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Dear Dena,

Dena Barasi Ofgem 9 Millbank London SW1P 3GE

# Locational BSUoS Charging Methodology - GB ECM-18

Thank you for the opportunity to respond to this Regulatory Impact Assessment (RIA) consultation. We have answered the questions from the consultation in the attached annex. For clarity we have summarised our main points below and expanded on them further in the annex. We have not changed our views on the proposal. Indeed our views have been reinforced by DECC's "minded to" statement of the 14<sup>th</sup> January 2010 concerning transmission access. We do not believe that that the GB ECM-18 Locational BSUoS Charging Methodology proposal better meets the relevant objectives for the Use of System Methodology and therefore should not be implemented. We are strongly opposed to the implementation of any Locational BSUoS proposal as it will have a profound negative impact on the competitive market and wider Government policy objectives. It would also in our view be illegal. Our views are summarised below.

# The Level of Constraints

- The analysis and proposal are based on constraint forecasts by NGET that are overstated and fundamentally are flawed.
- Constraint costs are at a level that was forecast at BETTA and on which Ofgem's decision to "allocate" access rights was based.
- Constraints are only at current levels because of circuit outages to upgrade the network that will in turn reduce constraints.

# The Impact on Wholesale and Balancing Mechanism Prices

- The analysis has not fully considered the wider impact of increased wholesale and Balancing Mechanism (BM) prices.
- Redpoint's analysis for DECC, takes account of the net effect of constraint costs and the wholesale price of Locational BSUoS. It shows that there is little or no overall saving to be made from Locational BSUoS compared with a fully socialised model.



### Competition

- Contrary to what is portrayed in NGET's Addendum Report of 29<sup>th</sup> November 2009, SSE have not been engaged in non-competitive behaviour in Scotland. Should the Report be founded on by Ofgem in deciding to implement Locational BS UoS it will undermine the validity of Ofgem's decision.
- Much is made of the behaviour of generators in Scotland with Locational BSUoS. However Locational BSUoS splits the GB market, and with different cost basis, it is invalid to then compare market behaviour on either side of the constraint boundary.
- Ofgem need to be consistent in considering market power issues in E&W behind constraint boundaries there.
- If there are competition concerns, Locational BSUoS will only make things worse if it forces plant off in Scotland. It will not therefore solve the problem it is intended to address.

### Discrimination

- The proposal is discriminatory on a number of levels: against Scottish generators; non-portfolio players and inflexible generators such as wind and nuclear.
- The focus on the derogated Cheviot boundary is discriminatory.
- Scottish constraint costs and volumes are not the result of solely Scottish generators. E&W generators influence both costs and volumes.
- Constraint costs in E&W have increased by more than that in Scotland, yet these costs continue to be socialised.
- The proposal in effect removes property rights from Scottish generators and as such is illegal.

#### The Derogated Boundary

• There is no clear rational for applying the proposal at the Cheviot derogated boundary.

# Security of Supply

• With high wind penetration, security of supply, especially in Scotland, could be compromised.

# Move to a Low Carbon Economy

• The risk and costs to renewables of the proposal will do nothing for the move to a low carbon economy.

# **Effect of Proposals**

- SSE annual revenues could be hit by up to £40m, resulting in windfall gains for generators in E&W. This is both disproportionate and unreasonable.
- The proposal is complex and will provide little signal for generators to react to.
- The complexity of the proposal will increase regulatory risk and deter investment. This has not been fully considered in the analysis.
- Locational BSUoS removes any signal to the TOs or SO on the need for infrastructure reinforcement.
- The proposal breaks up the BETTA market arrangements.



### Further Flaws in the Analysis of the Proposals

• There are a number of deficiencies in the analysis presented by NGET and Ofgem, not least that the analysis is based on data from 2008/09, an "atypical" year and does not include data from the summer outages of 2009.

### Process

- Starting with Ofgem's letter of the 16<sup>th</sup> February 2009, the process for forcing through this change has been flawed.
- Importantly, DECC's "minded to" statement of 14<sup>th</sup> January 2010 completely undermines the proposal.

These points are expanded on below.

### The Level of Constraints

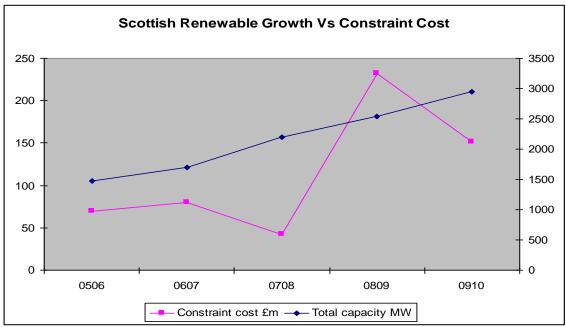
Ofgem wrote to NGET on 16<sup>th</sup> February 2009 identifying concerns about rising forecast constraint costs in Scotland in 2009/10. However, it is clear looking at the forecast outturn costs for this year that NGET's forecasting is flawed. NGET's first forecast of GB constraint costs for 2009/10 was £307m, made in December 2008. They are now forecasting, a year later, an outturn cost for 2009/10 of £198m and we believe that the actual costs will be much lower, given we are through the summer outage period of high constraints. NGET are incentivised to overstate constraint costs and disincentivised to contract for constraint management services (that would lower the costs) before their SO Incentive scheme is set at the end of March. In terms of costs to the market, this is enough of a failing, but when it influences major policy, such as this, it is clearly unacceptable (we have written to Ofgem separately about possible solutions to this). The Locational BSUoS proposal would also mean that NGET are no longer exposed to these constraint costs going forward and so implementation of the proposal would be a benefit to them. Further, the proposal removes any signal on when it would be appropriate to invest in the transmission network. As a basis for Ofgem making a decision to implement Locational BSUoS, NGET's forecasts leave any decision open to challenge.

It is stated in the RIA that the assumptions made at the implementation of BETTA (with regard to constraint costs) and on which the decision by Ofgem was made to "over allocate" access rights, need re-visited. However, the NGET forecast level of constraints for 2009/10 (£198m) is within the range forecast at BETTA for 2009 (£120m to £380m), as is the forecast for 2010/11. The basis of the decision at BETTA appears to be valid and therefore undermines the justification for the introduction of Locational BSUoS now.

Contrary to what is stated in the RIA (attributed to NGET), that the increase in constraint costs is due to increased generation in Scotland, there is no correlation between the jump in the level of constraint costs in 2008/09 and increased wind generation. This can be seen in the graph in Figure 1 below.







Instead, the current level of Scottish constraints is primarily due to transmission circuits being taken out of service that will allow upgrading of the transmission system, allow new generation to connect and reduce constraint costs in the medium and long term. It can be seen from the constraints data in Table 1 below, that whilst in the first year of BETTA, the Cheviot constraint costs are higher than that in E&W, they settle down at a lower level in 06/07 and 07/08, before the Cheviot "Interconnector" upgrade works started in 08/09.

Table 1

Constraint	05/06	06/07	07/08	08/09	09/10 Latest
Cost	Actual (£m)	Actual (£m)	Actual (£m)	Actual (£m)	Forecast (£m)
E&W	13	28	29	31	55
Cheviot	44	25	22	178	106

Without the upgrade works, the current underlying constraint cost would be of the order of £40m to £50m. It should also be noted that the consequence of upgrade works (on the transmission system) increasing constraint costs was recognised, though not quantified, in the analysis carried out for the introduction of BETTA which stated that the constraint costs forecasts were based on "the assumption of an intact network and that this is optimistic, particularly in light of the significant construction outages required to accommodate additional windfarm generation.".

It is clear that constraint costs increased significantly in 2008/09, but are forecast to reduce again in 2009/10. Regardless, they remain within the level forecast at BETTA. It would therefore be unjust and discriminatory to target all of these costs at Scottish generators by introducing Locational BSUoS. In addition a decision now by Ofgem to introduce Locational BSUoS, when the constraint cost are within the range deemed



acceptable by Ofgem at BETTA, puts into question Ofgem's decision making and adds significantly to regulatory risk with a resultant adverse impact on investment.

Our response to NGET's SO Incentive Scheme consultation in December provided further detail on our criticism of NGET's constraint forecasting. The covering letter is provided in the annex to this response.

The Impact on Wholesale and Balancing Mechanism Prices

There is a great deal of focus in the RIA on the reduction of constraint costs through the implementation of Locational BSUoS. It is presented that there will be a decrease in constraint costs, saving hundreds of millions of pounds. However, there has been little detailed analysis provided on the wider impact that Locational BSUoS will have on wholesale market prices and indeed Balancing Mechanism prices. Ofgem simply conclude that it appears that *"the wholesale price does not have a large impact on the case for introducing the proposed modification"*. However, both the Redpoint and Frontier Economics analysis (for DECC and Ofgem respectively) have shown that the benefits of increased generation entry on the wholesale price can be significant and can outweigh the cost of constraints under a Connect & Manage regime.

Further, Redpoint's recent analysis of Locational BSUoS for DECC, and its impact on constraint costs and wholesale price shows that in their Central Case over the period to 2020, implementing Locational BSUoS is broadly neutral, compared to a fully socialised model (a £7m NPV on NPVs of around £1.6bn). It should be noted that the analysis takes no account of the change on BM prices, and that given DECC's minded to statement of 14<sup>th</sup> January 2010, any Locational BSUoS proposal implemented by Ofgem will be short-lived and therefore any savings will, if any, be negligible. It is therefore clear that a) there has not been sufficient analysis of this carried out either by NGET or Ofgem as part of the RIA and b) that the implementation of Locational BSUoS will at best result in little if any overall savings, rather than the savings put forward in the RIA for constraints in isolation. In short, Locational BSUoS will not produce the anticipated cost savings and could in fact increase costs overall.

#### Competition

Ofgem and NGET continue to make statements about the behaviour of SSE in Scotland. We have already written to Ofgem on the statements made in the 16<sup>th</sup> February 2009 letter. We have also written more recently to NGET, copied to Ofgem, expressing our concerns on the statements included in NGET's Addendum analysis to this proposal. In that letter we have stated that our Bidding over the last 18 months is better value to NGET than the E&W average. As a consequence, if NGET's analysis is used by Ofgem in deciding to implement the Locational BSUoS proposal, it would undermine the validity of Ofgem's decision.

Much is made in the RIA of the behaviour of generators in Scotland behind the constraint boundary. It is suggested that any divergence of Bid price level from that in E&W will be clear to see and that this will be acted on by Ofgem. We do not agree that a divergence of Bids prices from that in E&W under a Locational BSUoS arrangement is necessarily the use of market power or a cause for concern. For example, if the marginal generator is in merit even taking account of Locational



BSUoS, the marginal generator in Scotland will make Bids that will allow it to cover its costs of providing a constraint management service, including the Locational BSUoS costs. In addition, the level of these Bids will be floored by the next generator's Bids in the merit order in Scotland and so there will be a limit on the extent of the marginal generator's Bids. More fundamentally, given Locational BSUoS in effect splits the GB BETTA market, it would be wholly wrong to compare the Bidding behaviour of generators on either side of the split market boundary.

The RIA discusses market power behind the derogated boundary in Scotland, but no analysis is undertaken of market power behind other known boundaries in E&W. Table 2 below provides our analysis of the HHI (Herfindahl-Hirschman Index) across all the system boundaries across GB that are presented in NGET's Seven Year Statement (SYS). The data used is taken for the current SYS. "HHI In" and "HHI Out" represent the HHI on each side of the boundary, as it is not always clear which side of the boundary will have the higher HHI, e.g. boundary B11. We have also estimated the ownership/control of generation in the columns labelled "Parent Co./Offtaker". This changes some of the HHIs but not the overall picture. What is clear from both sets of results is that the majority of boundaries have HHIs higher than the B6 Scotland boundary. Ofgem need to be consistent in the consideration of market power issues across the whole of GB.

Furthermore, whether Ofgem consider that the market is currently competitive or not, the implementation of Locational BSUoS will only make matters worse if generation in Scotland is forced out of the market.

By Register	ed Generat	or	By Parent Co./Offtaker			
Boundary ID	HHI In	HHI Out	Boundary ID	HHI In	HHI Out	
B2	6328.39	634.83	B2	6633.90	955.07	
B17	5585.35	592.86	B4	5678.20	955.69	
B13	4567.34	607.36	B17	5585.35	967.77	
B4	4444.10	650.68	B3	4784.34	963.40	
B1	3996.25	618.21	B13	4567.34	969.78	
B5	3451.68	665.26	B1	4321.37	966.54	
B3	3420.05	610.26	B5	3991.60	980.63	
B12	3090.87	565.37	B12	3356.03	941.21	
B14	2728.97	587.49	B6	2392.48	1015.75	
B6	1955.46	692.68	B14	2209.52	954.46	
B10	1923.39	604.02	B10	2071.78	946.07	
B15	1830.90	592.68	B7	1863.72	1028.63	
B7	1595.84	725.35	B15	1830.90	1029.03	
B11	810.19	938.19	B11	1305.67	1208.94	
B8	722.52	1155.61	B8	1234.52	1431.37	
B16	596.11	1037.43	B16	1181.69	1271.48	
B9	569.35	1357.63	B9	1058.65	1565.74	

Table 2



### Discrimination

The proposals clearly discriminate against Scottish generators. The forecast Cheviot constraint cost of £180m for 2010/11, largely associated with outages on the Cheviot transmission circuits, is to be targeted through Locational BSUoS at Scottish generators. However, the forecast cost of £100m associated with the Thames Estuary circuit outages in E&W in 2010/11 is not being targeted at the generators behind that constraint and will continue to be socialised. It is also clear that whilst E&W constraint costs are forecast to go up by more than three times in 2010/11, Scottish constraint costs will go up by a much lower degree, yet no form of targeting is proposed for E&W constraint costs.

As well as Locational BSUoS being introduced because of the increase in constraint costs in Scotland, further justification is given in the RIA for its implementation at the derogated Cheviot boundary on the grounds that the short run costs of access (i.e. constraint costs) are diverging from the long-run cost (i.e. TNUoS). However, the cost of constraints in E&W of £100m, clearly highlights that constraint costs can be high, and that the short-run costs can diverge from the long-run costs without there being a derogated boundary. The specific targeting of such short-run constraint costs at Scotland can be seen as wholly unjustified and discriminatory.

Further justification given for only Scottish generators being targeted by the proposed Locational BSUoS arrangements is that only they have control over the level of constraints and costs. However, this is flawed, as these constraint cost are determined from a number of factors in relation to the Cheviot boundary: generation in Scotland; generation in E&W; demand in Scotland; demand in E&W; the transmission infrastructure that is taken out for routine maintenance; the transmission infrastructure that is taken out whilst reinforcement work is undertaken; the transmission infrastructure build that is delayed and indeed NGET's strategy for managing constraint costs. More particularly, not only do E&W generators influence costs at the Cheviot boundary through their Offers in E&W into the Balancing Mechanism, they also influence volumes, as the MW transfers at the Cheviot boundary are dependent on the disposition of plant in E&W (i.e. which plant in E&W is running), especially those in the North of England. This has always been the case and was a feature of the operation of the Interconnector prior to BETTA (transfer levels were referenced against E&W generation plant in Appendix K of the Interconnector Agreement). It is also noted in NGET's report on access options in the run up to BETTA, that "generation close to the SP-NGC interconnector (particularly North West England) will have an impact on the capability of the interconnector". Given the level of influence E&W generators can have on the constraint costs and volumes at the Cheviot boundary, targeting the costs at only Scottish generators is wholly discriminatory.

The introduction of Locational BSUoS will increase costs and risks to new renewable investments, having a particularly detrimental effect on the financing of independent development. It is also clear that existing renewables, through their inherent inflexibility to dispatch, will not be able to react to the additional costs arising from Locational BSUoS, having simply to absorb the cost.



The proposals also clearly discriminate against Scottish non-portfolio generators, particularly those that are inflexible. They also do not benefit from any upside in the reduction in BSUoS in E&W. Such outcomes are highly unsatisfactory and clearly discriminate against renewable generators as a class, and in particular independent non-portfolio developers.

In its effect, Locational BSUoS removes the commercial compensation for constrained operation (a cornerstone of the NETA and BETTA arrangements) that generators in E&W will continue to enjoy. In short, Scottish generators are having their property rights removed. We believe this is illegal.

# The Derogated Boundary

The derogated boundary is used as a justification for the imposition of a short-run cost of access charge. This is based on a statement in the RIA that the long-run TNUoS charge assumes a compliant system. However, we believe that there is a question mark over the way that the derogated boundary and the Security Factor are treated in the TNUoS model<sup>1</sup>. We believe that the TNUoS model already makes allowances for the derogated boundary meeting the security standards. That being the case, it would be inappropriate to then apply a "short-run" Locational BSUoS cost to Scottish generators in addition to the cost already being paid under TNUoS.

We also question Ofgem's rational in picking out the derogated boundary at BETTA for special treatment when there are many derogations applied across the market and have been since privatisation. For example, generators that do not meet the requirements for Reactive capability or Frequency Response capability have derogations. These increase costs to customers and disadvantage those generators that do not have derogations and provide the services, sometimes under scrutiny from Ofgem, because they are the only ones that actually provide a service to NGET. Ofgem's focus on only one derogation, the derogated Cheviot boundary, is inconsistent and discriminatory.

# Security of Supply

It is clear that during the recent cold spell this winter, with a prolonged high pressure across the UK, little generation output came from wind. It has been put forward in the RIA that there will be little impact on security of supply from these proposals, that even if a coal set shut in Scotland, there would be little impact on security of supply. Even if that were the case in GB, given the fact that the Cheviot boundary transfer going North into Scotland is actually lower than the transfer limit going South, and with increasing wind generation in Scotland, if existing thermal plant in Scotland closes, even if the rest of GB is secure, there could be negative implications for Scotland's security of electricity supply.

<sup>&</sup>lt;sup>1</sup> In calculating the Security Factor, NGET state that they run a secure DCLF ICRP transport study, and that this calculates the nodal marginal costs where peak demand can be met despite the Security and Quality of Supply Standard contingencies. This suggests that, in contrast to the statement in the RIA, the TNUoS model makes allowances for the derogated boundary meeting the security standards.



# Move to Low Carbon Economy

The proposal does nothing for the transition to a low carbon economy. The additional risk and costs of the proposal will make financing of independent projects more difficult and deter investment in renewables in Scotland. This increased risk is not balanced by a complementary lessening of risk in E&W. Therefore the overall impact will be negative. This increased risk and cost is likely to materialise in two ways, some marginal projects not going ahead (which some would put down as not being material at present), but more importantly that individual projects will be developed at a smaller scale as the marginal wind turbines on a specific site become uneconomic to develop sooner.

### **Effect of Proposals**

By NGET's analysis, SSE could be faced with a penalty on annual revenues of up to £40m following the implementation of Locational BSUoS. This is on top of SEE's TNUoS charge of some £88m for GB and £46m for our Scottish generation. This almost doubles our Scottish network charges. In the short term, these additional costs are likely to have to be absorbed, as we will not be able to make any significant changes to our plant disposition or overheads, such as TNUoS, rates, staff, maintenance contracts etc. Indeed, across Scotland, the plant running regime is unlikely to change in the short term. Instead, the proposals will simply transfer costs to Scottish generation and result in windfall profits to E&W generation. Given the level of wealth transfer, the proposals are disproportionate, unreasonable and challengeable.

It is clear that the Locational BSUoS proposals are complex, the costs will be unknown ex-ante and will be extremely volatile as they depend on many factors including transmission circuit configuration, circuit outages, generation operation in Scotland and E&W and generator Bids in Scotland and Offers in E&W. The whole process will be dynamic and iterative. If, as proposed, Locational BSUoS is applied at multiple "nested" derogated boundaries, this will increase the complexity even further. There is also a risk of a feedback effect to the extent that certain generators take into account anticipated future BSUoS costs in Scotland in their balancing market Bids and Offers. As such the Locational BSUoS costs will be unknown and therefore there can be no meaningful signal given to generators on how they should operate nor, importantly, to those planning to invest in Scotland. This is likely to have a significant affect on investment in generation and in turn security of supply.

As the costs of constraints are simply recycled back into Scotland, the proposals also mean that there can be no meaningful signal given to the Transmission Companies on when to reinforce the transmission network or to incentivise the SO in managing the system.

In the longer term, Locational BSUoS in effect removes property rights from Scottish generators on a discriminatory basis compared to England and Wales. We believe that this is illegal and will have a serious adverse effect on investor confidence. If Locational BSUoS is implemented, it is clear that access rights are not enforceable. This can only have a serious adverse affect on investment in GB.



The proposals are also a fundamental change to the operation of the market, in effect unwinding BETTA, and the common access arrangements that were a prerequisite for restructuring the E&W and Scottish markets in 2005.

### **Further Flaws in the Analysis of the Proposals**

The RIA and NGET analysis has been based on data from 2008/09. Not only does this not take account of the most recent summer outage programme in 2009 (much of which would have been available to NGET prior to the publication of their Addendum), the year 2008 has already been recognised and quoted by both Ofgem and NGET as "atypical"<sup>2</sup>.

The analysis by NGET is based on there being an "*instantaneous feedback loop*" between generators getting and acting on information on Locational BSUoS costs. However, that will not be the case. Generators will not have sufficient information on other generators' behaviour ex-ante and will only have outturn BSUoS data two working days later. It is clear that there will be no instantaneous feedback loop and therefore it puts NGET's analysis in doubt.

The RIA is also deficient in assessing the impact the proposal would have on companies' IT systems and the time it will take to put new systems in place. In our case we have estimated that the changes required to our Front office, Back office and financial reporting systems will take some 6 months to put in place.

One final point is that this is a complex change. NGET have found it difficult to predict how generators will behave and therefore how to model the outcome of the change. This raises doubts about the analysis but also raises concerns with regard to any unintended consequences, which there are certain to be.

#### Process

We believe that the process to date has been flawed, from Ofgem's initial coercion of NGET to bring the proposal forward in the letter of 16<sup>th</sup> (not 17<sup>th</sup>) February 2009, to NGET. The subsequent consultations do not address this fundamental flaw in the process followed.

In addition, Ofgem continue to take forward these Locational BSUoS proposals despite the clear intention of DECC to introduce a Connect & Manage regime for GB transmission access with a fully socialised BSUoS charge as noted in their "minded to" statement of 14<sup>th</sup> January 2010. No matter what Ofgem decide with respect to GB ECM-18, given DECC's powers under the Energy Act 2009, Ofgem's decision is going to be overwritten. Any decision by Ofgem can only be very short-lived, indeed it is unlikely that changes to systems could even be made in time for implementation before DECC's implementation of Connect & Manage on or before June 2010. This makes the ongoing pursuit of this proposal by Ofgem inefficient and costly to all market participants.

 $<sup>^{2}</sup>$  Recognised in Ofgem's letter on TAR, issued on 27 February 2008, where, in NGET's commentary on Project Rationale, it is stated that "data in respect of the current year is atypical and is influenced by unusual conditions which are not believed to be representative of the long term outlook".



As noted above, the levels of Scottish constraint costs have fallen dramatically from the initial NGET forecast levels that caused the knee-jerk policy reaction. It is also clear that the level of constraint costs is similar to that anticipated at the outset of BETTA. It is therefore not clear, why Ofgem a) took so long to bring these proposals forward, but also b) why Ofgem continue to pursue it, particularly given NGET's forecast costs for 2009/10 can be seen to be so fundamentally flawed.

Ofgem's proposals for Locational BSUoS are a fundamental change to the way the GB electricity market has operated thus far. The current operation of the market, where constraint payments are made to participants, has been a feature of the Pool, NETA and BETTA. Generators pay for their access to use the transmission network and if economic generation cannot run due to a lack of transmission infrastructure, then the generator has always been entitled to receive compensation. Ofgem's proposals seek to take that compensation right away, at least for generators in Scotland. The process has not been appropriate to such a fundamental change in the market arrangements.

As noted in our original correspondence on this issue, Ofgem's views have turned full circle on the rights to compensation for generators. The proposals for Locational BSUoS take away "the right to export power onto the system up to the value of their TEC which is financially firm", removing the "compensation in the form of constraint payments", by re-circulating this compensation as a BSUoS cost back into Scotland. Such a U-turn cannot be considered good regulatory practice, increases regulatory risk and will have a negative impact on investment and hence security of supply.

Finally, we note the speed with which Ofgem were able to issue the RIA on the 3<sup>rd</sup> December 2009, following NGET's issue of their Addendum report on 26<sup>th</sup> November 2009. NGET took more than 5 months to complete their analysis. Ofgem were able to carry out their analysis of the report and issue the RIA in 5 working days. Five working days seems in inordinately short time for consideration of such a significant issue. It is therefore not clear whether Ofgem had the NGET information before it was issued to the market or whether Ofgem's assessment was made before the report was presented. We believe it raises serious process questions in relation to the issue of the RIA.

We would be happy to discuss this response and the proposal for Locational BSUoS with you, or if you would like to discuss any of the points in more detail, please do not hesitate to get in contact.

Yours sincerely,

Rob McDonald **Director of Regulation**