable for the development.
- 7.3.4. Notwithstanding the above, the applicant states that the development will undertake a detailed site investigation survey which will inform construction methodology. The proposed layout and elevations are based on informed assumptions. However, this may change because of the availability of equipment and technological advances. In this regard the applicant will accept a condition that final detailed design layout and elevation be submitted for approval prior to construction, should the Board be minded to grant planning permission. I consider this an acceptable approach in the context of the development.
- 7.3.5. A construction and Environmental Management Plan accompanied the planning application. The site will be subject to frequent monitoring and maintenance. Damage or degradation of, any project component will be identified at an early stage and the relevant component will be repaired /replaced. After 30 years the site will be decommissioned and restored in accordance with best practice.

7.4. Visual Amenity

- 7.4.1. The site is not located within a designated scenic or amenity area. The site is located within LCA Landscape Area 5 'Northeast Galway (Tuam Environs)' in the County Galway Landscape Character Assessment. The site is located within a landscape designated as Class 1 in the development plan, where it is an objective to protect these lands from inappropriate development. Policy LCM1 states that regard must be given to the landscape sensitivity classification of sites in the consideration of any significant development proposals and, where necessary, require a Landscape and Visual Impact Assessment (LVIA) to accompany such proposals. A Visual Impact Assessment and photomontages were submitted with the planning application.
- 7.4.2. The appellant argue that the boundaries proposed offer no visual screening and there is insufficient space between the boundary and internal roads to plant a hedgerow. It is argued that the sensitivity of the receptor (local resident) is high and not medium as set out the Landscape and Visual Impact Assessment submitted. It is set out that the solar farm will transform the character of the view and while the impact might be described as short term and reversible, the lifetime of the permission is significant at 10 + 30 years.

- 7.4.3. The Landscape and Visual Impact Assessment and Photomontages, which provides 5 no. viewpoints of the subject site, were submitted with the application. The assessment indicates that the magnitude of change and visual effect was found to be low to medium in so far as the site is screened by existing hedgerows and the natural landcover reduces site visibility. A landscape plan accompanied the planning application, to mitigate against any negative visual impact it is proposed to provide additional planting prior to construction. The existing and proposed hedgerows and landscaping would have a height of between 2m -3m and will be reinforced in exposed locations with additional tree planting. The eastern site is relatively flat and appropriate boundary planting will, in my opinion significantly reduce the visual impact. The western site is more exposed from the southern approach to the site as the site rises from south to north. This section of the site is located to the south of the quarry and north of the active turf bog. It is proposed to screen the site from the R347 with additional mixed native hedgerow and trees. Subject to additional screening of all western site boundaries addressing the R347 including the boundary to the extreme southwest of the site adjacent to the bog, I am satisfied that owing to the height of the panels at 2.2m above the ground level that the development will be appropriately screened and will not represent a visual impact in the area.
- 7.4.4. The dominant landscape character of the area is the field patterns and adjacent cutover peatland, The development has been designed such that there are no changes to the existing vegetation including hedgerows, subject to the implementation of appropriate landscaping and the biodiversity management plan which also accompanied the application. I am satisfied that visual impact will be negligible.

7.5. Glint and Glare

- 7.5.1. Concerns were raised that the proposed development would generate glint and glare, particular concerns was raised as to whether the conclusion makes allowances for the effect on overtaking manoeuvres or for impact on motorists turning onto or off the R347.
- 7.5.2. A Glint and Glare Assessment accompanied the planning application and examined the impacts on local receptors within a 1km radius study area (excluding lands to the north of the proposed arrays). The report assessed the potential glint and glare impacts associated with the development with regard to local dwellings and local

- roads. It is noted that the site lies outside aviation receptors. The M17 motorway passes through the western extents of the study area while the R347 passes between the proposed arrays.
- 7.5.3. A total of 146 road receptor points were assessed. On site verification of digital terrain modelling determined that 48 of the road receptors points have potential to be materially affected by glint and glare. When proposed mitigation was incorporated into the digital surface model (DSM) analysis, results revealed 32 road receptor points have the potential to experience reflectance. These road receptors were examined in further detail. It noted that there is potential for glare from certain road receptors, but the level of glare will not be hazardous to vehicle users, pedestrians, or cyclists. It is further noted that glare is temporal in nature and is associated with the track of the sun. The PV panels have a southern orientation and are located in a relatively flat landscape, therefore, the potential glare impacts are typically limited to the months of March September and that this broadly represents the season where foliage is present on vegetation. It is set out that on most roads the potential to notice some glare will be off set greater that 50 degrees to the direction of travel and for this reason residual hazardous impacts are unlikely at these road receptor points.
- 7.5.4. To mitigate against any potential negative impacts, it is proposed to provide additional landscaping to screen the development and prevent any hazardous effects of glint and glare. I am satisfied that potential negative impact from glint and glare on the surrounding road network is negligible, and the implementation of the proposed mitigation measures, in my opinion, the proposed development would not result in a traffic hazard.
- 7.5.5. With regard to local dwellings the assessment considered 20 no. residential units within a 1km radius of the site. The report found that 3 no. houses had the potential to be affected by glint and glare, however, when existing screening was considered only 2 no. houses had the potential to be affected by glint and glare. The 2 no. houses are located 300m and 450m respectively from the site. The worst-case scenario indicated that the houses would have the potential to be impacted by glint and glare taking screening into account for between 8 minutes per days for 77 days for H10 and 24 minutes per day for 165 days a year for H19. It is proposed to provide additional screening which would mitigate glint and glare at the ground floor level of these houses. Having regard to the distance of the properties from the

appeal site, the limited potential period for glint and glare to occur and the proposed screening, it is my view that the proposed development would not result in a significant nuisance to surrounding dwellings.

7.6. Residential Amenity

- 7.6.1. The proposed panels will maintain a maximum height of 2.2m above the terrain and will be tilted up to 20 degrees from horizontal towards the south. There are a number of houses and commercial / agricultural buildings in close proximity to the subject site. The nearest dwelling is located to the immediate west and south of the northern portion of the site and is bound on two sides by the development. At its closest point, the arrays are approx. 22m from the site boundary of this dwelling. A further five dwellings are located approx. 112m west of the northern portion of the site, in addition to a further nine houses within 270m of the site. The closet dwelling to the southern portion of the site is located approx. 30m to the immediate west on the opposite side of the R347. Having regard to the separation distances and the height of the panels. it is considered that they would not negatively impact on the existing residential amenities.
- 7.6.2. The proposed compound is located in the southwest of the northern portion of the site removed from any adjoining residential development and screened from the public road by existing roadside boundary tress and hedgerow. The compound consists of a 70sqm control building with a ridge height of 4.9m, inverter units, underground cable ducts, hardstanding area and is surrounded by a 2.950m high palisade fence. Having regard to the separation distances and the limited height of the substation, it is considered that it would not negatively impact on the existing residential amenities, in terms of overshadowing or overbearing impact.
- 7.6.3. Concerns were also raised regarding the potential for noise disturbance generated by the development. The PV panels do not generate any noise during the operation phase and that there are no moving parts. Noise would be emitted from the inverter / transformers. As solar farms only operate during daylight hours there would be no noise during the evening or night. I further note that the construction phase of the development is short and any disturbance cause by additional traffic, construction noise and vibrations will be temporary.

7.7. Other Matters

Public Consultation

7.7.1. The public notices associated with the development were in accordance with the requirements of Planning and Development Regulations 2001 (as amended). There is no obligation on the applicant to discuss the development with the appellant. The planning system is designed such that the public are informed about planning applications by way of public notices.

Archaeology

7.7.2. An Archaeology and Cultural Heritage Assessment accompanied the planning application. The report notes that there are no recorded monuments within the appeal site. Forty-two recorded monument are identified within 2km of the site. The report recommends a programme of pre-development testing be undertaken of the areas of the proposed compounds electrical equipment area, roads, and cable trenches. I note the planning authority did not attach a planning condition relating to test trenching. Owing to the scale of the development and the proximity of numerous recorded monuments should the Board by minded to grant planning permission, I consider a suitable condition should be attached to any grant of planning permission.

Development Contribution and Development Bond

7.7.3. I have reviewed the Galway County Council Development Contribution Scheme 2016 (as amended 2019), the provision of solar farm is not listed under Part 4 *Exemption* of the scheme. Therefore, should the Bord by minded to grant planning permission, I consider the imposition of development contribution appropriate in this instance, in addition to a development bond to ensure the site is appropriately restored following the decommissioning of the development.

7.8. Appropriate Assessment

Stage 1 Screening

7.8.1. The proposed development would not be located within an area covered by any European site designations and the works are not relevant to the maintenance of any such sites. A Natura Impact Statement and An Ecological Assessment accompanied the application documentation received by the Board. The NIS submitted provides a description of the development. The site location and description of the project are set out in Section 3. It is noted that The Grange River flows 160m to the south of the southern site boundary of the southern land parcel west of the R347 and that the site is connected via drainage ditches to the River. The Grange River is designated as part of Lough Corrib SAC.

7.8.2. Figures 3.1 of the NIS illustrates the SPA's and SAC's within 15km of the site.

Conservation Objectives: to maintain or restore the favourable conservation condition of the Annex 1 habitat(s) and / or the Annex II species for which the SAC has been selected.

European Site	Site	Relevant	Distance
	Code	Ql's and Cl's	
Lough Corrib SAC	000297	Oligotrophic waters containing	c.140m
		very few minerals of sandy	
		plains (Littorelletalia uniflorae)	
		[3110]	
		Oligotrophic to mesotrophic	
		standing waters with	
		vegetation of the Littorelletea	
		uniflorae and/or Isoeto-	
		Nanojuncetea [3130]	
		Hard oligo-mesotrophic waters	
		with benthic vegetation of	
		Chara spp. [3140]	
		Water courses of plain to	
		montane levels with the	
		Ranunculion fluitantis and	
		Callitricho-Batrachion	
		vegetation [3260]	
		Semi-natural dry grasslands	
		and scrubland facies on	
		calcareous substrates	

(Festuco-Brometalia) (* important orchid sites) [6210]

Molinia meadows on calcareous, peaty or clayeysilt-laden soils (Molinion caeruleae) [6410]

Active raised bogs [7110]

Degraded raised bogs still capable of natural regeneration [7120]

Depressions on peat substrates of the Rhynchosporion [7150]

Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210]

Petrifying springs with tufa formation (Cratoneurion)
[7220]

Alkaline fens [7230]

Limestone pavements [8240]

Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]

Bog woodland [91D0]

Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]

		Austropotamobius pallipes (White-clawed Crayfish) [1092] Petromyzon marinus (Sea Lamprey) [1095] Lampetra planeri (Brook Lamprey) [1096] Salmo salar (Salmon) [1106] Rhinolophus hipposideros (Lesser Horseshoe Bat) [1303] Lutra lutra (Otter) [1355] Najas flexilis (Slender Naiad) [1833] Hamatocaulis vernicosus (Slender Green Feather-moss)	
Lough Levally SAC	000295	[6216] Turloughs	9km
Monivea Bog SAC	002352	Active raised bogs [7110]Degraded raised bogs still capable of natural regeneration [7120]Depressions on peat substrates of the Rhynchosporion [7150]	14.4km
Derrinlough (Cloonkeenleananode) Bog SAC	002197	Degraded raised bogs still capable of natural regeneration [7120]	14.6km
Lough Corrib SPA	004042	Gadwall (Anas strepera) [A051]Shoveler (Anas clypeata) [A056]Pochard (Aythya ferina) [A059]Tufted	14.7km

Duck (Aythya fuligula) [A061]Common Scoter (Melanitta nigra) [A065]Hen Harrier (Circus cyaneus) [A082]Coot (Fulica atra) [A125Golden Plover (Pluvialis apricaria) [A140]Black-headed Gull (Chroicocephalus ridibundus) [A179]Common Gull (Larus canus) [A182]Common Tern (Sterna hirundo) [A193]Arctic Tern (Sterna paradisaea) [A194]Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]Wetland and Waterbirds [A999

- 7.8.5. The Stage 1 AA screening report concluded that the site is not located within any European Designed Site. The AA screening concludes that Levally Lough SAC, Monivea Bog SAC and Derrinmlough SAC can be excluded from further assessment for the following reasons:
 - Levally Lough SAC is in a separate hydrological catchment and although in the same groundwater catchment is located upstream of the proposed development. There is no connectivity between the site and Levally Lough SAC.
 - Monivea Bog SAC is designated for terrestrial habitats. Based on the lack of connectivity between the site and the SAC, the site is not in the zone of likely impact.
 - Derrinmlough SAC is designated for terrestrial habitats. Based on the lack
 of connectivity between the site and the SAC, the site is not in the zone of
 likely impact.

- 7.8.6. Indirect impacts on the following qualifying interest of Lough Corrib SAC can be ruled out due to the terrestrial nature of the habitats/species, the distance from the proposed and the absence of a complete source-path-receptor chain:
 - Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia)
 - Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)
 - Active raised bogs
 - Degraded raised bogs still capable of natural regeneration
 - Calcareous fens with Cladium mariscus and species of the Caricion davallianae
 - Petrifying springs with tufa formation (Cratoneurion)
 - Alkaline fens
 - Limestone pavements
 - Old sessile oak woods with Ilex and Blechnum in the British Isles
 - Bog woodland
 - Najas flexilis (Slender Naiad)
 - Hamatocaulis vernicosus (Slender Green Feather-moss)
- 7.8.7. The development is outside of the foraging range for the Bat population of the SAC. It is further noted that lesser horseshoe bat summer roost for which Lough Corrib SAC was designated is located approx. 26km form the development site and outside of core foraging range (2.5km).
- 7.8.8. The conservation objective for freshwater pearl mussel in the SAC applies to the Ownerriff River located in a separate sub-catchment. Therefore, there is no pathways or effect on the freshwater pearl.
- 7.8.9. Table 3.1 highlights the hydrological pathway from the appeal site to Lough Corrib SAC and Lough Corrib SPA. Potential indirect effects on the Lough Corrib SAC relates to sediment laden surface water run-off entering the drainage ditch to the south of the site, and ultimately entering Lough Corrib SAC. In the absence of mitigation measures, it is not possible to rule out impacts on water quality which could negatively impact on water sensitive qualifying interests of the SAC and SPA

and potential for disturbance and displacement related impacts to *Otter* during construction, operational and decommissioning phases. In the absence of mitigation measures, it is not possible to rule out impacts on water quality which could negatively impact on water sensitive qualifying interests of Lough Corrib SAC and Lough Corrib SPA.

Conclusion on Screening

- 7.8.10. I have outlined in the table above the sites within c.15km of the subject site and provided the Board with information on the sites within the area. However, I concur with the applicant's agent that only two site have a potential hydrogeological connection to the subject site that being: Lough Corrib SAC and Lough Corrib SPA.
- 7.8.11. Therefore, it is reasonable to conclude that on the basis of the information on the file which I consider adequate that the proposed development either individually or in combination with other plans or projects would not be likely to have a significant effect on European Site Lough Levally SAC (000295), Monivea Bog SAC (002352) and Derrinlough (Cloonkeenleananode) Bog SAC (002197)
- 7.8.12. On the basis of the information on the file, which I consider adequate in order to issue a screening determination, it is not possible to conclude that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on European Site 000297 and 004042, or any other European site, in view of the site's Conservation Objectives. A Stage 2 Appropriate Assessment is therefore, required.

Appropriate Assessment – Stage 2 NIS

7.8.13. Introduction

As outlined in the screening undertaken above, this AA relates to the following site:

- Lough Corrib SAC 000297
- Lough Corrib SPA 004042

Lough Corrib SAC

7.8.14. Lough Corrib SAC located 140m south of the appeal site. The site synopsis states Lough Corrib is situated to the north of Galway city and is the second largest lake in Ireland, with an area of approximately 18,240 ha (the entire site is 20,556 ha). A number of rivers are included within the SAC as they are important for Atlantic

Salmon. These rivers include the Clare, Grange, Abbert, Sinking, Dalgan and Black to the east, as well as the Cong, Bealanabrack, Failmore, Cornamona, Drimneen and Owenriff to the west. In addition to the rivers and lake basin, adjoining areas of conservation interest, including raised bog, woodland, grassland and limestone pavement, have been incorporated into the site.

- 7.8.15. Potential Effects and Proposed Mitigation indirect effects on the Lough Corrib SAC relate to:
 - Detrimental change to water quality as a result of the proposed development as a result of sediment laden surface water run-off entering the drainage ditch on the southern site boundary which has surface water connectivity with Lough Corrib SAC and would affect the habitats or food sources for which the Lough Corrib SAC species is designated. In the absence of mitigation measures, it is not possible to rule out impacts on water quality which could negatively impact on water sensitive qualifying interests of the SAC.
 - Disturbance to Otter

Lough Corrib SPA

7.8.16. The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Greenland White-fronted Goose, Gadwall, Shoveler, Pochard, Tufted Duck, Common Scoter, Hen Harrier, Coot, Golden Plover, Black-Headed Gull, Common Gull, Common Tern and Arctic Tern. The site is also of special conservation interest for holding an assemblage of over 20,000 wintering waterbirds. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetlands & Waterbirds.

Lough Corrib is an internationally important site that regularly supports in excess of 20,000 wintering waterbirds including an internationally important population of wintering Pochard (10,107) – except where indicated all figures are five year mean peaks for the period 1995/96 to 1999/2000. The site also supports nationally important populations of wintering Greenland White-fronted Goose (160 - five year mean peak for the period 1994/95 to 1998/99), Gadwall (48), Shoveler (90), Tufted Duck (5,486), Coot (14,426) and Golden Plover (1,727). Other species which occur include Mute

- Swan (182), Whooper Swan (35), Wigeon (528), Teal (74), Mallard (155), Goldeneye (74), Lapwing (2,424) and Curlew (114).
- 7.8.17. Potential Effects and Proposed Mitigation indirect effects on the Lough Corrib SPA relate to
 - Loss of Habitat
- 7.8.18. At Section 5 of the NIS, the authors address the likely significant effects on each of the relevant features of interest within the zone of influence of the project. I propose to address the matter by way of addressing the potential effects and will reference where appropriate particular qualifying interests.

Lough Corrib SAC

Water Quality

Potential impacts include contaminants entering the waters of Lough Corrib impacting on the water quality and qualifying interest species arising from surface water run-off.

The CEMP accompanying the NIS notes that rainwater will runoff and spread out and infiltrate into the 'rain shadow' beneath the panels. There will be no alteration to local surface water hydrology. Drainage water from any works area will not be directed to any watercourse. Drainage water from works areas that might carry silt or sediment will be collected to allow attenuation and settlement prior to controlled diffuse release. It is proposed to install interceptor and collection drains either side of all access tracks to the site. These drains will be supported by attenuation and settlement systems such as level spreaders and silting ponds. Water quality will be monitored throughout the project. Adherence to best practices methodologies during the construction phase would control the release of sediments to surface water and prevent surface and ground water pollution as a result of accidental spillages or leaks.

The full implementation of mitigation measures and adherence to best practice will ensure that downstream water quality is protected. Therefore, no adverse effects on this Qualifying Interest are anticipated.

Otter

A deterioration of water quality and consequent reduction of fish stock and prey on which the otter depends, could present a threat to the population. Following a request

for further information a dedicated otter survey was conducted on the 29th November 2019. The survey which included all watercourses /drainage ditches on and adjacent to the site concluded no evidence of otter activity. No sign of otters including holts, slides, prints or sprains were recorded during the initial survey of 26th April 2019 and the second survey 29th November 2019. The report concludes that the habitats within the site are suboptimal and the site is not of significance to an otter population.

The full implementation of mitigation measures and adherence to best practice will ensure that downstream water quality is protected and commuting routes along watercourses will not be affected. Therefore, no adverse effects on this Qualifying Interest species are anticipated.

Lough Corrib SPA

Loss of Habitat

The site to the east of the R347 is covered by GSI dry calacerous neutral grassland, GA1 improved grassland, GS4 wet grassland, PB4 cutover bog, WLI hegerow and FW3 drainage ditches. The site of the west of the R347 is covered by GA1 improved grassland, PB4 cutover bog, PB4/GS4 degraded cutover bog/wet grassland mosiac, WLI hegerow, WSI scrub and FW3 drainage ditches. The habitats are considred to be of local importance (higher value), any loss will result in a neutral impact (no effect) to the conservsation objectives of the designated site. It is noted that signifcant areas of habitat within the SPA are available to all wintering waterbird species, it is not expected that any habitat fragmentation would take place. The separation distance between the site and the SPA would mean that any limited periods of disturbance caused by the works would not add to any disturbance or displacement effects that would result in lessening of species density. It is considred that there is ample overspill foragining for all relevant SCI species populations in the area. Therefore, no signifcant negative impact on local populations of Lough Corrib SPA SCI species is expected, the impacts are likely to be imperceptible.

There is no predicated construction disturbance impacts on the Lough Corrib SPA SCI species or the quiaifying intersts of the Lough Corrib SPA as a result the 14.7km buffer between the site and the desitnated sites.

Conclusion

Having regard to the nature and scale of the proposed development, notwithstanding the presence of an aquatic connection to a European site via the nearby drainage ditch, and to the nature of the qualifying interests and the conservation objections, it is my opinion that the proposed development, subject the full implementation of the mitigation measures and compliance with best practice methodologies during the construction phase, would not have the potential to affect the Lough Corrib SAC and Lough Corrib SPA and their the conservation objectives.

It can be reasonably concluded on the basis of best scientific knowledge therefore that the proposed development will not adversely affect the integrity of Lough Corrib SAC and Lough Corrib SPA.

Appropriate Assessment conclusion:

I consider it reasonable to conclude on the basis of the information on 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 000297 and 004042 and any other European site, in view of the site's Conservation Objectives.

8.0 Recommendation

It is recommended that permission be granted subject to conditions

9.0 Reasons and Considerations

Having regard to the location, nature and scale of the proposed development, to the provision of the Galway County Development Plan, 2015 and to national targets for renewable energy, it is considered that, subject to compliance with the conditions set out below, the proposed solar farm would not seriously injure the visual and residential amenities of the area, would not endanger human health, or the environment and would be acceptable in terms of landscape impacts and of traffic safety and convenience. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

10.0 Conditions

The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, as amended by the further plans and particulars submitted on the 23rd December 2019, 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 hereby permitted may be carried out shall be 10 years from the date of this Order.

Reason: Having regard to the nature of the proposed development, the Board considered it reasonable and appropriate to specify a period of the permission in excess of five years.

- 3. a) The permission shall be for a period of 30 years from the date of the commissioning of the solar array. The solar array and related ancillary structures shall then be removed unless, prior to the end of the period, planning permission shall have been granted for their retention for a further period.
 - b) Prior to commencement of development, a detailed restoration plan, including a timescale for its implementation, providing for the removal of the solar arrays, including all foundations, anchors, CCTV cameras, fencing and site access to a specific timescale, shall be submitted to, and agreed in writing with, the planning authority.
 - c) On full or partial decommissioning of the solar farm, or if the solar farm ceases operation for a period of more than one year, the solar arrays, including foundations/anchors, and all associated equipment, shall be dismantled and removed permanently from the site. The site shall be restored in accordance with this plan and all decommissioned structures shall be removed within three months of decommissioning.

Reason: To enable the planning authority to review the operation of the solar farm over the stated time period, having regard to the circumstances then prevailing, and in the interest of orderly development.

4. The final format and precise location of the proposed controls cabins, inverter units and solar PV Modules/Panels shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.

Reason: In the interests of clarity, residential amenity and protection of the environment.

5. Details of the materials, colours and textures of all the external finishes to the proposed development shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.

Reason: In the interest of visual amenity

6. No additional artificial lighting shall be installed or operated on site unless authorised by a prior grant of planning permission.

Reason: In the interests of residential amenity.

7. CCTV cameras shall be fixed and angled to face into the site and shall not be directed towards adjoining property or the road.

Reason: In the interests of residential amenity.

- 8. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within the site. In this regard, the developer shall
 - a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation relating to the proposed development,
 - b) employ a suitably-qualified archaeologist who shall monitor all site investigations and other excavation works, and
 - c) provide arrangements, acceptable to the planning authority, for the recording and for the removal of any archaeological material which the authority considers appropriate to remove.

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 site and to secure the preservation and protection of any remains that may exist within the site

- 9. a) The landscaping scheme shown on drawing no. 17027-LP-01 and drawing no. 170521-LP-02 submitted to the planning authority on the 23rd December 2019 shall be carried out within the first planting season following substantial completion of construction works.
 - b) Additional tree planting shall be implemented on the boundary to the extreme southwest (shared with the adjoining cut over bog) of the southern site to the east of the R347.

All planting shall be adequately protected from damage until established. Any plants which die, are removed or become seriously damaged or diseased, within a period of five years from the completion of the development, shall be replaced within the next planting season with others of similar size and species, unless otherwise agreed in writing with the planning authority.

Reason: In the interest of residential and visual amenity.

10. Drainage arrangements, including the disposal and attenuation of surface water, shall comply with the requirements of the planning authority for such works and services.

Reason: In the interest of public health.

11. 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 but not limited to, hours of working, noise and dust management measures, the management of construction traffic and off-site disposal of construction waste.

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

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 satisfactory

reinstatement of the site on cessation of the project 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 satisfactory reinstatement of the site.

13. The developer shall pay to the planning authority a financial contribution 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. Details of the application of the terms of the Scheme 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 the proper application of the terms of the Scheme.

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.

Irené McCormack
Planning Inspector
24th May 2020