

SEM-21-027

**" Proposed Decision on Treatment
of New Renewable Units in the
SEM"**

A Submission by
Dublin Waste to Energy

9th July 2021

Dublin Waste to Energy - Key Points

-) Dublin Waste to Energy's primary business is Waste Treatment.
-) Dispatch down of Waste to Energy plant has serious ramifications for the Waste Sector.
-) The RA's recommended approach to curtailment will likely create a new priority dispatch hierarchy, perhaps inadvertently.
-) Generators, such as HE-CHP and Waste to Energy, who do not have priority over other forms of renewables will now be dispatched behind non-priority dispatch plant
-) It is not acceptable for current holders of priority dispatch to make way for generators who do not have priority.

Executive Summary

Dublin Waste to Energy's primary business is waste treatment

Dublin Waste to Energy ("DWTE") is deemed an essential service for both waste treatment and energy production. The facility is a critical part of the National Waste Infrastructure (processing 35% of the residual waste produced in Ireland).

The facility is an R1 recovery facility which is paramount for Ireland to meet its recovery rates for waste management. The requirement to meet Article 12 & 13 of the Electricity Regulation must align with requirements to meet other EU legislation. In addition, the Regulatory Authorities must avoid interpreting Articles 12 & 13 in a way that could put Ireland in breach of other obligations under EU law.

Dispatch down of the facility has major consequences for the waste industry

Currently:

-) to facilitate non-synchronous renewables, Dublin Waste to Energy is dispatched down *despite itself being primarily renewable*.
-) the plant can be also/further dispatched down to make way for a handful of CCGTs in the Dublin region to meet the TSO's local reserve requirements, *despite being connected in Dublin*.

DWTE is not aware of any other technologies that are treated in this way.

Downward dispatch of a Waste to Energy ("WtE") facility is significantly different from dispatch down of other plant on the system, in that it hinders the provision of another essential service. The consequence to the waste industry of dispatch down is far greater in magnitude to the impediment to the power generation industry to facilitate baseload operation of WtE.

To that end, dispatch down of WtE plant must be prevented

Current dispatch of the Dublin Waste to Energy plant creates plant issues

With large volumes of new renewable generation connecting to the Electricity System, Waste to Energy plant are consistently requested to dispatch down to make way for renewable sources higher up the priority dispatch hierarchy. It is not uncommon for Waste to Energy plant, designed for baseload operation, to cycle down to its minimum load two or three times overnight, often with only a few minutes between instructions. This dispatch regime is not sustainable and no other European country dispatches Waste to Energy in this way, due to the need to protect essential waste processing capacity.

DWTE has reduced waste processing capacity directly because of dispatch down, so given the current rule set, effectively the electricity market has superiority over waste processing capacity. Rules relating to dispatch and redispatch must adhere to not just the EU's Clean Energy Package but also the Circular Economy Action Plan which has implications for waste policy. Failure to meet certain EU targets for waste will lead to significant fines from Europe for non-compliance.

Implementation of New Projects without Priority Dispatch

Once renewable projects are commissioned without priority dispatch, should the RA's preferred approach be implemented then a new priority dispatch hierarchy will be created, perhaps inadvertently.

Generators, such as HE CHP and Waste to Energy, who do not have priority over other forms of renewables and are currently indirectly curtailed as a result, will be further disadvantaged. It is not acceptable for current holders of priority dispatch to make way for generators who do not have priority.

Curtailement is a measure taken for the system to adhere to SNSP limitations, but for synchronous generators to be indirectly penalised for this is perverse.

Introduction

Dublin Waste to Energy Ltd ("DWTE") welcome the opportunity to comment on the consultation Proposed Decision on Treatment of New Renewable Units in the SEM" (the "Consultation") in which the Regulatory Authorities (the "RAs") present their proposed decision on how to integrate new renewables in the SEM consistent with the Articles 12 & 13 of the Clean Energy Package (the "CEP").

The following document outlines DWTE's response to the proposed decision paper. DWTE is satisfied that the contents of this response will be published in full.

For convenience, we provide a response to the five areas highlighted in the proposed decision in five separate sections below. We highlight each of the key summary points made by the RAs in grey.

Section 1: Treatment of New Renewables in Scheduling and Dispatch

“The SEM Committee proposes that no specific changes are required to accommodate dispatchable units without priority dispatch, subject to testing and impact assessment being carried out for such units (Category 1) by the TSOs”

New dispatchable units, such as Waste to Energy plant, high efficiency CHP, Biomass, Hydro and Hybrid units are classed as *Category 1*. The proposal is no distinction or special status will be offered for these units as ‘renewable’, and they will be treated in the exact same way as non-renewable units are currently.

Presumably, any new unit that is not eligible for priority dispatch would therefore be in a position to set the imbalance price if tagged as *energy*.

Waste to Energy facilities are unique in the electricity market, in that they have a requirement to export power in order to meet the requirements of another essential service. Any new Waste to Energy facility without priority dispatch would presumably be dispatched down, and potentially dispatched down to zero, in the event of high levels of priority dispatch generation (and non-priority dispatch wind) relative to system demand. This situation effectively creates a barrier to entry for new build capacity in this space, since the asset would be subject to erratic dispatch patterns and not be able to achieve the volume certainty necessary to commit to waste volumes. Effectively, it would also enforce a priority of the electricity market ahead of another sector providing essential waste management services; and would not be consistent with other European goals to strengthen the circular economy.

In DWTE’s response to SEM-21-026, we outline that this type of dispatch pattern is unique in Europe, with other European TSOs not utilising WtE for dispatch down given the need to protect waste processing capacity.

The Clean Energy Package acknowledges that it is not realistic to expect that the necessary investments in renewables will be made if renewables face redispatch risk that is not fully compensated. It is similarly unrealistic to expect that necessary investments will be made in transmission, distribution, storage, demand response and cross zonal capacity without appropriate signals for future investment.

“In order to accommodate new units which would have previously qualified for priority dispatch and have been categorised to date as non-dispatchable but controllable (Category 2), the RAs are of the view that such units would be required to register as dispatchable units and submit PNs, COD and TOD in so far as it is applicable to them. The RAs are of the view that no change to the timing of submission of PNs for different units is required at this stage but request that the TSOs and SEMO review any changes that may be required to PNs, COD or TOD from a system perspective. For such Category 2 units, the RAs request that the TSOs and SEMO host one or more workshops as required

to discuss some of the issues raised by market participants in their responses to SEM-20-028 in terms of the systems required to facilitate this treatment”

This requirement, largely on new build wind, is a significant new submission requirement that would be out of scope for PPAs that are already in place. On the part of the generator, or more likely, the PPA provider, this requirement would likely necessitate an investment in trading capability in terms of systems or people. It is not clear what impact this may have on wind assets that opt to trade as assetless units at the day ahead stage.

Section 2: Treatment in the Balancing Market

New units without priority dispatch which are dispatched away from their ex-ante market positions for energy balancing reasons should be considered in dispatch on an economic basis like any other instance of balancing energy.

As outlined above, if the intention is for new, non-controllable units to be dispatchable, and with it comes a requirement to submit commercial, technical offers and physical notifications, then these providers should be able to provide balancing energy. Balancing energy must be what the TSOs use in the first instance to ensure supply meets demand. Article 13 requires that:

-) Article 13(1) requires that redispatching (which includes constraints and curtailment) shall be based on objective, transparent and non-discriminatory criteria.
-) Article 13(2) requires that resources that are redispatched shall be selected based on market-based mechanisms and shall be financially compensated. The payment of compensation for redispatch is not discretionary, it is mandatory.

For a central dispatch market, it then follows that assets which provide balancing energy are evaluated on an economic basis and balancing actions are determined accordingly. Actions for balancing energy are tagged as energy rather than system actions, and are therefore not subject to restrictions laid down in the bidding code of practice, so there should be no impediment for plant to capture lost support scheme revenue in this instance.

Balancing actions (as distinct to balancing energy) that are system actions, would be consistent with a requirement to either constrain or curtail for the needs of the system and would constitute non-market based redispatch. The RAs are proposing that curtailment would be remunerated at the day ahead price if the asset in question has firm access. It is not clear how this would interact with Eirgrid's proposal that only usable wind is accounted for at the day ahead stage, should it be adopted.

The principles of treatment of Biased Quantities should not change, but different approaches to the application of biased quantities for new renewable units (Category 2

identified in Section 2.1) will need to be considered within the scope of the detailed design and the TSOs and SEMO should consider these as part of the implementation process.

DWTE believes in the principle of balance responsibility, and that market position and FPN submissions should be as consistent as possible. While the overall treatment of biased quantities should be left unchanged, it would seem unnecessarily penal to not give intermittent sources, with a requirement to submit physical notifications, an ability to provide the most up to date information without significant penalty assuming they are making best endeavours to adhere to the principle of balance responsibility.

Section 3: Bids and Offers

The RAs are not of the view that different rules for Bid-Offer Acceptance, or any changes to their timing or classification need to be developed in order to accommodate new renewable units in the market.

DWTE agrees with this assessment

In the RAs' view, where new renewable units have the same COD, pro-rata dispatch down across units with the same COD should be considered in the TSOs' submission for implementation of the interim and enduring system changes required, noting consistency of treatment with other units in the market.

Units which have the same status (priority vs. non-priority, firm vs non-firm), are fully grid code compliant and submit identical commercial offers, should be treated in the same way. Realistically, this will more pertain to the concept of curtailment, where this is a system phenomena to restrict non-synchronous generation, rather than constraints which should be easier to distinguish between renewable assets.

This Proposed Decision does not include any change to the application or content of the Balancing Market Code of Practice but acknowledges that changes may be considered in future to accommodate different unit types as a result of new renewable units taking part in the market without priority dispatch

The proposed decisions taken in SEM-21-026 and SEM-21-027 may necessitate significant change to the BMCOP. It is DWTE's view that for balancing energy, this would fall outside of the BMCOP in the first place, so a modification for this service would not be required. For curtailment, the day ahead price is offered as compensation for assets with firm access. During periods of extreme curtailment, it is likely that the day ahead price will be suppressed, possibly into negative pricing territory. DWTE's comments on the BMCOP are made in its response in SEM-21-026.

The RAs are making a recommendation on treatment on constraints separately, and we make a response on this below.

Section 4: Treatment of Redispatch: Constraints

The RAs propose that constraints will be applied to all non-priority dispatch units based on a market based merit order, based on the bids and offers of such units, accounting for operational constraints and system security

The message from the RAs is clear in their proposed decision, which is to let the existing market structures work to their fullest extent to meet obligations under Article 12 and 13. The RAs proposed decision outlines that constraints are market based redispatch, assuming they are applied to units that have submitted commercial and technical offers (even if the constraint is applied to a single asset). The issue here is that those offers are subject to a bidding code of practice and may deviate from the bids the generators wish to submit to move away from its market position, so realistically is not the product of economic dispatch.

Given that the recommendation is for assets designated Category 2 to commence submitting offers of this type, this opens the possibility to consider non-priority renewables in the same economic decision-making process as conventional plant.

Section 5: Treatment of Redispatch: Curtailment

It is the RAs' preferred approach that curtailment will be continue to be applied on a pro-rata basis where required to all non-synchronous units, regardless of priority dispatch status.

DWTE supports the concept of pro-rata application of curtailment, however Article 12's phase out of priority dispatch post 4th July 2019 (implementation decided in SEM-20-072) makes this relatively simple process more complicated. To our knowledge, no project has been caught up in this regulatory change, so all renewable projects, even those commissioned post July '19 have priority dispatch status as they obtained a route to market (REFIT letter or RO accreditation) ahead of the cut-off date. Once renewable projects are commissioned without priority dispatch, should the RA's preferred approach be implemented then a new priority dispatch hierarchy will be created, perhaps inadvertently. Generators, such as HE CHP and Waste to Energy, who do not have priority over other forms of renewables and are currently indirectly curtailed as a result, will be further disadvantaged. It is not acceptable for current holders of priority dispatch to make way for generators who do not have priority. In addition, curtailment is a measure taken for the system to adhere to SNSP limitations, but for synchronous generators to be indirectly penalised for this is perverse.