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Response to Consultation SEM-19-024 Balancing Market and Capacity Market Options Consultation Paper (the “Consultation”)

Summary of Response:

We appreciate the opportunity to respond to the Consultation. Our high-level comments on the Consultation are that it deals with a number of important issues of market design which have the potential to have very significant knock on effects for both market participants and consumers. We therefore believe that it is critical that these decisions not be made hastily or prematurely. Rather, as required by good regulatory practice, these decisions must be informed by accurate data and detailed analysis of existing contractual and other risk management tools to understand both the extent of the perceived issues with the market and the real impact of these decisions on market participants and consumers. In this context it is abundantly clear that considerable additional work needs to be done before Option 1 can be credibly evaluated, not least of which is that correct pricing needs to be established before any credible discussion can begin about the status and features of the balancing market in general.

Furthermore, it goes without saying that any decision of the SEMC is required to be compliant with relevant EU law and that such decisions must be lawfully made within the powers of the SEMC under the laws of Ireland and Northern Ireland. It is notable that any analysis of the domestic and EU framework within these decisions have been made is absent from the Consultation. This is particularly concerning in the case of Option 1 which creates a **false reality in pricing** and is, in our view, clearly incompatible with EU law and, in any event is ultra vires the SEMC (and also in particular the Utility Regulator).

Our detailed comments on the two options are set out below, dealing with Option 2 first.

Option 2: Capacity Market Options

We support the proposed changes to the capacity market options. We understand that the recent events in the market may have caused unfair outcomes for certain generators who were available to generate at times of high prices but were prevented from doing so because of a constraint, something out of the unit’s control. Diluting the link between high prices in the 5 - 30 minute time frames, given they should relate to an investment signal designed to operate over a much longer time frame, is a prudent design step. Given that replacement reserve constraints were already included in the FSS flag, it makes sense to also include other constraints which may prevent a unit from generating. Ultimately, we believe this is a simple change which will not disrupt the operation of the market in any way but will very effectively solve a problem which has unfairly punished many and can be implemented relatively quickly. However, please note that our opinion is subject to the proposed changes relating solely to generators that were actually available for the periods in question. We do not believe units who were unavailable should be able to avoid difference payments.



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We acknowledge that there is a concern relating to the unintended impact of this change on the CRM auction, in that the reduced risk of exposure to RO Difference Charges would incrementally incentivise new plants to locate behind an export constraint, rather than inside the constrained area. Although this point is valid in theory, in reality the fact remains that these instances are rare to the point that their occurrence is almost negligible, and so we don't believe that any business case to build a generator will realistically be based off these very limited short-term opportunities.

Overall, we are of the firm belief that implementing Option 2 alone is sufficient to mitigate and address any concerns there are in the market in the immediate term.

Our responses to the Consultation Questions on Option 2 are therefore:

3.1: Do you support this Capacity Market Option and its implementation in the SEM?

Yes, we understand that the recent events in the market may have caused undue outcomes for certain generators who were actually available to generate at times of high prices. We firmly believe that by implementing Option 2, the concerns that are currently in the market would be sufficiently addressed and mitigated.

3.2: Do you have any concerns regarding the removal of Difference Charges where Operational Constraints are binding, including the risk of unintended consequences? If so, please explain these concerns.

We do not believe there will be unintended consequences of implementing Option 2. For the purpose of preventing unfair outcomes for generators who were available to provide capacity at the time of a scarcity event, we believe there is strong justification to apply this change.

3.3: Do you consider this proposed change is in keeping with the broader CRM detailed design? Please explain your view.

Yes, it appears that current rules of the Trading and Settlement Code have caused unintended consequences in the capacity market. By implementing Option 2, this should remove this issue and therefore keep within the broader CRM detailed design.

3.4: Do you have any views on this option from a consumer perspective?

We believe that the implementation of this option should have a negligible impact on the consumer.

3.5: Do you have a strong view regarding an alternative option which could be implemented, i.e. preferably requiring only a configuration change rather than a system change?

No.

Option 1: Simple NIV Tagging in the Balancing Market

We have a grave concern in respect of the recent simple NIV tagging proposals being associated with the balancing market modifications. Indeed, we have a grave concern with several balancing market modifications that are currently being discussed. In our opinion the proposed changes are unnecessary and will have a plethora of unintended and unrelated consequences which, while readily foreseeable, are not able to be fully understood given that the SEMC does not have access to correct baseline data or risk management information. This is extremely concerning. The proposed changes, allied with what we believe is flawed logic



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and analysis, creates a **false reality** of illusory pricing which is entirely at odds with both the underpinning legal obligations and market design principles. We have attempted to summarise our concerns further (below) with regard to what we consider four key categories.

1) Incompatibility with EU Law

At its simplest level, the practical effect of simple NIV tagging as described in section 2.3 of the Consultation is that the simple NIV prices have a lower maximum price and a minimum price closer to zero. This therefore results in a “smoothing” of prices and reduction of volatility. However, this is completely at odds with all relevant provisions of EU law that require imbalance prices to reflect the real-time value of energy with no direct or indirect limits on maximum or minimum prices, and not some “smoothed” version of balancing prices which fail to give real price signals.

The proposed changes towards simple NIV tagging moves the integrated Single Electricity Market (“SEM”) away from the requirement to have modern market structures which dynamically reflect the real time value of energy. In the underpinning EU legislation, “**Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing**” (the “**Balancing Regulation**”), recital 17 clearly states,

“The general objective of imbalance settlement is to ensure that balance responsible parties support the system's balance in an efficient way and to incentivise market participants in keeping and/or helping to restore the system balance. This Regulation defines rules on imbalance settlement, ensuring that it is made in a non-discriminatory, fair, objective and transparent basis. To make balancing markets and the overall energy system fit for the integration of increasing shares of variable renewables, imbalance prices should reflect the real-time value of energy”

This is further supported by the language contained in Article 44(1) of the Balancing Regulation which requires that “*that imbalances are settled at a price that reflects the real time value of energy*”. Similarly, Recital 15(1) of **Regulation (EU) 2019/943 of 5 June 2019 on the internal market for electricity** (the “**Electricity Regulation**”) provides that: “*the general objective of imbalance settlement is to ensure that balance responsible parties keep their own balance or help restore the system balance in an efficient way and to provide incentives to market participants for keeping or helping to restore the system balance. To make balancing markets and the overall energy system fit for the integration of the increasing share of variable renewable energy, imbalance prices should reflect the real-time value of energy*”. Article 6(5) of the Electricity Regulation further provides “*The imbalances shall be settled at a price that reflects the real-time value of energy.*”

In short, the unambiguous purpose of the legislation is to ensure that balance responsible market participants are required to support the balancing of the SEM in an efficient manner which reflects the real time value of energy. The result being the incentivisation of market participants to balance the system. The indisputable intention, as the Regulations states, is to ensure non-discriminatory, fair, objective



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and transparent procurement of balancing services having regard to imbalance settlement.

Secondly, introducing measures to reduce pricing volatility amounts to *“indirectly restricting wholesale price formation”* contrary to Article 10 of the Electricity Regulation. Article 10 prohibits measures which directly or indirectly impose maximum or minimum limits in wholesale electricity markets (including balancing markets), including any measures which *“challenge market outcomes”* which is the clear intent of simple NIV tagging.

Article 10(5) imposes an express obligation on Regulatory Authorities to *take all appropriate actions to eliminate or, if not possible, to mitigate the impact of”* any *“policy or measure which could serve to restrict wholesale price formation”*. Member States shall provide a report to the Commission by 5 January 2020 detailing the measures and actions they have taken or intend to take to eliminate such policies or measures.

Finally, simple NIV pricing is contrary to the general direction of travel of the European electricity market design meaning that even if Option 1 could be implemented today it could not survive this year. Article 30 of the Balancing Regulation, states that:

“...one year after the entry into force of this Regulation, all TSOs shall develop a proposal for a methodology to determine prices for the balancing energy that...Such methodology shall:

- a) Be based on marginal pricing (pay-as-cleared);*
- b) define how the activation of balancing energy bids activated for purposes other than balancing affects the balancing energy price, while also ensuring that at least balancing energy bids activated for internal congestion management shall not set the marginal price of balancing energy...”*

We acknowledge that the balancing market may require further refinement in its design and execution. However, simple NIV tagging is a conscious departure from pricing imbalances at the real time value of electricity, distorting true market signals and leading to increased inefficiency, while depressing incentives for market participants, in each case entirely contrary to the express requirements of all relevant provisions of EU law including the Balancing Regulation and the Electricity Regulation. Both the Balancing Regulation and the Electricity Regulation are binding on the CRU and the Utility Regulator and it is therefore not open to the SEMC to lawfully implement simple NIV tagging.



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2) Incompatibility with Domestic Law

While the SEMC has the power to make decisions in relation to balancing market design, any such decisions must be made in a manner that is compatible with both EU and domestic law. For the reasons outlined above, we are of the view that simple NIV tagging is clearly incompatible with all relevant provisions of EU law including the Balancing Regulation and the Electricity Regulation. Furthermore, simple NIV tagging appears to go well beyond the *vires* of the SEMC, both by taking into account irrelevant considerations and failing to take into account relevant considerations, while also discriminating between market participants in different jurisdictions.

Firstly, the simple NIV tagging proposal appears to be primarily driven by a desire to reduce volatility in the balancing market. Neither Regulatory Authority has any statutory or other power or duty to reduce volatility per se nor even the power or duty to have regard to the need to reduce volatility. On the contrary, it has an express obligation under EU law to ensure that balancing prices reflect the real-time value of energy and not contain direct or indirect restrictions on wholesale price formation, irrespective of the volatility of such prices.

Secondly, the Consultation makes reference to the PSO Levy in Ireland as being a factor to which it has had regard in proposing simple NIV tagging. It is clearly not open to the SEMC to have regard to the PSO Levy in Ireland. While the CRU may argue that it has an ability to have regard to the PSO in order to protect consumers, this is unsupportable given that the relationship between the renewable component of the PSO Levy and energy prices is generally established to be a zero sum game over the long term. In the case of the Utility Regulator exercising its SEMC powers there can be no justification for having regard to the PSO Levy in Ireland. This is clearly *ultra vires*, distorts a non-market levy in one jurisdiction, discriminates between consumer and market participants in different jurisdictions and exposes the Utility Regulator to a material risk of judicial review in Northern Ireland.

Thirdly, the proposed redesign of the balancing market is contrary to the requirement that regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed. Simple NIV tagging appears to have been conceived in the absence of accurate baseline pricing data, in the absence of any analysis of the adequacy or otherwise of risk management tools to address balancing market volatility and in the absence of any analysis of who is being harmed by this volatility and why it is required. In our view the market has responded to deliver effective and efficient risk management tools to manage balancing price volatility and there is no justification for a regulatory intervention to seek to address an issue which is effectively and appropriately managed by the market.

We are therefore of the view that a decision to introduce simple NIV tagging is neither permissible nor proportionate for either Regulatory Authority, but is particularly problematic for the Utility Regulator.

3) Undue and unnecessary commercial disruption on the marketplace

The SEM has taken significant modernising steps in its market design. Considering the pace and fashion at which the market design has occurred, the achievement has been even more credible given the rate at which commercial entities, foreign direct investors, global funds and international and domestic banking institutions have been able to comprehend the SEM and manage associated risks.

The impulsive proposals to balancing market design now put at risk this successful transition. The SEMC, in this Consultation, appears to have ignored or are unaware of the significant volume of commercial contracting work that has seen all industry players transition to and manage risk in the SEM in its current form, including balancing market volatility.

If we take, as an example, the market for wind farm Power Purchase Agreement's ("PPAs"), as standalone. Given the number of new entrants and service providers that have been attracted to the PPA market in Ireland, it is evident the market is working well. With over 360 wind farms and over 5000MW of capacity in SEM, the scale of contracting and commercial work completed over the last twelve to eighteen months has been vast. All of this work was completed under the assumption of the balancing market as it currently implemented. A breakdown of this point, in simple estimated terms, could easily assume for a wind farm project in Ireland, with a PPA or alternative balancing agreement, that the contracting structure contains counterparties/stakeholders of one (1) to five (5) equity investors, one (1) lead arranging lender/bank with a further (2) to (4) lenders/banks upon syndication of the debt, one (1) offtaker under the PPA, three plus (3+) legal organisations representing the various interested parties and at least one (1) guarantor or other security agent guaranteeing payments under the PPA. Subject to how the debt is structured the significant volume of contracts and costs associated therewith should not be lightly underestimated. In our own experiences, as the leading third party provider of trading services and contracts in the market, we have seen a minimum of six (6) agreements, including the PPA itself, associated solely with the PPA¹. This is without consideration of associated Facility Agreements, Guarantees, Intercreditor Agreements, Constructions Agreements, Turbine Supply Agreements, Maintenance Agreements, Site Service Agreements, Direct Agreements, Collateral Warranties etc. all of which are underpinned by and dependent on the PPA.

For all wind farms, be they either supported or not, the fundamental commercial consideration is the expected volatility and price setting mechanism of the balancing market. The epicentre of the contracting arena revolves around certainty over price setting mechanisms. For the Regulatory Authority's to actively propose such a fundamental redesign of the balancing market without due consideration of the commercial effects on over 5000 MW of assets, and associated agreements, is profoundly concerning. The multitude of parties involved have only just completed an

¹ PPA, Direct Agreement, Insurance Agreement, MC Guarantee, Form of Authority, Constraint Trading Agreements



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extensive and exhaustive contracting initiative over the past twelve to eighteen months. The inherent disruption and significant cost involved in a widespread reopening of the associated agreements would have a colossal impact on the sector. This process would result in an enormous value leakage from a sector which has already had to internalise the costs of I-SEM implementation, and given the existence of the contractual risk management arrangements that have been put in place would deliver no incremental value. We cannot understand why the SEMC seeks to make a regulatory intervention to solve a perceived issue that the market has already solved. At this crucial point in time, where the industry is on the verge of delivering unsubsidised renewable projects and competitive renewable auctions, it would be a detrimental blow to the market and the confidence of its stakeholders. Indeed, the orderly investment landscape for both indigenous and foreign direct investors could no longer be relied upon by the industry as a significant selling point. Such investors have an even more critical role to play as the industry, as tasked by Irish Government, is required to deliver on the seventy per cent (70%) renewable targets.

4) Fundamental flaws in economic design logic and process

We have grave concerns over the lack of rigor involved in the proposed balancing market redesign and modification initiatives.

We are particularly concerned about the absence of a baseline set of balancing price data in the market. This can be attributable to the mispricing of the vast majority of prices in the balancing market to date by SEMO. It is abundantly clear that this correction of pricing needs to be established before any credible discussion can begin about the status and features of the balancing market in general.

Additionally, the balancing market, like any system needs time to develop into a steady state of operation after initiation. For any type of market system, which is reliant on human behavior and feedback loops, there needs to be an appropriate period of time in which market participants can make and adjust informed trading decisions. As per our comment above, this can only occur where the pricing in respect of any market is accurate and beyond question. It is evidently clear that the SEM is not at this juncture currently. We question how any other party, including the Regulatory Authorities, could draw any realistic conclusions.

The proposed Consultation appears, at this point in time, given the incorrect data, to be a premature response to initial anxieties arising out of individual events which have no statistical significance to the general long term operation of the market design. The graphs below show the reduction volatility in the past four months when compared with the first four months of the SEM. We believe that this stabilisation is as much due to i) changing behavior and ii) generator outage statistical changes, as it is on seasonal effects.



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The SEMC appears to have arrived at an arbitrary outcome-based approach in the Consultation which infers that less volatility than the current level of volatility, somehow results in a better market design. The assumption that any change that reduces volatility in price is an improvement, is both flawed and unlawful. This is an oversimplification and absolutely no basis has been provided for such an assumption in this Consultation. While it may be desirable for volatile prices to create market signals that stimulate investment and in turn reduce volatility, consciously dampening price signals by regulatory intervention is unjustifiable and unlawful.

The graph above compares some of the initial volatility in the Irish market with that of the German market. When compared to the size of the synchronous system, the Irish market has a much higher penetration of renewable energy compared with the German market, and much less liquidity. Therefore, the Irish market must observe a fundamentally higher level of volatility in its real-time imbalance pricing than that of Germany. This is currently the case.

The sheer magnitude of the proposed change is extremely concerning. We have conducted more detailed analysis into the impact NIV tagging would have on imbalance prices at 5-minute intervals. The graph below shows the flag status for the Price for Marginal Energy Actions PMEA for each 5-minute period from October 2018 to April 2019. It illustrates 2 very pertinent points.

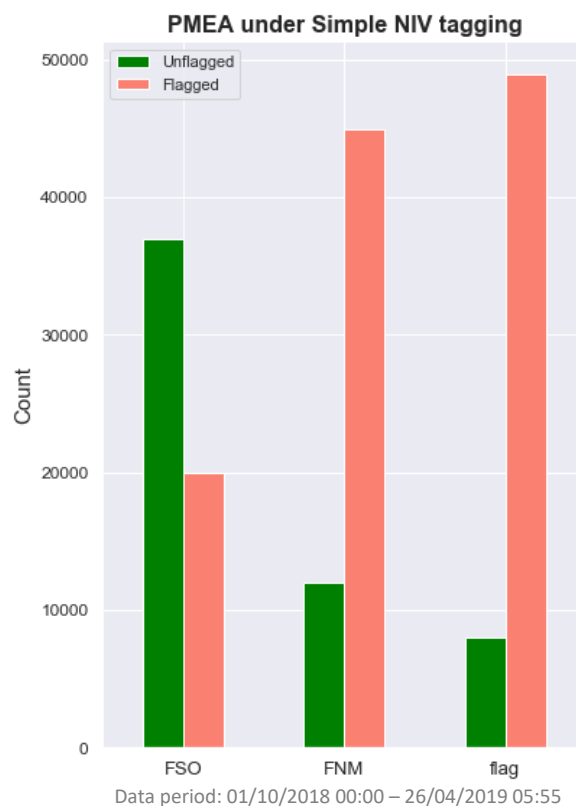
Firstly, around 20,000 periods are set by a price that should be (and currently are) flagged out of the price setting mechanism as an FSO (System Operator Flag) action for non-energy actions (i.e. congestion management). We state again that Article 30 of the Balancing Regulation will shortly require that *“that at least balancing energy bids activated for internal congestion management shall not set the marginal price of balancing energy”*. The NIV flagging proposal will run contrary to this requirement an estimated 36% of the time.



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FNM (Non-Marginal Flag) actions identify actions/bids that cannot be marginal in reality due to minimum/ maximum generation constraints or ramping constraints. NIV flagging would utilise these “non-marginal” bids to set the marginal price of energy in an estimated 80% of the periods. Self-evidently, these bids cannot be marginal and cannot produce imbalance prices that reflect the real-time value of energy as required under law. The analysis highlights the scale of the effect the proposed changes would have on the market, in that units which (by definition) should not be setting the marginal energy price are in fact setting the marginal energy price. This perhaps shows that the proposed changes have much more far reaching consequences than previous analysis showed.

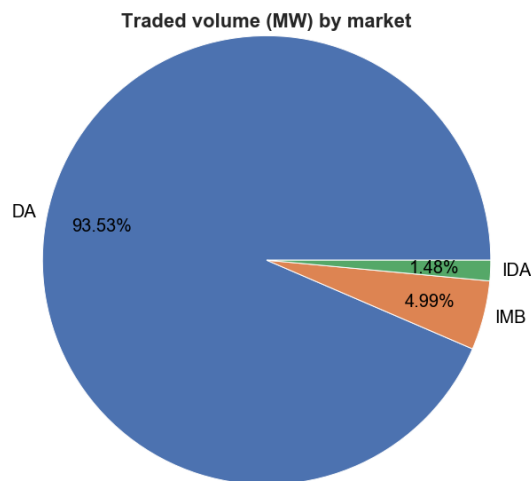


To date, only five percent (5%) of the total traded volume in the SEM goes through the balancing market. With the link between balancing prices and liabilities for available generators with respect to Reliability Obligations diluted, there should be no fundamental basis for concern about volatility in the balancing market. Any such concerns can only be justified in economic logic through market design principles.



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Our responses to the Consultation Questions on Option 1 are therefore:

- 2.1: No. The proposal in the Consultation Paper is ill-conceived and unlawful.
- 2.2 Yes. Simple NIV tagging has the effect of reducing volatility in balancing prices so that they are less reflective of the real-time value of energy. This is entirely incompatible with all relevant provisions of EU law that require imbalance prices to reflect the real-time value of energy. The proposal appears to be based on irrelevant considerations (particularly in the case of the Utility Regulator), is discriminatory and, we believe, disproportionate, although we acknowledge that we have virtually no accurate baseline pricing data for the balancing market. There is certainly insufficient data to make this decision. The perceived risks that simple NIV tagging seeks to address are already effectively managed through market based mechanisms, such that the implementation of this option would require significant investments of time and cost, in particular for those who have provided solutions to the market in response to existing price signals, for little or no benefit.
- 2.3 The question of whether simple NIV tagging is consistent with existing SEMC Decisions is somewhat academic given that these do not set binding legal parameters for the SEMC. The Electricity Regulation and the Balancing Regulation do, however, set legally binding parameters for the SEMC and simple NIV tagging is demonstrably incompatible with the obligations on the Regulatory Authorities under this legislation. Without prejudice to the foregoing, we would observe that the extracts of the market design decisions in the Consultation are selective and slightly misleading. While it is true that SEM-17-024 contemplated tools for reducing price volatility if required, SEM-17-024 suggested that the test for whether interventions should be made to address undue volatility was *“imbalance prices were to be unduly volatile to the extent of negatively affecting efficient trading across market timeframes”*. There is no suggestion in the Consultation that this test has been satisfied, nor indeed any evidence that regard has been had to the question of whether efficient trading has been negatively affected. For the reasons outlined above, we are of the view that any such analysis would demonstrate that this is manifestly not the case.



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- 2.4 We do not agree that pricing outcomes under simple NIV tagging are preferable. Such pricing outcomes are less reflective of the real-time value of energy and as a consequence are both less economically efficient and unlawful. Article 10 of the Electricity Regulation expressly prohibits maximum or minimum limits to wholesale prices (including in the balancing market), while Article 10(5) imposes a positive obligation on Regulatory Authorities to eliminate or mitigate any measures that limit prices and requires Member States to report to the Commission on same.

Modification Proposal MOD 10 19

We are also highly concerned about the recent related modification proposed by the Market Monitoring Unit (Modification 10-19) concerning the treatment of priority dispatch generators with respect to balancing market pricing. Again, there seems to be a series of fundamental misunderstandings around what marginal pricing is, and what removal of bids rather than regulatory manipulation of bids to zero actually achieves. It also encroaches into regulation of simple bids by participants. Given that this Modification again proposes to alter the balancing market price setting mechanism, the associated issues here need to be studied in conjunction with the host of unresolved and unaddressed issues arising out of the NIV tagging proposal. If there is to be fundamental redesign of the SEM balancing market, and we don't believe this is necessary, it must be conducted with rigor, in a holistic way, based on best economic practice, in line with relevant law and with due consideration for the commercial impact in the market.

Conclusion

The arguments as presented above, raise critical questions and fundamental concerns in respect of this Consultation, and need to be considered in a much greater level of detail by SEMC, or such other appropriate entity, before the potential fundamental redesign of the balancing market could be considered.

We believe that Option 2 is an appropriate and proportionate modification to address an unintended consequence of the market design. The false reality in pricing Option 1 is, in our view, ill conceived, based on inadequate information and unlawful. Furthermore, the most significant of the perceived issues addressed by Option 1 would be addressed by implementation of Option 2 in any event. The implications of simple NIV tagging for the market for power purchase agreements and balancing risk management services would be enormous and could have significant adverse implications for providers of market based solutions in I-SEM, such as ourselves. We reserve our position in relation to any decision to implement simple NIV tagging.

Sincerely,



Ronan Doherty – CEO ElectroRoute