



Submission to CRU consultation regarding proposed Direction to the System Operators related to Data Centre grid connections (CRU/21/060)

Introduction

The Department of Enterprise, Trade and Employment (DETE) welcomes the opportunity to engage with the Commission for Regulation of Utilities (CRU) on this topic, which is important to enterprise policy, economic development and our electricity system.

DETE is aware that the CRU and EirGrid have advised the Department for Environment, Climate and Communications (DECC) that there is a significant short- to medium-term risk to electricity security of supply. Naturally, security of supply for all electricity customers is a key economic and competitiveness concern for DETE, that could have significant implications for Ireland's reputation internationally. Availability of electricity 24/7 is of paramount importance and should inform all decision making. In this context, DETE is acutely aware of the challenges this significant demand growth poses for the management of Ireland's grid, and in particular the capacity constraints faced in the Dublin region as a result of demand, principally from data centres. We are also concerned about the serious implications that security of supply constraints raises regarding decision making for investment, Ireland reputation and competitiveness.

Data centres are a significant feature of Ireland's electricity demand (11% of demand in 2020) with all indications being that this sector is likely to continue to grow and seek to connect new demands to the grid. The CRU's consultation on data centre connection policy is therefore an appropriate and sensible approach to addressing the need to ensure security of supply in the short and medium terms while facilitating sensible and sustainable connection of new data centre demand in quantity, quality and locations, that best serve the grid, data centre customers and all electricity users well into the future. In welcoming this consultation, DETE further notes that management of new data centre demand is only one aspect of the steps necessary to ensure sustainable security of supply; with steps to be taken in connecting new supply, higher levels of grid system services and planning for more successful supply capacity auction processes all necessary and complementary responses.

DETE supports the CRU's assessment that, given the circumstances that we are now in, that the challenges posed by unconstrained demand growth, and ongoing security of supply concerns, in combination mean that a 'do nothing' option would not be sensible at this juncture. Further, DETE agrees that a moratorium on new data centres connections would be disproportionate and inequitable given the positive role they play in economic development, that they are only a sub-sector of large energy users (LEUs) and the planned, predictable nature of their electricity demand.

DETE therefore provides the following comments for the CRU's consideration in setting out a proportionate, sustainable data centre connection policy. Further, IDA Ireland, an agency of DETE, will separately provide input on the basis of their engagement with clients in the data centre sector and their expertise in attracting foreign direct investment to Ireland.

Data centres are important economic investments

Data centres are a core infrastructure enabler of a technology-rich, innovative economy, which, in turn, places Ireland on the global map as a location of choice for a broad range of sectors and



activities that are increasingly reliant on digital capabilities including manufacturing, animation, retail, medical devices and financial services.

Data centres facilitate many other activities across the European and global economy by enabling critical functions such as e-commerce, payroll processing, securities transactions, banking, fraud protection, telecommunications, content streaming, and disaster recovery services. Indeed, the important economic and societal role of data services, such as, video calls, streaming services, and other remote work technology has become ever more apparent during the COVID-19 pandemic. Data centres securely store and manage the data which keeps much of our information-based economy and society moving.

DETE will commit, in Climate Action Plan 2021, to revising the 'Government Statement on the Role of Data Centres in Enterprise Policy' to reflect this ambition. DETE, working closely with DECC, proposes to set out the measures required to ensure this sizeable energy demand is mobilised to drive decarbonisation, to deliver regional economic opportunities and to drive research, development and innovation in the sector that can assist in providing increasingly efficient, flexible and future-proofed infrastructure for Ireland's digital, knowledge-based economy. The outcome of the CRU's connection policy consultation and decision, as well as Eirgrid's *Shaping Our Electricity Future* analysis, would be a key input to that revised Statement, and we welcome ongoing frank and collaborative engagement on our shared objectives in this regard.

DETE therefore argue that data centre connection policy should continue to facilitate sustainable investments in the data centre sector, and thereby support ongoing development as our knowledge economy, manufacturing 4.0 and digitalisation of our enterprise base continues to rely on data and data services. Further, a revised connection policy for data centres should be complemented by a clear plan to facilitate future demand growth, capacity availability and a LEU location price/market signal with as comprehensive and detailed information as possible on the scope for new demand connections and the scale of available capacity over a clear timeframe, and locations in which this capacity will be available.

Data centres can be a catalyst for decarbonisation

Decarbonising our electricity is central to decarbonising our economy; it is as important for our competitiveness, future growth and development prospects, as it is to our environmental sustainability. The sustainability and competitiveness of our economy, and therefore the prosperity of our society, relies on a well-planned, well communicated and deliverable transition of our energy system to carbon neutrality or zero carbon.

It is notable that all the large multinationals with data centres in Ireland have committed to becoming 100% renewably powered, some within the coming decade. Indeed, the sector has demonstrated significant interest in being 'part of the solution' and to play a positive role in Ireland's electricity system. DETE proposes that the grid operators harness that intent to assist Ireland with achieving our renewable energy targets and use our data centre sector as a catalyst, rather than an impediment, to decarbonising our power system.

Decarbonising the electricity grid requires very high levels of renewables generation, but it will also require a grid and demand profile that can optimise its use of those renewables and bring down the average carbon intensity of each Kwh throughout the day, season and year. DETE recognises that demand flexibility, and the capacity for responsive demand or demand re-profiling have an



important role to play in the grid of the future. From our engagement with businesses, and LEUs in particular, it is clear that many are willing and interested in decarbonising their energy use. Connection policy should recognise the positive role data centres can play in bringing a level of demand flexibility, grid services such as on-site generation or storage, and Corporate Power Purchase Agreement (CPPA) demand to our electricity market and grid.

Connection policy should facilitate cost effective development of the grid

Even as the grid is decarbonised, it is clear that we will see significant electricity demand growth across most customer-types. This will arise in part from ambitious Government targets to electrify transport and space heating in residential and commercial buildings, as well as electrification of manufacturing processes. The costs of decarbonising the electricity grid are set to be significant – the required scale of investments in the grid, and subsidies to be provided for renewable generation, are going to be significant and enduring. These costs will ultimately be borne by customers through the PSO levy, Transmission Use of System Charges (TUoS), Distribution Use of System (DUoS) and retail market prices. A reasonable level of new connections and efficient demand growth will be appropriate and necessary to allow these costs to be spread equitably between new and existing customers; financing investment in our energy infrastructure while maintaining electricity prices that would not disincentivise the electrification of transport and heating sectors.

Data centres and Security of Supply

While data centre demand growth is a significant feature of the Irish energy system, this demand is predictable, stable and well-understood by the time it connects to the grid. The significant growth in data centre demand has been visible and expected, evidenced by the level of connection requests and engagement with the planning process. Short-term security of supply concerns do not therefore arise primarily due to unanticipated demand growth, but through a shortfall in expected available supply. It is important that LEUs, particularly data centres, do not become a ‘scapegoat’ for wider grid challenges. An assessment of data centre demand connection is appropriate given the constraints facing the grid, but the CRU should acknowledge clearly that demand management is only one side of the mitigation response required to address security of supply concerns. Responses from the grid operators must also include rigorous generation market assessment and industry engagement in advance of planning and design of capacity auctions. All measures necessary to attract and enable the required level of supply, and ensure competitive tension between suppliers, should be identified and implemented.

Conclusion

DETE again welcomes the opportunity to engage with the CRU on these issues, and requests due consideration be given to the points raised in directing the grid operators regarding prioritisation of any criteria or requirements as part of data centre connection applications.

DETE and its agencies will continue to engage with the CRU and all stakeholders to ensure that Ireland is planning appropriately for new demand in the context of national electrification and decarbonisation ambitions, facilitating a growing enterprise and data centre sector and ensuring that we are cultivating future energy markets and infrastructure that deliver smart and competitively priced services to electricity customers.