

Eastmont Developments Limited

Large Energy User Connection Policy

CRU Consultation Response

Eastmont Developments Limited

1 Introduction

This document provides responses to the Options for Connections Criteria section within the CRU consultation paper on Review of Large Energy Users connection policy (CRU2024001), published on 15 January 2024.

The subsequent section headings and question reference correlate to that in the above document.

2 Category of LEU to which this policy applies

2.1 Question 1:

Comments are invited from interested parties on the categories of LEU in electricity and gas to which this policy should apply (e.g. for electricity is DG10, DTS-T is appropriate, should DG6-DG9 be included, should the definition focus on capacity or usage, should a combination of criteria be applied?).

2.2 Question 2:

Please provide views on whether this proposed policy should apply to capture smaller LEUs in due course, and if so which categories of LEU and on what timeline should this occur. Please provide rationale for any views shared.

2.3 Response:

We agree with the CRU's proposal i.e. focus on Extra Large Energy Users (XLEUs).

We agree with the CRU's proposal i.e. focus on those with a peak hourly demand greater than 50MW thermal input and a connection pressure of 16 bar or above.

3 Transition Period

3.1 Question 3:

Comments are invited from interested parties on the proposed use of a transition period/glide path in relation to (i) the changing requirements at time of connection on the transition to zero real time emissions, and (ii) once connected, the changing requirements as the project transitions closer to real time zero e.g. from non-firm connection to firm connection linked to milestones.

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3.2 Response:

We appreciate the CRU's review and proposal of a glide path which will support continued investment in the Irish economy. It's important however that the end goal or the requirements at the end of the glide path be clear at the time application and connection. Developing a large energy facility requires significant capital investments and making investments to future proofing the project is difficult if all of the requirements are not well defined.

Furthermore, the glide path should be aligned with renewable fuel source availability expansion targets. In doing so will ensure realistic and achievable milestones.

It is our view that incentive schemes will accelerate investment in renewable technologies, to support the move to net zero.

3.3 Question 4:

Please provide views on the proposed timing of different options.

3.4 Response:

See response to Question 3 above noting milestones should be realistic and achievable in order to ensure they can be delivered.

3.5 Question 5:

Should optionality be maintained in allowing a menu of different options to perspective LEUs, with the end net zero emissions target becoming more binding as the glide path advances?

3.6 Response

Yes and may need to evolve over time.

4 Measuring Performance

4.1 Question 7:

Comments are invited on the approaches used to account for net zero emissions. This could include timestamped GOs or renewable certificates. Please provide reasons and rationale for any views provided.

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4.2 Response:

We support the use of timestamped GOs / similar certification; however such certification should take account of both generation from renewable sources and equally if a battery discharges renewable generation the timing of such discharge should be noted.

4.3 Question 11:

Comments are invited on the requirement for indigenous sources of renewable energy e.g. renewable electricity feeding into the Irish system and for gas secure sufficient renewable gas credits feeding into Irish system.

4.4 Response:

We support the use of indigenous sources of renewable generation and this should be a requirement.

4.5 Question 12:

Comments are invited on how the storage of renewable energy is captured by any measurement system when this stored renewable energy is used.

4.6 Response:

See response to Question 7 above.

5 Location of LEUs

5.1 Question 15:

Should new LEUs be located close to areas of renewable generation and/or storage or within energy parks? Please provide reasons and rationale for any views provided.

5.2 Response:

It is our opinion that the location of LEUs close to renewable generation is counter productive as it would not facilitate the flexibility required during low wind or solar generation.

In the case of Data Center or continuous process loads, the security of supply issue would require installed alternatives or secure connections in under-developed areas of both Gas and Electricity networks.

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5.3 Question 18:

Comments are invited from interested parties on the level of proximity between LEUs and renewable generation? How should this be measured? Should this value apply across the board or be determined on a case-by-case basis?

5.4 Response:

Well defined energy clusters is important with annual reports published by the system operators identifying current and future (example timeline 1year, 5 year, and 10 year) projected constraints.

5.5 Question 19:

If locational requirements are introduced, there is a need for better integrated planning of the network, generation and demand. What are the roles of the System Operators and enterprise agencies in supporting/facilitating this?

5.6 Response:

Network operators should clearly define energy clusters based on up to date understanding of network constraints which will always be subject to update in the future.

6 Non-firm Demand Connections

6.1 Question 21:

Should non-firm LEU connections be introduced? If so, should these non-firm connections be made on an enduring basis? Please provide reasons and rationale for any views provided.

6.2 Response:

Introducing non firm connections on an enduring basis appears to contravene the desire of department of Enterprise to attract large multinationals to set up in Ireland. It is incumbent on the CRU to find solutions to this goal in a competitive landscape and use this investment as an opportunity to showcase Ireland engineering prowess and lead the zero emission race.

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7 On-site Generation and Storage

7.1 Question 28:

Comments are invited on the use of renewable generation and storage on-site. Should this be used to match LEUs demand on-site or to provide flexibility services to the system? Please provide reasons and rationale for any views provided.

7.2 Response:

The location of large energy users has been driven by its intended use and whether the location enables that. Data centers are located for example where power, gas, and fiber are available and typically proximate to metro centers so getting to and from the data centers is convenient for the employees and customers. Solar and wind siting strategy is likely very different.

The economics of a proposed development is important as well. Data center developers are purchasing land at market prices for data center development which is far greater than solar development. The economics would likely be cost prohibitive for a data center developer to purchase land at data center prices and utilize majority of that land to generate power to meet the data center energy demand.

Furthermore, exporting to the grid when the incoming connection is on a non-firm / flexible basis will prevent data center operators from providing the level of reliability their customers require

7.3 Question 30:

Do LEUs require back-up generation for operational reasons? If so, what is the typical annual running hours of this back-up generation?

7.4 Response:

Yes. Operations of back up generation is typically for testing and maintenance only and used as a back-up resource to the power system. In an unconstrained market where there is management demand and supply (both renewable and non-renewable), LEUs would typically run their backup generations minimally.

The number of running hours will also be dependent on the extent of flexibility with non-firm / flexible grid connections.

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8 Demand Flexibility

8.1 Question 31:

What should demand flexibility services provided by new LEUs be used for, system support, decarbonisation or both? Please provide reasons and rationale for any views provided.

8.2 Response:

We would recommend demand flexibility should only be used for system support in times of low wind.

Decarbonisation by utilising the most modern systems available would be expected.

9 Energy Efficiency & District Heating

9.1 Question 37:

Comments are invited from interested parties on the use of waste heat from LEU sites.

9.2 Response:

We welcome the incorporation of waste heat re-use from LEU sites, however policies are required to agree:

- Proximity of LEU to existing district heating networks
- Metering and incorporation in the net zero calculation
- Grade heat expected to be exported. Data centers export low grade heat, which will require further heating (by others) to meet district heating scheme temperature grades. As a consequence, heat export from DC developments are rarely realised.

10 Gas

10.1 Question 40:

Comments are invited from interested parties on the use of biomethane towards decarbonisation of LEU demand. Do respondents have a view on the volume of indigenous biomethane that can be produced annually? Do respondents have a view on the scalability of using biomethane towards the decarbonisation of LEU demand?

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10.2 Response:

We welcome and support the use of biomethane to decarbonise LEU demand but would caveat the supply of same is limited and would require development of that industry noting the ongoing consultation on bio methane currently under way which may assist in this.

10.3 Question 45:

Comments are invited on the introduction of non-firm/interruptible gas connections for LEUs (at exit point). Do respondents have a view on whether these non-firm/interruptible connections can help alleviate emissions? Please provide reasons and rationale for any views provided.

10.4 Response:

In a data center application, gas generation as primary power source is usually only considered where the incoming electrical utility is provided on a non-firm basis.

When both incoming electrical and gas connections are offered on a non-firm basis, this introduces a huge amount uncertainty and will not be acceptable to end customers.

11 Roles of other organisations

11.1 Question 52:

Comments are invited from interested parties on the roles of other organisations in the different approaches considered in this paper.

11.2 Response:

Our hope is that the outcome of this consultation will align with the Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy issued in July 2022 which will then allow for all operators to have a clear structure that will allow for the interactions of all stakeholders with the system operators and the CRU to work off one policy that is both understood by all parties and works in practice.

12 General Comments

12.1 Applicability of New Policies

There are a number of applications that have been submitted prior to CRU's Call for Evidence Paper published on June 23, 2023. It is important that clarity be achieved expeditiously and pending application to confirm they are exempt from new policies as was stated on the CRU discussion with stakeholder's webinar recently.

12.2 Renewable Energy Clusters

We support the definition and use of renewable energy clusters as a solution to individual Large Energy Users being required to be net zero at their meter. There is however a need to recognise realistic roadmap to net zero due to availability of indigenous renewable generation.

12.3 Firm vs. Non Firm Power and Gas.

Our view is that it's important to not have a one size fit all model. In unconstrained areas, there should be no reason not to offer firm power and gas contracts. Furthermore, the ability to tolerate flexible connections in a data centre implementation will rely largely on whether one of the two incoming supplies can be provided on a firm basis.

In addition, a significant factor in firm vs flexible are the consequential footprint requirements to comply with export and fuel storage requirements.

The assessment of whether a firm or flexible connection is appropriate for a LEU should be cognisant of the nature of both fuel sources.

12.4 Transition Period

We support the recognition of policy goals and what's market ready. We support carbon free generation but sustainable resources, supply, and infrastructure for renewable fuels like hydrogen are not readily available in Ireland. With that, we support a transition period.

12.5 Path Forward

How will the CRU and GNI proceed to enable the path forward for Large Energy Users? Timeline would be greatly appreciated.