



## **Response by Energia to SEM-24-046**

***Demand Side Units: A Revised Phase 1 Solution for Energy  
Payments and Other Issues***

**25 October 2024**

# 1 Introduction

Energia welcomes the opportunity to respond to SEM-24-046 on a revised phase 1 solution for Demand Side Units (DSUs). Energia is grateful for the regulatory authorities' (RAs) willingness to grant an extension to the response deadline to allow participants to further examine the important issues raised in the consultation. Energia also welcomes the RAs active engagement in hosting a workshop for suppliers on the 10<sup>th</sup> of October regarding this consultation.

This response is on behalf of Energia Group. Energia Group operates through three primary business units: Renewables, Flexible Generation and Customer Solutions (via the Energia brand in the Republic of Ireland, and Power NI in Northern Ireland). The further integration of DSUs in the energy market is relevant to Energia both as a generator active in the energy markets, and a supplier to domestic and commercial customers across the island of Ireland.

This response will briefly offer some general comments, before responding to the individual consultation questions. Energia would be available to discuss or elaborate on any aspect of its response if so desired by the RAs.

## 2 General Comments

Energia recognises that the evolution of how DSUs are integrated into the electricity markets is an imperative of the EU Clean Energy Package, as well as desirable in terms of competition and providing the flexibility that is required to enable the energy transition. Particularly with regards to the constraints crisis in Northern Ireland, and increasing levels of constraints in RoI, responsive demand could have an important role to play in reducing the dispatch down of renewables. On that basis, Energia welcomes that the RAs are actively progressing with this matter in the form of this consultation.

### Energy Payments

With regards to the revised phase 1 solution, the consultation is useful in that the RAs have highlighted a potential interim solution to the issue of over-compensation of DSUs in the event of energy payments. While it is useful to seek feedback and views on the high-level design of the proposed solution, if the RAs decide to proceed with the high level design, then Energia's view is that further consultation would be required on the specifics of how the proposed interim solution would work in practice.

Specifically, more detail would be required on the calculation of the supplier compensation payment (PCOMP). As the crucial mechanism to avoid the over-compensation of "long-run" DSUs, and to protect consumers from an undue increase in imperfections charges, it is important that any proposal is consulted upon in detail and following bespoke modelling and an impact assessment. This will help avoid a repeat of the scenario whereby a modification was approved before the extent of the financial impact was clear.

### Other Aspects

In addition, the consultation focuses on the energy payments aspect of the proposed phase 1 solution and then considers other aspects in much less detail and with fewer concrete proposals. Some of these other aspects, particularly baselining, metering and availability declarations, are essential to meeting the EU requirement of treating

demand response in a manner that is non-discriminatory and ensures balance responsibility as required of all other market participants.

Energia notes that ACER's revised draft Network Code on Demand Response (NCDR), out for consultation until the end of October, states the following with regards to baselining:

*"A properly designed baseline methodology is probably one of the most important determinants of the successful conduct of any DR service as it enables system operators and system users to measure performance of DR resources".*

On metering, the draft NCDR states that:

*"The injections and withdrawals for the settlement of the system operation services and the imbalance settlement shall be calculated based on the metering equipment of the connection point".*

In order to comply with the requirements of the forthcoming NCDR and future-proof any revised phase 1 solution, detailed proposals on baselining, metering and availability should be consulted upon prior to the introduction of energy payments and PCOMP. Not only will this ensure that the treatment of DSUs is non-discriminatory relevant to other participants, but it will help ensure that genuine value is being gained by consumers in return for any increase to imperfection charges while the phase 1 solution is in place.

### 3 Consultation Questions

#### **3.1 Q1: Do you agree with the description and analysis of the models for compensating demand response and, in particular, for energy payments to DSUs? Please explain your view.**

The models provided in the paper clearly set out at a high level the different methods for paying demand response, including how demand response is currently compensated, and how it could be compensated were it possible to identify individual suppliers who could be charged for non-consumed energy. The models also clearly set out at a high level the proposed revised phase 1 solution. The worked examples with figures were particularly helpful in setting out the models.

However, as a result of being high-level, the models do have a level of simplification which brings the risk of not accurately reflecting the operation of the market or the behaviour of participants, particularly with regards to the description of the missing money issue. This could be important when it comes to implementing any proposed solution, as the impact in practice may differ from that suggested by the high-level models.

As a non-exhaustive list of examples:

- The models frequently cite supplier savings from not purchasing non-consumed energy wholesale. In reality suppliers have no way of knowing when a high-cost DSU will turn down, and therefore are likely to purchase the power in the ex-ante markets before spilling into the balancing market (BM) in the event that the power is not consumed by the final customer.

- The models describes DSUs as clearing either through the ex-ante markets or the BM. In reality it is far more likely that high-cost DSUs will only be in called upon through the balancing market as prices rise in response to unexpected scarcity.
- With regards to long-run DSUs, suppliers will factor in the historic demand of these customers when deciding the volumes to purchase ex-ante.

As per Energia's general comments, given that the models in the consultation are high-level, it is important that if the RAs intend to take forward a revised solution, there is a detailed consultation, modelling and impact assessment using real-world and SEM-specific assumptions, so that participants and the RAs can accurately assess the potential implications of any proposed changes. This will help avoid a repeat of the scenario from 2022 when the impact of an approved mod only became apparent to some participants after approval.

**3.2 Q2: Do you agree with the description and analysis of the appropriate treatment of 'long-run' DSUs? Please explain your view.**

Energia agrees that there is a potential issue with "long-run" DSUs receiving energy payments paid for via imperfection charges without PCOMP that consumers face additional costs for no particular benefit. Without baselining, it is difficult to see how "long-run" DSUs can evidence genuine demand response beyond their business-as-usual on-site generation.

**3.3 Q3: Do you agree that incorporation of a supplier compensation payment between DSUs and suppliers would be an appropriate mechanism for addressing the 'missing money' problem for DSUs? Please explain your view.**

Energia sees the merit in introducing PCOMP in theory. However, to fully understand how PCOMP would work to properly incentivise high cost DSUs while ensuring that long-run DSUs are not over-compensated, Energia would need to assess a detailed proposal for how PCOMP would be calculated, and worked examples of how it would work in practice to avoid over-compensation.

**3.4 Q4: For the revised Phase 1 solution, if it isn't possible to identify the affected suppliers, do you agree that it would be appropriate for the supplier compensation payment to be paid into the Imperfections Charge fund? Please explain your view. Do you consider that this will allow DSUs to compete on an equal footing, without any undue**

***disadvantage or undue advantage, compared to generators? Please explain your view.***

Energia agrees that the inability to identify affected suppliers would require payments to and from a general pot (in this instance, the Imperfections Charge fund) to implement energy payments to DSUs.

With regards DSUs competing on an equal footing, changes may need to be made to ensure that DSUs are genuinely balance responsible as other participants are required to be. Baselineing (currently non-existent) and detailed metering (dispatch quantity currently set to metered quantity) to demonstrate that demand reduction has actually taken place should be implemented alongside a revised phase 1 solution on energy payments.

***3.5 Q5: How do you think the Supplier Compensation Price (PCOMP) should be calculated? What costs should be taken into account and what costs should be ignored? Please explain your view.***

Energia needs to see detailed proposals from the RAs on how PCOMP may be calculated prior to opining on which costs would be appropriate to include or not.

***3.6 Q6: Do you agree that a supplier compensation payment would have the correct incentive effect on long-run DSUs, as well as other DSUs, and would impose reasonable costs on end consumers? Please explain your view.***

As per the above, Energia would require more detailed proposals prior to opining on whether PCOMP would have the correct incentive effects.

***3.7 Q7: Do you have any views on whether supplier corrections for non-consumed energy could be determined by voluntary agreement between the supplier and the DSU, or by ex-post analysis of demand reduction dispatch decisions? Please explain your views.***

Energia does not operate any active DSUs at this time. As such we do not have particular views on voluntary agreements between the supplier and the DSU.

***3.8 Q8: Do you agree that it would be possible to categorise DSUs into long-run and intermittent DSUs by some other criterion, such as running hours, such that it would be possible to determine whether or not compensation for 'missing money' would be appropriate? If not, please explain why. How could such a test be implemented, in practice, and eligibility criterion enforced? Should such a***

***test be used instead of, or together with, supplier compensation payments? Please explain your view.***

Energia's view is that if it were possible to categorise DSUs based on differing underlying characteristics, and if by doing so this would more accurately reflect their relative contributions to the market, this would be worth pursuing. If this could provide consumers with better value than the implementation of PCOMP, it would be particularly worth investigating further.

***3.9 Q9: Do you agree with the description and analysis of the appropriate treatment of Capacity Payments and Capacity Charges? Do you think that Capacity Charges should be levied on non-consumed energy, e.g. by an adjustment to the supplier compensation price? Please explain your view.***

Energia does not fully follow the logic of the paper in regard to capacity payments and charges for DSUs and the impact of the proposed phase 1 solution. Levying charges on non-consumed energy is not seen to be administratively possible at this time.

***3.10Q10: Do you consider that some form of baselining is needed? Would appropriate supplier compensation payment arrangements affect this? If baselining is needed, do you have any views on how the baselining methodology should work? What should be taken into account in determining the baseline profile? Please explain your view.***

As noted in our general comments, baselining is recognised in the draft NCDR as vitally important to the participation of DSUs in the electricity market. The draft NCDR

proposes to create an EU repository for approved baselining methodologies. Energia would broadly agree with the approach set out in the draft NCDR.

**3.11Q11: How important is it to use sub-metering? Please explain your view.**

Metering and sub-metering is important to ensuring that DSUs deliver on their dispatch instructions. Energia's view is that an evolution of how DSUs are metered is necessary prior to the full implementation of energy payments.

**3.12Q12: Would it be appropriate to use SCADA data for the purpose of setting DSU metered quantity? How could this arrangement work in practice? Please explain your view.**

If the RAs do propose to use SCADA data as part of a revised phase 1 solution, how this would work in practice along with the associated benefits and shortcomings should be set out in a separate consultation and this is something that Energia would consider.

**3.13Q13: Do you consider that on-site generation could be accommodated in the SEM through the arrangements for Aggregated Generator Units? Are there reasons why it makes more sense to use Demand Side Units? Please explain your view.**

From the consultation it does appear that certain on-site generation is more suited to forming part of an Aggregated Generator Unit. This could particularly apply to long-run DSUs, which as stated in the consultation do not provide genuine demand response at times of high prices as would high-cost DSUs.

**3.14Q14: Are there any other issues relating to the treatment of DSUs in the SEM, which the SEM Committee should consider when implementing a revised Phase 1 solution? If so, please explain these issues.**

No further comments.

**3.15Q15: What are your views regarding negative demand response? Do you consider the supplier compensation payment arrangement will work for negative demand response? Do you think there is any potential for perverse outcomes and undue discrimination between customers? Please explain your view.**

Energia would welcome further consideration of the potential benefits of dispatchable consumption, and its potential to add flexibility to the system and reduce the dispatch down of renewables. Energia welcomes that this is being further considered as part

of the Strategic Markets workstream of the System Operators' Future Power Market programme.

**3.16Q16: How should shutdown costs for IDSs be accurately reflected in the COD for DSUs? Please explain your view.**

Energia acknowledges the issue as raised by the RAs in the consultation. Energia's view is that these costs should be properly reflected in COD to ensure that DSUs are competing in a non-discriminatory manner with other generators in the BM.

**3.17Q17: How should decremental bid prices to reduce demand reduction be calculated? Under what circumstances do you consider that decremental prices could be negative? Please explain your view.**

Energia does not have any comments on this question at this time.

**3.18Q18: Do you agree that the Grid Code requires DSUs to declare an availability of 4 MW or above on a regular basis? If not, please explain why.**

Energia agrees with the analysis as per the consultation.

**3.19Q19: Do you agree that the Grid Code requires DSUs to round down their declared availability to the nearest MW? If not, please explain why.**

Energia agrees with the analysis as per the consultation.