Dublin Waste to Energy

SEM-21-026

Consultation on Dispatch, Redispatch and Compensation Pursuant to Regulation (EU) 2019/943

A Submission by
Dublin Waste to Energy

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- No other European Union nation uses Waste to Energy for system stability.
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- Non-market based redispatch is subject to Article 13(7) and lost revenue must be compensated. There is no discretion to not offer compensation per EU law.

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 ruleset, 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.

Dispatch down of WtE is generally constraint based, and non-market based redispatch

As synchronous generation, Waste to Energy plant are not subject to curtailment. For WtE, dispatch down in line with curtailment elsewhere is considered constrained volume. Dispatch down to accommodate system issues, system inertia ("min sets") etc. are also considered constrained volume. On rare occasions, dispatch down when the aggregate generation from priority dispatch plant exceeds demand may potentially be considered *energy balancing*.

For all constraints applied to WtE, they are applied on a non-market based redispatch basis. This is for two reasons:

- Bids are subject to a code of practice
- As priority dispatch, bids are not used for the formulation of dispatch instructions. Dispatch is not the product of any economic merit order.

Generators subject to non-market based redispatch are entitled to compensation

The RAs do not have discretion as to whether the current arrangements or the arrangements in Article 13(7) apply. Ireland is subject to EU law and therefore 13(7) is binding. Compensation as prescribed by the Article is the higher of the additional operating cost or the financial support that would have been received in the event of dispatch down. If this formula leads to the generator being over or under compensated, then there is scope to compensate on a blend of operating cost / financial support rather the higher level.

The reference to "unjustifiably low" or "unjustifiably high" is therefore a test of whether the generator is overcompensated or undercompensated, not whether compensation is due to which the generator is lawfully entitled.

Introduction

Dublin Waste to Energy Ltd ("DWTE") welcome the opportunity to comment on SEM-21-026, the "Consultation on Dispatch, Redispatch and Compensation Pursuant to Regulation (EU) 2019/94" (the "Consultation") in which the Regulatory Authorities (the "RAs") present their proposed decision on how implement dispatch and redispatch decisions and provide compensation in the SEM consistent with the Articles 12 & 13 (the "Articles") 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, with the exception of the information provided in the Appendix.

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

Dublin Waste to Energy

The Facility

DWTE is a critical part of Ireland's waste management infrastructure.

Dublin Waste to Energy Ltd is a Waste to Energy ("WtE") facility, operated by Covanta, located on the Poolbeg Peninsula in Dublin City. It is a PPP with the four Dublin Local Authorities. The facility entered commercial operation in 2017. The plant can be described as a dual utility facility providing both a waste treatment service and renewable energy to the grid. Waste to Energy provides non-intermittent, indigenously fuelled, renewable energy generation capacity, offering many advantages both as a source of reliable base-load renewable generation capacity and in terms of the achievement of national/EU energy and environmental policy objectives. DWTE qualifies for Priority Dispatch based on the renewable fraction of its processed residual waste.

The DWTE facility is Ireland's largest Waste to Energy plant, treating 600,000 tonnes of residual municipal solid waste ("MSW") per annum. This is equivalent to 35% of Ireland's residual MSW. As a result, the plant is considered a critical part of Ireland's waste management infrastructure. Waste to Energy facilities in Ireland continued to operate throughout the height of the pandemic in 2020.

DWTE considers that the issues raised by this series of Consultations, particularly concerning the classification and treatment of priority dispatch generators (and therefore treatment of Waste to Energy generators), are of critical importance to the efficient operation of the facility, and indeed implementation of waste policy in general.

Integration of Waste and Energy Policy

DWTE is subject to a number of EU policies, which should be complementary for the establishment of a circular economy.

Waste to Energy is multi-purpose by its nature and therefore, adheres to at least three main policies in the EU:

- Waste Management
- Energy Policy
- Air quality & climate change.

In addition, the European Commission has adopted a new Circular Economy Action Plan - one of the main blocks of the European Green Deal, Europe's new agenda for sustainable growth.

Energy Policy

Even though Waste to Energy is subject to different EU policies and legal frameworks, all these policies are largely intertwined. These three policies are essential for the establishment of a 'circular economy' and directed towards the achievement of a sustainable European future. Waste to Energy, while being a single technology, can provide a solution to different EU policies and has an important role to play, in that it 'injects' waste back into economy as secondary raw materials. Therefore, it reduces the environmental footprint of production and consumption and increases the security of supply of raw materials, one of the main objectives of *energy policy*. While the RAs have a domestic policy responsibility for energy rather than waste, as emanations of their respective Member States, EU Directives and Regulations are binding on and directly enforceable against them. This means that in interpreting EU law, the RAs must have regard to a different range of matters than those which are prescribed under domestic legislation.

Regarding Waste to Energy, the Circular Economy Action Plan articulates that Waste to Energy can "play a role and create synergies with EU energy and climate policy". Along similar lines, the European Commission's Energy Union Strategy defined in 2015 also aims to "further establish synergies between energy efficiency policies, resource efficiency policies and the circular economy", which should also include exploiting the potential of Waste to Energy.

Waste Policy

It is important to note the requirements of meeting the Waste Frame Directive, which:

- puts measures to improve waste management systems in the Member States ensuring that waste is valued as a resource.
- contains stricter targets to ensure that by 2030 waste (especially MSW) suitable for recycling or other recovery will not end up in landfills.
- The Member States also must ensure that they will meet the target set by the EU. Failure to meet these targets will result in significant fines.

Similarly, the Waste Management industry should aim for regional self-sufficiency in managing waste. The environmental costs of waste management should not be passed to communities which are not responsible for its generation. Furthermore, exporting the waste for disposal in another jurisdiction is not a responsible policy. Sustainable waste management is central to

ensuring public health and therefore ensuring that energy policy responds to public health and safety considerations is no less important in the waste sector than, for example, the case of safe managed release of water from hydro dams.

In addition, it is incumbent on states in the EU to have a sustainable waste management policy. Currently Ireland is exporting approximately 20% of its waste to other European countries who convert this waste to energy. Reducing the output of WtE plant in Ireland only compounds this situation and makes Ireland more dependent on export resulting in a less sustainable waste management system.

Energy Independence

Waste to Energy is not just about waste management. Waste to Energy helps to make Europe less dependent on fossil fuel imports and contributes to security of renewable energy supply, a major goal of the Energy Union policy alongside sustainability and competitiveness. In 2013 the Waste to energy plant contributed to approximately 1.5% of the total energy requirement of Europe.

'Waste' can cease to be a problem and become a valuable resource. The inclusion of the organic portion of MSW in the definition of potential sources of renewable energy has enabled the Member States to meet their national renewable energy targets via the Waste to Energy industry. Therefore, Waste to Energy enables the use of waste as a valuable domestic source of energy contributing to energy security, transforming waste management into sustainable material management with the embedded principles of the circular economy, the di□usion of renewable energy, energy e□ciency, improved economic opportunities and long-term competitiveness.

Air quality & climate change

Waste to Energy is a better alternative to landfilling for managing MSW that is not recyclable, a reality explicitly recognised by the waste management hierarchy recommended by the European Union.

WTE is a proven technology for heating, cooling, industrial processes and electric power production that displaces fossil fuels and at the same time has a significantly lower carbon (greenhouse gas) footprint compared to landfilling. WtE also has the added benefit of destroying contaminated materials that contain pathogens and viruses.

Landfills are the primary alternative to Waste-to-Energy, and methane emitted by landfills is the second largest contributor to global climate change. New data show methane is even more damaging than previously thought. The release of methane (CH_4) from landfills is significant, methane is a powerful greenhouses gas with a 100-year global warming potential 28-34 times that of CO2[1]. Measured over a 20-year period, that ratio grows to 84-86 times.

To conclude, Waste to Energy is key to the circular economy and Energy Union policy

Apart from its position in waste management, WTE has strong synergies with the other EU objectives on climate and energy, especially in the context of resources and energy e□ciency. It is also instrumental in supporting the EU's commitments on sustainability and its transition to a

[1] https://unece.org/challenge

low carbon economy simultaneously meeting the principle of the protection of the environment, human health and combating climate change.

Implications of downward dispatch on Waste to Energy

WtE plant are designed to operate continuously (input driven rather than output driven) as base load plant at the top of merit order.

Downward dispatch of a Waste to Energy facility is significantly different from dispatch down of other plant on the system, in that it hinders the provision of another essential service, and in Ireland, it is a critical piece of waste infrastructure. Indeed, the impediment to the waste industry of dispatch down is far greater in magnitude to the impediment to the power generation industry to allow baseload operation[1].

To facilitate large penetrations of non-synchronous renewables, synchronous plant must be dispatched down. To make way for non-synchronous renewables, Dublin Waste to Energy is dispatched down despite itself being primarily renewable; and can be 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 to Dublin. **DWTE is not aware of any other technologies that are treated in this way.**

Aside from the critical nature of the facility, from a waste management viewpoint, the effect of being dispatched down has a negative impact on plant operations and maintenance, and in addition, may have a significant detrimental repercussion for its renewable energy status. The ramifications of this are outlined in a later section, however at a high-level, dispatch-down may impact on the ability to qualify for capacity revenue but also its classification under the Waste Framework Directive.

In recent times, the pattern of dispatch has had a detrimental impact on the plant reliability and by extension the ability of the facility to accept waste for processing. In one instance, the plant was dispatched down to minimum load for nine minutes and then dispatched back to maximum load, followed by another dispatch to minimum load. This type of dispatch pattern fails to offer any meaningful level of additional security for the electricity system but is highly damaging to plant integrity. While offering less flexibility to the system operator is not desirable, a plant needing to take an unplanned outage offers no flexibility at all.

It is important to note that the Irish system is an outlier in terms of how it dispatches Waste to Energy. A poll of other Waste to Energy operators in the UK; Sweden; Portugal; Spain; Austria and Italy indicate that only Spain requires Waste to Energy to dispatch down during rare events. **Generally, in Europe, the concept of dispatching down Waste to Energy plant as a stabilising factor for the grid is an unfamiliar concept given the requirement for maintaining waste capacity.**

Section 1: Definition of Dispatch and Redispatch

On Dispatch and Balancing Energy

"In the SEM, dispatch relates to the scheduling and dispatch of units to meet the energy requirements of the market, noting the complexity of identifying dispatch and redispatch separately in the central dispatch system with an integrated scheduling process, which is carried out through the identification of energy and non-energy actions as part of the flagging and tagging process"

On the definition of dispatch and redispatch, translating EU terminology into the context of SEM is problematic, the term is easier to apply in 'self-dispatch' power markets whereby dispatch is conducted by the producer, with re-dispatch applied by the TSO to prevent system issues.

Dispatch should exist to achieve the most economically viable operational schedule; driven by a combination of commercial submissions and market forecasts.

'Redispatching' is defined as "a measure, including curtailment, that is activated by one or more transmission system operators or distribution system operators by altering the generation, load pattern, or both, in order to change physical flows in the electricity system and relieve a physical congestion or otherwise ensure system security". In the context of the SEM, DWTE is of the view that 'redispatch' should be understood as any action that results in the dispatch schedule varying from the unconstrained market schedule, whether caused by constraints or curtailment.

Dispatch effectively meets the requirements of the market; re-dispatch effectively meets the requirements of the system.

Energy balancing in the SEM aligns with the definition under the Electricity Balancing Guideline as 'energy used by TSOs to perform balancing and provided by a balancing service provider. Dispatch and energy balancing are aligned to the existing concept of 'energy actions' in the SEM.

DWTE agrees that dispatch and energy balancing are and should be deemed as energy actions in the SEM. To tag these as system actions would surely mean all actions are tagged, rendering the balancing market inactive, and the resulting imbalance price would simply revert to the day ahead price.

A complexity to this interpretation is that priority dispatch wind and solar units cannot be dispatched for energy balancing purposes. This issue is considered further in Section 2.1

and updates may be required to SEM-13-011 in terms of the distinction between constraints, curtailment and energy balancing. This issue is also considered in the SEM Committee's Proposed Decision Paper on the treatment of new renewable units in the SEM (SEM-21-027), which has been published along with this paper.

Existing priority dispatch wind and solar do not have the requirement to submit commercial or technical offer data. Therefore, the TSOs do not have the ability to formulate an economic merit order to ascertain how to distinguish between assets in this category. The RAs proposed decision in SEM-21-027 makes it clear they wish for non-priority wind and solar to make COD and TOD submissions, so they could then in theory be evaluated to provide energy balancing services.

On Redispatch

Redispatch in the SEM relates to deviations from the market schedule for generation for both local network and broader system reasons, including TSO-instructed reduction in generation due to localised network issues (constraints) and reduction in non-synchronous generation due to other system-wide reasons such as levels of System Non-Synchronous Penetration (curtailment).

The Regulatory Authorities acknowledge that future market developments may include new forms of dispatch and redispatch at the distribution level

DWTE broadly agrees with the proposed definition, however, note that the rationale described here is not exhaustive. As it currently stands, curtailment of wind will result in constraint of synchronous renewables, given the current priority dispatch hierarchy.

On Dispatch and Redispatch Applied to Priority Dispatch Units

As part of this Consultation, the Regulatory Authorities welcome feedback on whether decremental actions taken on priority dispatch units can be considered either dispatch and redispatch (energy and non-energy actions) or as forms of redispatch only (non-energy actions)

Priority dispatch units which submit COD and TOD may be in a position to provide Energy Balancing services, albeit on a limited basis where the sum of priority dispatch plant exceeds system demand. In this instance, a merit order can be formulated, and the resultant action would

be energy tagged. Beyond this, decremental actions taken cannot be price-setting which is consistent with the Articles and the current implementation of the SEM and are not used in the basis for dispatching the system.

As set out in the SEM Committee's Building Blocks Decision Paper (SEM-15-064), priority dispatch generation should not be able to set the imbalance price. In a situation where the sum of available priority dispatch renewable generation exceeds the demand to be served in a particular 5-minute period and all available non-priority dispatch units have been dispatched down to their Lower Operation Limit, priority dispatch units are dispatched down according to the priority dispatch hierarchy, one option is to reflect this by implementing a Modification to replace the decremental bids of such units with zero for Imbalance Pricing.

The SEM building blocks decision paper and the decision to approve Mod_10_19 predate the implementation of Article 12 and Article 13, so Mod_10_19 may retrospectively apply to the period prior to 1st January 2020, but not thereafter if in conflict with the Articles. Quoting Article 13(2):

> *The resources that are redispatched shall be selected from among generating facilities, energy storage or demand response using market-based mechanisms and shall be financially compensated. Balancing energy bids used for redispatching shall not set the balancing energy price.*

Alternatively, it is proposed that a new flag for priority dispatch units could be introduced to the flagging and tagging process to ensure that in such instances, priority dispatch units are not price setting and are settled on the basis of their complex bids.

All actions that are taken outside of Energy Balancing are either constraints or curtailment. For Waste to Energy plants, given these assets are synchronous, all that remains are system constraints, albeit some constraints originate from the curtailment of other plant. These actions are for the benefit of the system and must be system tagged and are not eligible to set the balancing price. Submitted offers are actively disregarded by the TSO in processing dispatch on priority dispatch plant, so it follows that these actions must be non-market based redispatch and compensated per Article 13(7).

The interaction between this discussion and related Consultations on the Electricity Balancing Guideline and Articles 3, 6 and 10 of the Electricity Regulation has been

discussed in this section and a decision on the Modification referenced here will not be taken until this suite of Consultation and decision-making processes are complete

DWTE agrees that the complicated issues discussed in this round of consultations should be resolved prior to tackling additional articles and Mod_10_19. However, there is no value in implementing rules consistent with Article 12 and 13 if they are markedly out of step with other areas of the Clean Energy Package, inconsistent with the Circular Economy Action plan or incompatible with the Energy Balancing Guideline. In addition, the Renewable Energy Directive is also being reviewed and may need to be accounted in this Consultation round or in the forthcoming Consultation concerning the priority dispatch hierarchy.

Section 2: Definition of Non-Market Based Redispatch

Curtailment in the SEM is currently a form of non-market based redispatch, as it is applied to all non-synchronous units (regardless of priority dispatch status) and is not based on any merit order or the bids and offers of units.

DWTE agrees but reminds the RAs that curtailment can result in constraint of other plant further down the priority dispatch hierarchy. Any implementation of non-market based redispatch on renewable assets due to curtailment should also be implemented to those *indirectly* impacted.

Constraints as applied to all non-priority dispatch units are a form of market based redispatch.

As proposed, all non-priority dispatch units (including new renewables which are not eligible for priority dispatch) submit COD and TOD into the balancing market, and for these actions to be utilised by the TSO. If units with non-priority dispatch are system tagged for constraints, they are not compensated on a 'market basis' if their commercial offers are subject to a bidding code of practice. Surely compensation can only be market based if generators are able to bid a price where there are prepared to be dispatch down. Once bids are subjected to some form of administrative control then it is surely impossible to define these actions as market based.

Constraints as applied to all priority dispatch units are a form of non-market based redispatch

DWTE agrees with this assessment for the reasons listed above.

In the event that the RAs determine that new non-priority dispatch generators are also constrained on a non-market based redispatch basis, generators with priority dispatch must be compensated.

In the event the RAs determine that all generators are/can be constrained on a non-market based redispatch basis (as per previous section, on the rationale that bidding restrictions effectively render them outside of a market-based mechanism), then bids which are subject to opportunity cost would need to be amended to operating cost as specified by the 13(7). The payment scheme to a conventional generator under CDISCOUNT is identical where 13(7) applies or no, so no additional compensation would be required.

Constraints as applied to priority dispatch units and non-priority dispatch units should be remunerated based on the different mechanisms for compensation already in place in the SEM that are based on decremental prices submitted by non- priority dispatch units and the deemed decremental prices applied for priority dispatch units. The Regulatory Authorities do not propose any change to the current market mechanisms of remuneration for constraints

Article 13 does not allow for subjectivity as to constraint or curtailment remuneration, rather it must be based whether dispatch is considered market or non-market based redispatch. This is discussed further in the section below.

Section 3: Financial Compensation Under Article 13(7)

The RAs recognise that the issue of the difference between the ex-ante market schedule and feasible dispatch requires further consideration. The RAs intend to further assess these issues as part of a range of measures being considered to mitigate curtailment in the SEM.

The concept of ‘usable wind’ and limiting participation of non-synchronous generation at the day ahead stage is controversial and requires careful consideration. DWTE is of the view that while

the concept is difficult to implement, it may be feasible. Implementation of this type of measure is not strictly required for compliance with the Clean Energy Package, so DWTE would suggest evaluating this at a later stage should the proposal retain consideration.

The RAs propose to provide financial compensation for non-market based redispatch associated with curtailment based on a different compensation regime for priority dispatch and non-priority dispatch units. This is based on the value of priority dispatch and to provide a potential incentive for units to voluntarily give up priority dispatch, which may in turn reduce levels of curtailment where units are not run to their availability.

The RAs make reference to the value of priority dispatch; however, no analysis is offered to quantify this value.

DWTE is extremely concerned at the prospect of the RAs attributing a somewhat arbitrary valuation to priority dispatch, while at the same time proposing to erode the value of priority dispatch (in the case of Waste to Energy plant at least) where non-priority, non-synchronous plant is granted preference in the hierarchy to priority dispatch synchronous plant (a proposed decision in *SEM-21-027*). The value of priority dispatch is not exclusively for the generator asset, but for wider societal imperatives. In the case of Waste to Energy, an essential service *needs and must have* priority dispatch to function adequately, and without a level of volume certainty would not be able to operate as a recovery facility.

More simply, waste processing capacity in the state is heavily dependent on the status of the plant in another industry. The removal of priority dispatch, and/or high levels of plant redispatch down would have very significant consequences for the waste sector, which far outweigh any consequence observed in the Electricity Market. The RAs must be mindful that any action taken in this area does not have a disproportionate impact in another sector providing an essential service and grant a level of supremacy of one essential service over another.

On the RAs proposed decision to provide financial compensation associated with curtailment, 13(7) of the Regulation is clear, this is not a position the RAs are legally entitled to take.

The compensation arrangements in place today were determined by the RAs several years ago prior to the Regulation coming into force. Now that the Regulation is in force, those arrangements are binding upon Ireland. The RAs do not have a discretion as to whether the current arrangements or the arrangements in Article 13(7) apply. To the extent that the compensation arrangements in place today are inconsistent with EU Law, EU Law must take precedence.

Under this proposal, all units that are currently eligible for priority dispatch would receive compensation for non-market based redispatch (in relation to curtailment), where firm, up to the level of their additional operating costs caused by redispatching pursuant to Article 13(7) (a).

This is an unusual proposal from the RAs, in that the additional operating costs are presumably subject to the BMCOP, rendering all operational costs to €0/MWh for priority dispatch plant. To implement this policy consistent with Article 13, then the BMCOP would have to relaxed to ensure plant can, through its bidding strategy, reclaim the higher of:

- the additional operating cost or
- the financial support that would have been received.

The only dispute is the 'higher' part of the equation, where the regulation vaguely states that this term can be removed if the result is 'unjustifiably high' compensation. This is discussed in more detail below.

Article 13(7) is clear, in that it does not offer flexibility to the RAs to withhold payment of compensation, rather the flexibility granted by the regulation in the event of 'unjustifiable high' levels of compensation is to compensate using a blend of the support payment and the generator's operating cost. Article 13(7) states:

> *"Where non-market based redispatching is used, it shall be subject to financial compensation...Such financial compensation shall be at least equal to the higher of the following elements or a combination of both if applying only the higher would lead to an unjustifiably low or an unjustifiably high compensation"*

In the absence of any firm signal on the appropriateness of the level of compensation, market participants will have had reasonable expectation that the compensation under 13(7) would be to the level of their support scheme The high-level principle of bidding in opportunity cost into the market is very different for a waste to energy plant compared to a thermal asset, as its primary business is to provide waste management services for another sector. The sale of waste as a fuel input for an alternative use is not a credible endeavour compared to trading out of a gas position or shipping liquid fuel out of storage.

In addition, given that the Articles are applicable from 1st January 2020, then any changes to the implementation of the BMCOP would also need to be applied retrospectively, which is a difficult remedy to carry out. For plant connected in Ireland, the CRU did consider an amendment to the REFIT formula which would be relatively straightforward to implement and may part of the requirement listed above.

<u>On Unjustifiably Low or High Levels of Compensation</u>

The generator must be indifferent to redispatch

The reference in Article 13(7) to "unjustifiably low" or "unjustifiably high" pertains solely to the "compensation" that is required to be paid by the Article. The "compensation" to which this refers is the compensation to be paid by the System Operator to the generator to compensate it for the cost or opportunity cost of the redispatching.

The reference to "unjustifiably low" or "unjustifiably high" is therefore a test of whether the generator is overcompensated or undercompensated, not whether the compensation to which the generator is lawfully entitled is, or is not, an unjustifiable burden on anyone else (such as the consumer). In order to determine whether the generator is overcompensated or undercompensated, one must look to: "net revenues from the sale of electricity on the day-ahead market that the facility would have generated without the redispatching request".

Article 13(7) requires that where a generator is redispatched up, it is compensated for the cost of such upward redispatch in the form of incremental costs. Where a generator is redispatched down, it must be compensated for the opportunity cost of such downward redispatch the form of foregone net revenues (including renewable supports) or, where higher, incremental costs of such downward redispatch (for example in a WTE plant the cost incurred for both its Waste and Energy businesses).

Depending on the generator type, the interplay between the operating costs outlined in 13(7)(a) and the net revenues described in 13(7)(b), would likely result in a wide variety of compensation amounts were it not for the stipulation of compensation being at least: "equal to the higher of the following elements or a combination of both if applying only the higher would lead to an unjustifiably low or an unjustifiably high compensation"

Inclusion of this stipulation ensures that a mechanism exists such that **all generator types can be compensated to the level of being financially indifferent to being redispatched**. This stipulation within Article 13(7) therefore contains a methodology for calculating the minimum level of this level of compensation, allowing that it can be higher but can never be lower than the level calculated in accordance with the Article. Article 13(7) therefore does not create a cap on compensation, it only creates a floor. Article 13(7) also contains a saving provision that ensures that if the application of the methodology results in a generator being overcompensated or undercompensated (in each case unjustifiably), the Member State may adopt a methodology for calculating the level of compensation that involves a 'combination' of the two limbs.

As such it is not open to the RAs to simply ignore the minimum compensation requirements in any circumstance – it must apply a combination of (a) and (b). For example, if a conventional plant is dispatched down and is compensated for its full foregone revenue (including renewable supports) it may be overcompensated because it would be recovering more than it would have recovered had it generated (since it has saved its fuel cost by not generating).

In this case, Member States are permitted to compensate such a generator using a combination of (a) and (b) to deduct the avoided fuel cost from the lost revenues. Conversely, compensating a plant using only the higher of limbs (a) and (b) may undercompensate a generator, for example where a Waste to Energy plant is dispatched down it may lose energy revenues and lose revenues associated with waste gate fees. In this case compensating on the higher of limbs (a) and (b) would undercompensate the generator and the Member State is obliged, as a matter of law, to compensate at least using a combination of both to ensure that the facility is indifferent to redispatch.

All new units, which are no longer eligible for priority dispatch, based on the criteria outlined in SEM-20-072, would be subject to compensation under Article 13(7), where firm and subject to non-market based redispatch (in relation to curtailment) up to the level of the DAM price at the time they are curtailed.

All units would have the opportunity to avail of compensation up to the level of the DAM

price in exchange for surrendering their priority dispatch rights. This is linked to the implementation of market changes to facilitate non-priority dispatch renewables set out in SEM-21-027.

As it currently stands, all renewable participants in SEM are currently in receipt of priority dispatch, of which a subset of these units have firm access. To receive the DAM price compensation per the RA's proposal, renewable units with firm access would have to trade in this benefit to avail of the compensation due under 13(7), otherwise, in the RA's view, the compensation would be 'unjustifiably high'.

A renewable plant with firm access, such as wind or solar, which surrenders priority dispatch will do so if it believes the gain in curtailment 'revenue' outstrips any lost revenue caused by additional constraints. According to the proposed decision in SEM-21-027, curtailment volumes are unaffected by lost priority dispatch, since the RAs are proposing to implement curtailment across the market irrespective of priority dispatch status.

The value of priority dispatch is not a constant across the market. For example, for units whose support scheme has expired, it may make more sense to opt for non-priority dispatch status, while for others, volume certainty is of utmost importance. To issue a blanket decision encompassing all units seems both not in keeping with the regulation but also an unnecessarily blunt approach to pursue. Again, no in-depth study has been taken on the value of priority dispatch for differing plants across the system.

The proposed decisions outlines that under Article 13(7), all units that are currently eligible for priority dispatch would receive compensation for non-market based redispatch. However, if a generator choses to surrender their priority dispatch rights they would have the opportunity to benefit from the same treatment as new units. In DWTE's view this is entirely incompatible with the Regulation. While it is open to the Regulatory Authorities to incentivise generators to give up priority dispatch, they cannot do so by denying priority dispatch generators the level of remuneration to which they are entitled.

The intention of the Regulation is that all generation will be remunerated equally, whether or not they have priority dispatch or whether or not they are subject to market-based redispatch. In developing the Clean Energy Package the European Commission stated that "curtailment of generation due to limited transmission and distribution infrastructure would be a measure of last resort and confined to situations in which no market-based responses (including storage and demand response) are available, and subject to transparent rules known in advance to all market actors and adequate financial compensation. All resources would be remunerated in the market on equal terms"[2]. It is not open to the Regulatory Authorities to intentionally remunerate a generator less favourably that it is entitled (ie, remunerate it on unequal terms) in order to incentivise the generator to give up priority dispatch.

[2] Commission Staff Working Document Impact Assessment accompanying the document, inter alia, Proposal for a Regulation of the European Parliament and of the Council on the electricity market (recast) SWD(2016) 410 final (Part 1 of 5)

There are set targets in place to increase the level of SNSP to 75% by the end of 2021 and the TSOs plan to operate the system at SNSP levels of up to 95% in future in order to accommodate significantly higher levels of renewables. This may entail some enduring level of curtailment and a continued issue of alignment of the market with operational and system security requirements. On this basis, the RAs are also considering whether a limit on compensation under Article 13(7) could be included in future to account for the higher targets of SNSP and levels of non-synchronous generation which can be physically accommodated on the system.

The regulation refers to thresholds or targets to limit compensation. Surely once SNSP levels are raised, curtailment levels will decrease and the need to compensate for curtailment will reduce as well.

The RAs are of the view that constraints applied to priority dispatch units and non-priority dispatch units should only be remunerated based on the mechanisms for compensation already in place in the SEM. Units which benefit from priority dispatch should not be overcompensated for the non-market based nature of constraints applied to them, which is driven by the way in which priority dispatch is implemented in the SEM.

DWTE agrees that market participants should not be overcompensated, but likewise the test must also show that the unit is also not undercompensated. DWTE is concerned that the proposed decision could leave certain plant at an unjustifiable low level of compensation compared to the intent of the regulation. Without any scope to amend balancing market offers to reflect operating cost (as opposed to opportunity cost), then the proposal to leave market rules and principles unchanged regarding constraints fails to meet the requirements under the legislation.

The RAs propose to only compensate firm generators for non-market based redispatch associated with curtailment

The regulation does not provide for a distinction between constraint and curtailment in the determination of who is compensated for non-market based redispatch.

Section 4: Application of Proposals from 1 January 2020

The SEM Committee has outlined two proposals for an ex-post payment mechanism and welcomes feedback on this from interested stakeholders, including alternative proposals.

The SEM does not have a derogation to Article 13 of the Electricity Regulation which became effective in January 2020, so compensation would need to apply from that date. Any compensation arrangement should be structured in a manner that is both fair and equitable to all.

As mentioned previously, 13(7) is clear that units who are in the position of non-market based redispatch are to be compensated in a manner that is not 'unjustifiably high' or 'unjustifiably low'. The easiest means to do so is (in Ireland at least) in part a change to the REFIT formula, however this must be consistent with State Aid considerations. For Ireland, the CRU has made a proposal as part of CRU-21-04:

> *"Of relevance in respect of the PSO levy arrangements is paragraph 7 of Article 13, and in particular the stipulation that compensation for redispatching should be, at a minimum, the generator's net revenues and that, "where financial support is granted … based on the electricity volume generated or consumed, financial support that would have been received without the redispatching request shall be deemed to be part of the net revenues." It is thus appropriate to consider whether any changes to the PSO support schemes are necessary to comply with this requirement."*

The RA proposal to use the current market rules where possible is unlikely to succeed, since this proposal would necessitate a change to the thinking to the BMCOD retrospectively. and with it a re-evaluation of the bidding strategy of all units across the market. For example, thermal assets may have justifiable cause to reflect contractual positions in their commercial offers. The re-settlement implications of this are serious and may give rise to additional issues.

The RAs would appear to have three mechanisms for ex-post payments:

- A change to the REFIT formula
- A change to the bidding code of practice
- A new mechanism to fund the ex-post payment

A change to the REFIT formula would not fully meet the regulation since it would likely lead to unjustifiably low or high levels of compensation for certain units. A change to the bidding code of practice may work *moving forward* but is surely impossible to execute ex-post. A new mechanism may be therefore the most appropriate way to proceed.