

Energy Storage Ireland Sycamore House Millennium Park Naas Co. Kildare

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RE: Implementation of Regulation 2019/943 in relation to Dispatch and Redispatch

<u>Energy Storage Ireland</u> (ESI) is an industry representative association comprised of members who are active in the development of energy storage in Ireland and Northern Ireland. Our aims are to promote the benefits of energy storage in meeting our future decarbonisation goals and to work with policy makers in facilitating the development of energy storage on the island of Ireland. We have over 30 members representing many areas of the energy storage supply chain.

Given the ambitions of Ireland's climate action targets and the development of the Northern Ireland energy strategy, which will play a part in the UK's net-zero emissions target for 2050, it is vital that the development of technologies such as energy storage is facilitated via appropriate long-term technical and commercial frameworks. Energy storage technologies are a key enabler to a decarbonised electricity system, and their deployment supports climate change and energy security goals by providing a multitude of valuable services. Storage systems can act in the energy, capacity and system services markets to deliver a wide range of benefits such as wholesale energy price reductions, reduced CO2 emissions and flexible system support services to help manage the grid with higher levels of renewables while minimising dispatch down.

The DS3 programme has been a great success in integrating renewable generation onto the all-island system. Through the DS3 System Services programme, both via the volume capped auctions and regulated tariff arrangements, we are now seeing the development of new build storage assets that will help provide valuable services to the grid to manage increasing levels of renewables. Continued support for the DS3 programme is vital to deliver the system level changes and new technologies needed to deliver further SNSP increases and minimise renewable curtailment.



We therefore wish to express concerns regarding the implication in the consultation paper that compensation for non-market based redispatching in the SEM may impact funding for investment in System Services and the DS3 programme. This sends a damaging signal to the market, has the potential to reduce investor confidence, and could impact the development of the energy storage pipeline at a time when our members are progressing projects for delivery under the current market arrangements and certainty on revenue streams is needed.

Investment in new System Service technologies can deliver significant curtailment reductions and bring benefits to the system in terms of emissions reductions and system cost savings. Baringa's 'Store, Respond and Save' report estimates that sourcing all System Services needs from zero-carbon technologies, such as energy storage, will halve renewable curtailment, avoid 2 million tonnes of CO2 emissions and lead to system cost savings of €117 million **per annum** by 2030.¹

A focus on cost alone, i.e. network costs, does not adequately address the overall value that programmes such as DS3 can deliver in terms of fossil fuel production cost savings, avoided emissions and lower renewable deployment costs due to reduced curtailment. These benefits must be considered when weighing up the costs of investing in System Services and other programmes that increase the flexibility of the system to manage increasing RES-E. For instance, the EU-SysFlex study *'Financial Implications of High Levels of Renewables on the European Power System'*² estimates that the value of System Services, due to avoided production costs and avoided cost of carbon, is over €750 million per annum in EirGrid's Low Carbon Living scenario (the only scenario that meets 70% RES-E). The study also argues that the true value is likely much higher as there are many other externalities that are not easily captured.

The expanded DS3 programme (DS3+) for 2030 which is currently being developed by EirGrid and SONI will facilitate increased SNSP levels up to 95% and the removal of operational constraints such as conventional fossil fuel minimum generation levels. Energy storage will play a key role in facilitating these increased SNSP levels and as the consultation paper notes, any increase in SNSP over time will facilitate a lower level of curtailment in the SEM, thus reducing compensation costs for non-market based redispatch.

It is therefore essential that investment in zero-carbon technologies such as energy storage is supported via long-term investment frameworks and that funding is provided to support this. Indeed, investment in System Services and DS3 support will reduce and even remove system operational constraints that lead to renewable curtailment, consequently lowering the

² <u>https://eu-sysflex.com/wp-content/uploads/2020/05/Task 2.5-Deliverable-Report for Submission.pdf</u>

¹ <u>https://www.energystorageireland.com/wp-content/uploads/2020/02/Energy-Storage-Ireland-Baringa-</u> <u>Store-Respond-Save-Report.pdf</u>



compensation costs due to non-market based redispatch, so it would make sense to allocate investments towards these programmes rather than reduce them.

In conclusion, we would like to thank the SEM Committee for the opportunity to respond to this consultation. We are available to discuss any of the points made above in more detail should you require.

Kind Regards,

Sam Harden Chairperson, Energy Storage Ireland www.energystorageireland.com