

# Inspector's Report ABP 319398-24.

**Development** A transformer compound associated

with the permitted Tuam Energy Park (Solar Farm) adjacent to the existing

Cloon 110kv Substation.

Location In the townland of Cloonascragh,

Tuam, County Galway.

Local Authority Galway County Council

Type of Application Pre-Application under section 182E of

the Planning and Development Act

2000 (as amended).

Date of Site Inspection None required.

**Inspector** Brendan Coyne

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### 1.0 Introduction

- 1.1. The Board received a request on 26/03/2024 from Tuam Energy Park Limited to enter into a pre-application consultation under Section 182E of the Planning and Development Act 2000, as amended, in relation to development consisting of a proposed transformer compound and ancillary work associated with the permitted Tuam Energy Park solar farm, at Cloonascragh, Tuam in Co. Galway.
- 1.2. The Board's representatives met with the prospective applicant and agent on 09/05/2024. The meeting was held virtually. The applicant discussed the details of the proposed development and stated that the purpose of the proposed development is to connect the permitted solar farm to the national grid, and the proposed transformer is to form the connection between the permitted 33kV solar farm infrastructure and the 110kV substation via an under the fence cable.
- The prospective applicant requested closure of the pre-application process on the 30<sup>th</sup>
   May 2024.
- 1.4. This report provides an overview of the proposed development, relevant precedents, and legislative provisions. It also recommends that the proposed development does not constitute Strategic Infrastructure Development. A pre-application consultation meeting was held on 09/05/2024.

#### 2.0 Site and Location

2.1. The site is located in North County Galway, c. 23 km northeast of Galway City and c. 1.5 km south of Tuam, Co. Galway. The site of the proposed transformer compound covers an area of approx. 1165 sq.m and lies immediately northeast of the existing Cloon 110kV substation at Cloonascragh. The current use of the site is grassland/agricultural. The site is accessed via the local road (L6141), which connects with the regional road R347 c. 400m to the southeast. The landscape of the surrounding area is characterised by agricultural fields bordered by mature trees and hedgerows, bogs undergoing regeneration, and areas designated for commercial forestry. One-off rural dwellings and agricultural structures also characterise the surrounding area. The site's topography is relatively flat, and the site is devoid of watercourses. The Tuam Energy

Park - Solar Farm, as permitted under P.A. Ref. 20/1387, is located c. 1.1km southeast and c. 500m to the northeast of the site.

## 3.0 Proposed Development

- 3.1. The proposed development comprises a transformer compound with the following elements:
  - A control room structure measuring approximately 7.6m by 3.5m, and associated 33kV underground cabling.
  - Installation of a 110/33kV transformer, accompanied by related equipment, including a cable sealing end, surge arrestor, earth disconnect switch, current/voltage transformer, house transformer, circuit breaker, and lightning mast.
  - A grid cable connection under the fence, linking to the existing 110kV Cloon Substation.
  - A diesel generator for emergency lighting.
  - A 2-meter high palisade security fence.
  - An upgraded access point onto the local road (L6141).
  - Approximately 170 meters of 33kV underground electricity cable connecting the development to the permitted cable route of the Tuam Energy Park, which extends along the L6141 road to the east of the proposed site.
- 3.2. The purpose of this development is to facilitate the connection of the Tuam Energy Park (Planning Application Ref. 20/1387) to the national electricity grid. The Tuam Energy Park, located c. 400 meters to the southeast, will be connected to the transformer compound via the approved 33kV underground cable that runs along the L6141 road to the east of the proposed site.
- 3.3. The request is accompanied by a report and cover letter prepared by CD Consulting and several drawings.

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## 4.0 Prospective Applicant's Case

- 4.1. The prospective applicant, Tuam Energy Park Limited (TEPL), submits the following case for the proposed transformer compound adjacent to the existing Cloon 110kV Substation in Cloonascragh, Tuam, Co. Galway:
  - Purpose and Necessity: The transformer compound is designed to serve as the
    critical connection point to the national electricity network for the already permitted
    Tuam Energy Park. This solar farm is strategically positioned to enhance the
    region's renewable energy capabilities, aligning with national energy and
    environmental goals.
  - Configuration and Components: The development comprises a control room structure approximately 7.6m x 3.5m in size, associated 33kV underground cabling, a 110/33kV transformer with various ancillary equipment, and an underground cable connection to the Cloon Substation. Additional infrastructure includes a diesel generator for emergency lighting, a 2m high palisade security fence, and upgraded access to the local road (L6141).
  - Strategic Considerations: The applicant asserts that the proposed development
    does not constitute Strategic Infrastructure Development (SID) under section 182A
    of the Planning and Development Act 2000, as amended. The transformer
    compound is intended solely for connectivity between the Tuam Energy Park and
    the national grid, without introducing new nodes or altering the strategic layout of
    the existing transmission network.
  - Environmental Considerations: The selected site for the transformer compound
    has been carefully evaluated for environmental impacts, showing no significant
    ecological, geological, or hydrological constraints that would preclude
    development. This site selection process considered the absence of Europeandesignated nature conservation sites, sensitive flora and fauna, complex
    geologies, significant watercourses, and landscape or cultural heritage
    sensitivities.
  - Community and Local Impact: The location benefits from a substantial setback from residential dwellings, minimal impact on the local landscape, and compatibility

- with existing land uses, primarily agricultural. The development would integrate seamlessly with the surrounding environment without disrupting local communities.
- Regulatory Framework Compliance: In line with previous decisions by An Bord
  Pleanála on similar applications, the applicant considers that this development,
  while crucial for regional energy strategies, does not meet the thresholds set for
  SID designation. This consideration is grounded in the development's scale, its
  specific function connecting to an existing substation, and its lack of broader
  strategic impact on the national transmission network.
- 4.2. In conclusion, TEPL sought to enter pre-application consultation with An Bord Pleanála to affirm that the proposed development adheres to all pertinent regulations and aligns with sustainable planning principles without necessitating SID classification.

## 5.0 **Planning History**

- 5.1. P.A. Ref. 20/1387 Permission Granted on 23/04/2021 for a 10-year planning period for a solar PV farm in Tuam, Co. Galway, covering 62.6 hectares with photovoltaic panels on frames, 20 MV substations, 3 customer substations, and additional infrastructure including security fencing, a communications pole, CCTV, and electrical cabling. The project includes access tracks, gates, landscaping, and has a projected operational lifespan of 30 years. A Natura Impact Statement accompanied the application. The proposed development provides a total gross floor space of 673.2 sqm.
- 5.2. P.A. Ref. 18/896 Permission Granted on 03/10/2018 for the refurbishment of the Cloon to Lanesboro 110 KV Overhead line, a 65-kilometer circuit crossing through Galway, Roscommon, and a small section in Longford. The refurbishment primarily includes replacing many existing structures and components such as insulators, crossarms, and stays, and involves painting and reinforcing structures within Galway from the Cloon Substation to near Creggs village. No additional structures will be added; replacements will mirror the existing ones in height and appearance. Site works include vegetation clearance, stone wall and fence modifications, and temporary installations like silt traps and clear span bridges to protect the environment. A Natura Impact Statement was included with the application.

## 6.0 Relevant Precedents

6.1.1. The following table outlines the precedents that the prospective applicant considers to be relevant. I have also included several other similar cases for proposed development of transformers and associated infrastructure.

ABP Ref.	Development Description	Decision Date	ABP Decision
316369	A generator transformer compound and "over the fence" connection to the adjacent Rathkeale 110 kV substation, which would link to a proposed solar farm.	2023	Not SID
312013	Electrical development (transformer compound, cable connection and associated development) associated with the permitted Middleton House Solar Farm (Reg. Refs. 18135 and 21225) to the national electricity grid.	2022	Not SID
311993	Electrical development associated with a proposed BESS and Sync Con adjacent to West Offaly Power Station, Shannonbridge, Co. Offaly (BESS grid connection: 10/33kV grid transformer, surge arresters, current transformers, voltage transformers, HV circuit breaker bay; Sync Con grid connection: new 220/33kV grid transformer; 220 kV underground cables between the proposed	2022	Not SID

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311992	Electrical development associated	2022	Not SID
	with a proposed BESS and Sync Con		
	adjacent to Lough Ree Power		
	Station, Lanesborough (BESS grid		
	connection: 10/33kV grid		
	transformer, surge arresters, current		
	transformers, voltage transformers,		
	HV circuit breaker bay; Sync Con		
	grid connection: new 110/33kV grid		
	transformer; 110 kV underground		
	cables between the proposed BESS		
	and Sync Con development and		
	bays within the 110kV substation)		
307080	Electrical development (transformer	2020	Not SID
	compound, cable connection and		
	associated development) associated		Į
	with a proposed Flexible Thermal		
	Generation Facility (FlexGen) and		
	Battery Energy Storage System		
	(BESS), Dublin 4		
304794	110kV tail-feed substation and	2020	Not SID
	underground electricity cable		
	connecting the consented Coole		
	Wind Farm to the national grid at		
	Mullingar substation		
301672	110kV transformer and connection to	2018	Not SID
	the national grid which will serve as a	_	· v
	proposed battery storage facility with		
	a capacity of up to 100MW,		
	Kellistown East, Co. Carlow		
302647	110kV/220kV cable and transformer	2019	Not SID
	required to facilitate the operation of		
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four proposed rotating stabilisers,	-
Glencloosagh, Co. Kerry	

## 7.0 Legislative and Policy Context

## 7.1. Planning and Development Act 2000 (as amended)

7.2. Section 2(1) of the Act defines 'strategic infrastructure development' as including, *inter* 

"any proposed development referred to in section 182A(1)"

- 7.3. Under subsection 182A(1) of the Act, where a person (the 'undertaker') intends to carry out development comprising or for the purposes of electricity transmission, the undertaker shall prepare, or cause to be prepared, an application for approval of the development under section 182B and shall apply to the Board for such approval accordingly.
- 7.4. Subsection 182A(9) states that:
  - "... 'transmission', in relation to electricity, shall be construed in accordance with section 2(1) of the Electricity Regulation Act 1999 but, for the purposes of this section, the foregoing expression, in relation to electricity, shall also be construed as meaning the transport of electricity by means of —
  - (a) a high voltage line where the voltage would be 110 kilovolts or more, or
  - (b) an interconnector, whether ownership of the interconnector will be vested in the undertaker or not."

### 7.5. Electricity Regulation Act 1999 (as amended)

7.6. The following definitions, as set out in section 2(1) of the Electricity Regulation Act, 1999, as amended, are noted:

#### • 'Transmission':

"in relation to electricity, means the transport of electricity by means of a transmission system, that is to say a system which consists, wholly or mainly, of high voltage lines and electric plant and which is used for conveying electricity from a generating station to a substation, from one generating station to another, from one substation to another or to or from any interconnector or to final customers but shall not include any such lines which the Board1 may, from time to time, with the approval of the Commission, specify as being part of the distribution system but shall include any interconnector owned by the Board."

#### 'Electric plant':

"Means any plant, apparatus or appliance used for, or for the purposes connected with, the generation, transmission, distribution or supply of electricity other than — (a) An electric line 1 For clarity, references to the 'Board' in this instance relate to the Electricity Supply Board.

- (b) a meter used for ascertaining the quantity of electricity supplied to any premises, or
- (c) an electrical appliance under the control of a consumer"

## • 'Electric Line':

"Means any line which is used solely or amongst other things for carrying electricity for any purpose and as including—

- (a) any support for any such line, that is to say, any structure, pole or other thing in, on, by, or from which any such line may be supported, carried or suspended,
- (b) any apparatus connected to or associated with any such line for the purpose of carrying electricity or electronic communications services, and
- (c) any wire, cable, tube, pipe or similar thing (including its casing or coating) which is used for the purpose of carrying electricity or electronic communications services and which surrounds or supports or is surrounded or supported by, or is installed in close proximity to, or is supported, carried or suspended in association with, any such line."

#### 8.0 Assessment

8.1.1. The proposed development consists of a transformer compound associated with the already permitted Tuam Energy Park (solar farm), which would facilitate the stepping

- up of electricity generated from 33kV to 110kV. This transformer compound would connected to an existing 110kV underground cable that runs along the L6141 road and would be linked under the fence to the existing Cloon 110kV Substation, thereby connecting to the national grid.
- 8.1.2. The Cloon 110kV Substation plays a crucial role in the regional transmission network, as indicated by its ongoing operational status and its inclusion on EirGrid's Transmission System map 2023 (available to view at All-Island-Transmission-System-Map-December-2023 0.pdf (eirgrid.ie).
- 8.1.3. The proposed development is limited in scale and is designed to facilitate the connection of the Tuam Energy Park to the national electricity grid. It comprises a transformer compound specifically to step up electricity from 33kV to 110kV and does not constitute a new substation nor alter the function or nature of the existing Cloon Substation. Facilities like this are common in scenarios where new energy production sites, such as solar farms, require integration into the existing transmission infrastructure. This transformer compound would exclusively serve the Tuam Energy Park and would not influence the broader transmission network operations.
- 8.1.4. The proposed location for the transformer compound beside the existing Cloon Substation would have minimal environmental and community impact, as demonstrated by the comprehensive site evaluation at the pre-application consultation meeting held with the Board, which confirmed the absence of significant ecological, geological, or hydrological constraints.
- 8.1.5. Previous determinations by An Bord Pleanála on similar transformer-related developments have not classified these developments as Strategic Infrastructure Development under Section 182A of the Planning and Development 2000 (as amended). Recent cases include ABP Ref 316369-23 and ABP Ref 312013-21, where developments were intended to enhance connectivity to existing substations without constituting a new transmission function.
- 8.1.6. The proposed development seeks to effectively utilise an existing infrastructure corridor, thereby enhancing the operational connectivity of the Tuam Energy Park to the national grid without necessitating extensive new construction or significant alterations to the landscape or transmission network.

- 8.1.7. In consideration of the development's purpose, scale, incoming voltage at 33kV ((i.e. not high voltage), and regulatory framework it falls under, along with its support of strategic regional energy goals, it is my view that the proposal does not meet the criteria to be considered as a 'transmission' infrastructure. The proposed development is focused on stepping up the voltage for transmission via an existing connection, which integrates with the transmission system at Cloon Substation.
  - 8.2. Having regard to the limited nature, scale, and specific function of the proposed transformer compound, which is designed to facilitate the connection of the Tuam Energy Park to the national electricity grid; the development's failure to meet the criteria for being considered 'transmission' infrastructure; the lack of significant impact on the broader transmission network; and in consideration of similar previous determinations by the Board, it is my assessment that this development does not constitute strategic infrastructure. Consequently, I conclude that it does not fall within the scope of Section 182A of the Planning and Development Act 2000, as amended, and thus does not necessitate a direct application to the Board.

#### 9.0 Recommendation

9.1.1. I recommend that Tuam Energy Park Limited be informed that the proposed development, consisting of a proposed transformer compound and associated ancillary development, as set out in the plans and particulars received by An Bord Pleanála on the 26<sup>th</sup> March 2024, does not fall within the scope of section 182A of the Planning and Development Act 2000, as amended, and that a planning application should be made in the first instance to Galway County Council.

Brendan Coyne Planning Inspector

22<sup>nd</sup> July 2024