

Assessment Procedure Consultation Responses

P349 'Facilitating Embedded Generation Triad Avoidance Standstill'

This Assessment Procedure Consultation was issued on 8 August 2016, with responses invited by 26 August 2016.



Phase

Initial Written Assessment

Definition Procedure

Assessment Procedure

Report Phase

Implementation

Consultation Respondents

Respondent	No. of Parties/Non-Parties Represented	Role(s) Represented
LondonWaste Limited	0/1	Embedded Generator
Tees Valley Combined Authority	1/0	Local Authority and LEP
SmartestEnergy	1/0	Supplier
Good Energy	1/0	Supplier, ECVNA, MVRNA
EDF Energy	8/0	Generator, Supplier, ECVNA, MVRNA
National Grid Electricity Transmission	1/0	Transmission Company
ScottishPower PLC	6/0	Generator, Supplier, Non Physical Trader, ECVNA, Supplier Agent, MVRNA
RWE Npower	1/0	Supplier

Question 1: Do you agree with the Workgroup’s initial majority view that P349 does better facilitate the Applicable BSC Objectives than the current baseline?

Summary

Yes	No	Neutral/No Comment	Other
3	5	0	0

Responses

Respondent	Response	Rationale
LondonWaste Limited	No	<p>We do not see the proposal as “promoting effective competition in the generation and supply of electricity”. We argue that it would do the opposite by reducing competition in generation by creating a barrier to new entry into the generation market in the form of regulatory risk.</p> <p>This proposal seems to be based on the flawed premise that embedded generators (and the demand they offset) are ‘using’ the transmission system. What was the lowest level of total embedded generation during a triad Settlement Period? As a collective they provide a significant generation base which is “always there” at triad times in the same way the demand they offset is “always there” and so the transmission system has never had to cater for that demand. It cannot be argued that anything more than a minority of such generators are using the transmission system. It might be argued that the embedded generators have stolen this load away – but that is competition which is to be encouraged. The proposal claims that it seeks to “level playing field between new embedded generators and other generation <u>plant</u>”, but in fact the effective competition in the long term arises between <u>companies</u> and results from the investment decisions they make. The playing field is already level, because the proposer of P349 is quite free to build embedded plants as well as any other company. P349 would significantly stifle the building of new embedded plant and thus stifle competition in generation.</p>
Tees Valley Combined Authority	No	<p>We do not see the proposal as “promoting effective competition in the generation and supply of electricity”. We believe that it may reduce competition in generation by creating a barrier to new entry into the generation market in the form of</p>

Respondent	Response	Rationale
		<p>regulatory risk.</p> <p>This proposal seems to be based on the premise that embedded generators (and the demand they offset) are 'using' the transmission system. What was the lowest level of total embedded generation during a triad Settlement Period? As a collective they provide a significant generation base which is "always there" at triad times in the same way the demand they offset is "always there" and so the transmission system has never had to cater for that demand. It cannot be argued that anything more than a minority of such generators are using the transmission system. The proposal claims that it seeks to "level playing field between new embedded generators and other generation plant", but in fact the effective competition in the long term arises between companies and results from the investment decisions they make. The playing field is already level, because the proposer of P349 is quite free to build embedded plants as well as any other company. P349 would significantly stifle the building of new embedded plant and thus stifle competition in generation.</p>
SmartestEnergy	No	<p>Reporting gross data is inappropriate. The triad charge is on suppliers and should be net. As far as NGT are concerned there is no difference between a MW of reduced demand or a MW of increased embedded generation.</p> <p>It is also wholly inappropriate to progress this modification until it is clear what solutions are going to come out of the CMP264/265 process. The Ofgem open letter has been a game changer and CMP264/265 is of much greater significance. It is therefore inappropriate to continue with the accelerated timetable and proposals need to be considered in a thorough manner. Because Ofgem are not conducting their own review into Embedded benefits at this stage there will be many more WACMs proposed under the CMP264/265 proposal and these will not necessarily involve gross reporting of data.</p>
Good Energy	No	<p>We consider that P349 does not better facilitate Applicable BSC Objectives (a) & (c) and is neutral to the other Applicable BSC Objectives.</p> <p>P349 introduces changes that may be unnecessary depending on the outcome of Ofgem's review of the charging arrangements for embedded generation.</p>

Respondent	Response	Rationale
		<p>Should OFGEM’s final decision on the future of the TNUoS charging regime not align with CMP264, there are likely then to be significant abortive costs to be borne by the industry.</p> <p>In implementing CMP264, P349 risks undermining investor confidence, leading to decreased competition in the generation market in addition to increasing cost of capital for investors. The proposals are likely to introduce perverse incentives encouraging economically inefficient investment to create behind-the-meter arrangements. Such generators generally do not participate in the wholesale market, which could result in reduced numbers of participants in the wholesale market, leading to a reduction in both competition and market liquidity. It is also likely to significantly increase barriers to entry to the smaller generation market, again reducing competition going forward.</p>
EDF Energy	Yes	<p>As to BSC applicable objective a, the efficient discharge by the Transmission Company of the obligations imposed upon it by the Transmission Licence, BSC P349 (taken with CUSC mod 264) helps the Transmission Company to efficiently discharge its obligations to better develop a cost reflective charging methodology. It also allows the Transmission Company to discharge obligations enshrined in the SLC C13 by forming part of an enduring solution to the issue of a disparity in charging arrangements for different types of generation.</p> <p>As to BSC applicable objective b, The efficient, economic and co-ordinated operation of the National Electricity Transmission System , this is not relevant.</p> <p>As to BSC applicable objective c, Promoting effective competition in the generation and supply of electricity and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity, BSC P349 slightly better facilitates this than baseline; it would if passed with CMP264, enable the promotion of more effective competition in the generation and supply of electricity, by partly addressing a growing disparity in charging arrangements for different types of generation.</p> <p>As to BSC applicable objective d, Promoting efficiency in the implementation of the balancing and settlement arrangements, this is not relevant.</p> <p>As to BSC applicable objective e, Compliance with the</p>

Respondent	Response	Rationale
		<p>Electricity Regulation and any relevant legally binding decision of the EC and/or ACER, this is not relevant.</p> <p>As to BSC applicable objective f, Implementing and administrating the arrangements for the operation of contracts for difference and arrangements that facilitate the operation of a capacity market pursuant to EMR legislation, BSC P349 better facilitates this than baseline; there are wider Capacity Market effects that will flow from the implementation of P349 (and CUSC mod CMP264) including promoting investment in capacity to ensure security of electricity supply, and facilitating the efficient operation and administration of the Capacity Market.</p>
National Grid Electricity Transmission	Yes	At this stage, we would agree with the assessment made by the Workgroup.
ScottishPower PLC	Yes	<p>We agree with the majority view of the Workgroup that P349 better facilitates the Applicable BSC Objectives (a) and (c) compared to the baseline.</p> <p>Should the Authority direct implementation of CMP264, P349 will facilitate delivery by suppliers or their agents of the data requirements under CMP264 thus enabling the Transmission Company to deliver the obligations under its Transmission Licence (objective (a)).</p> <p>In helping facilitate CMP264, P349 will remove a distortion in competition between investing in embedded and transmission connected generation by removing a non cost reflective payment from embedded generation thus better facilitating Objective (c).</p>
RWE Npower	No	<p>We do not agree that P349 better facilitates the applicable BSC objectives. Please see below our comments towards the each relevant objective below:</p> <p><i>The efficient discharge by the Transmission Company of the obligations imposed upon it by the Transmission Licence.</i></p> <p>We are neutral towards whether P349 facilitates this objective.</p> <p><i>The efficient, economic and co-ordinated operation of the National Transmission System</i></p> <p>P349 does not better facilitate this objective as the development of systems and data flows to support</p>

Respondent	Response	Rationale
		<p>CMP264 are likely to be disproportionately costly in terms of the terms of the temporary and partial nature of the benefits they will deliver when implementing the solution suggested.</p> <p><i>Promoting effective competition in the generation and supply of electricity, and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity</i></p> <p>P348 does not better facilitate this objective as it does not improve competition as this modification introduces different rules for different Embedded Generators. (CM vs non CM).</p> <p><i>Promoting efficiency in the implementation and administration of the balancing and settlement arrangements</i></p> <p>We feel that P349 does not better facilitate this objective given the added complexity this modification delivers at significant expense for a limited time period only.</p> <p><i>Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency [for the Co-operation of Energy Regulators]</i></p> <p>N/A</p> <p><i>Implementing and administering the arrangements for the operation of contracts for difference and arrangements that facilitate the operation of a capacity market pursuant to EMR legislation</i></p> <p>N/A</p>

Question 2: Do you agree with the Workgroup that the draft legal text in Attachment A delivers the intention of the P349 proposed solution?

Summary

Yes	No	Neutral/No Comment	Other
3	1	4	0

Responses

Respondent	Response	Rationale
LondonWaste Limited	Yes/No	We have no views on the legal text.
Tees Valley Combined Authority	Yes/No	We have no views on the legal text.
SmartestEnergy	No comment	N/A
Good Energy	Yes/No	We do not have a view on this.
EDF Energy	Yes	<p>Yes, it delivers the primary solution, entailing the Supplier reporting to the SVAA, the Supplier's Metering System Metered Consumption (SMMC); the Metering System Losses.</p> <p>Upon request by its Supplier, HHDA's report various data for relevant Metering Systems to the SVAA, which calculates and reports to Grid (as part of the TUOS Report), Gross Period Metered Export for each relevant Metering Systems as identified to it by Suppliers.</p>
National Grid Electricity Transmission	Yes	<p>The legal text appear to provide for the data required under CMP264, however, we would note that CMP264 is still progressing through the CUSC Workgroup processes and therefore the Original and any alternatives (WACMs) are not yet defined. Under the principle of proposer ownership, the Original CMP265 solution may yet change which would affect P349.</p>
ScottishPower PLC	No	<p>The solution for P349 should require the SVAA to calculate Gross Period Metered Export (GPME) for each New Embedded Generation (NEG) Metering System identified to it by Suppliers. The netting of import and export might produce more accurate results, however we remain unconvinced of the overall benefits, irrespective of the definition of mixed site, i.e.</p>

Respondent	Response	Rationale
		<ul style="list-style-type: none"> o Import volumes are likely to be small at times of TRIAD o Cost of netting may be prohibitive o Where do you draw line, and ensure that loopholes are not exploited <p>Accordingly, we question the use of the BSC term Supplier's Metering System Metered Consumption (SMMC), as we believe that a solution that covers the gross export of each NEG Metering System identified is required. A possible suggested approach that may need developed further by Working Group could be:</p> <ul style="list-style-type: none"> o Supplier provides the total SMMC and SMML for the NEG to SVAA o The HHDA provides the same as the above o Supplier sends the MSIDs for their NEG to SVAA (this includes the import and export values for each MSID) <p>Any calculations can then take place within the SVAA before being sent to the Transmission Company.</p>
RWE Npower	Yes	We believe that the draft legal text in Attachment A sufficiently delivers the intention of P349's proposed solution.

Question 3: Do you agree with the Workgroup that the draft legal text in Attachment B delivers the intention of the P349 potential alternative solution?

Summary

Yes	No	Neutral/No Comment	Other
3	0	5	0

Responses

Respondent	Response	Rationale
LondonWaste Limited	Yes/No	We have no views on the legal text.
Tees Valley Combined Authority	Yes/No	We have no views on the legal text.
SmartestEnergy	No comment	N/A
Good Energy	Yes/No	We do not have a view on this.
EDF Energy	Yes	Attachment B contains the draft changes to the legal text in the BSC for the BSC P349 potential alternative solution, which is 'BSC light' : it places greater emphasis on the Transmission Company receiving and aggregating metered data from individual Metering Systems – it requires Suppliers and their HHDCs to report metered data for EGCMU Metering Systems and Related EGCMU Metering Systems directly to the Transmission Company. Under the BSC P348 potential alternative solution, the Transmission Company would then be responsible for calculating SMML and applying Suppliers' netting rules to determine net export energy volumes for individual EGCMU Metering Systems. If it can be made to work, we see merit in the BSC P348 potential alternative solution, for which legal text has been produced.
National Grid Electricity Transmission	Yes/No	The legal test appears to provide for the data required under CMP264, however, we apply the same caveats as in our response to Question 2.
ScottishPower PLC	Yes	Please see our response to question 2 above. We question if the use of the term SMMC will deliver a solution that covers the gross export of each NEG Metering System.
RWE Npower	Yes	We believe that the draft legal text in Attachment B sufficiently delivers the intention of P348's proposed

Respondent	Response	Rationale
		alternative solution.

Question 4: Do you agree with the recommended Implementation Date?

Summary

Yes	No	Neutral/No Comment	Other
2	6	0	0

Responses

Respondent	Response	Rationale
LondonWaste Limited	No	The industry seems to be trying to rush through changes to well established charging principles which have been in place for many years, when instead a great deal of consideration is required.
Tees Valley Combined Authority	No	The industry seems to be trying to rush through changes to well established charging principles which have been in place for many years, when instead a great deal of consideration is required.
SmartestEnergy	No	It is wholly inappropriate to progress this modification until it is clear what solutions are going to come out of the CMP264/265 process. The Ofgem open letter has been a game changer and CMP264/265 is of much greater significance. It is therefore inappropriate to continue with the accelerated timetable and the CUSC proposals need to be considered in a thorough manner first.
Good Energy	No	We are concerned that the implementation of P349 could delay the implementation of other required changes. This would clearly be inappropriate should P349 turn out to be abortive work.
EDF Energy	Yes	P348 is targeted for implementation in the June 2017 Elexon/BSC Systems Release. This does appear quite challenging, but it is necessary given the implementation date of 30th June 2017 specified in P348 original. It is possible, depending on any further discussions at the workgroup, that the potential alternative solution may better facilitate this. We note also that the proposer spoke of potentially delaying implementation until September 2017; that is not quite a sufficient delay to catch the next, November, Elexon/BSC Systems Release, so it would make no difference in Elexon/BSC Systems Release terms.
National Grid Electricity	No	We recognise that the BSC implementation date has been chosen to allow implementation of the CMP264 CUSC modification for the 2017 winter tariff

Respondent	Response	Rationale
Transmission		<p>season.</p> <p>There is already less than 12 months before the change to the proposed change to the BSC, and we are very concerned that we would not be able to make our internal system changes in that timescale to accept the data from Elexon.</p> <p>We would propose an implementation date of 2018, to allow charges to be set from 2018/19 under a new methodology – however recognise that this data is driven by the CUSC rather than the BSC.</p>
ScottishPower PLC	Yes	<p>Yes, parties participating in the Capacity Mechanism auction process require certainty over future costs and revenues in order to bid efficiently. The implementation approach for CMP264 can provide that certainty by allowing for an Authority determination before the December 2016 CM auction and a cut-off date for entitlement to embedded benefits of June 2017. In line with when Triad periods can occur, the actual implementation of the system changes needs to be no later than 1 November 2017.</p>
RWE Npower	No	<p>We feel any modification that makes such significant changes to the demand charging principles should allow a minimum of three years from the date of the Ofgem decision to implementation. This delay is necessary for suppliers and consumers because it enables systems and processes to be updated to accommodate the changes required. In addition it will enable current contractual agreements to unwind which will allow the required changes to be factored into future contracts.</p> <p>As system changes will be required in order for us to implement P348, without this notice period there could be a negative impact on suppliers. This is made more difficult as customers typically sign a yearly contract with their supplier therefore it is only at the point of contract renewal that the supplier can incorporate these additional charges into customer contracts.</p> <p>However, P349 is targeted for implementation on 29 June 2017, as part of the June 2017 BSC Systems Release. This is not acceptable as there is less than one year for implementation.</p> <p>Should the locational element of TNUoS remain for these embedded generators but the residual removed, some will have negative TNUoS charges</p>

Respondent	Response	Rationale
		<p>and some positive. Where pass through benefits have been specified explicitly and exclusively for TNUoS within a contract with an embedded generator there will not be scope to pass on charges. Should the industry not receive 3 years notice from the point of a decision to implementation then future TNUoS rates charged by suppliers will need to factor in appropriate additional risk premia for potential future methodology changes. Longer term contracts covering 25 years plus also exist. These highlight the increased risks around changing industry rules and charging methodologies.</p> <p>We feel that the development of systems and data flows to support such a change are expensive and disproportionate in terms of the partial nature of the solution suggested. There are additional loopholes (behind the meter generation) that cannot be covered. In addition the expectation that suppliers can obtain appropriate information from Embedded Generators without supporting central data flows when quoting for an Embedded Generator that is not part of their current portfolio is unrealistic.</p> <p>This also opens up wider questions on the governance framework required on the data quality in addition to the resource implications this would have across the industry as appropriate SLAs would need to be put in place to ensure suppliers can readily access the required information for their tendering process.</p>

Question 5: Do you believe there are other potential Alternative Modifications within the scope of P349 which would better facilitate the Applicable BSC Objectives?

Summary

Yes	No	Neutral/No Comment	Other
0	7	0	1

Responses

Respondent	Response	Rationale
LondonWaste Limited	No	We argue that what is really required is a fundamental review of the transmission charging arrangements in order to fix the problem (the standing of NGC assets) and not one of the symptoms.
Tees Valley Combined Authority	No	We believe that what is really required is a fundamental review of the transmission charging arrangements in order to fix the problem (the standing of NGC assets) and not one of the symptoms.
SmartestEnergy	No	None provided.
Good Energy	No	We are not aware of any other potential Alternative Modifications within the scope of P349 which would better facilitate the Applicable BSC Objectives.
EDF Energy	No	None provided.
National Grid Electricity Transmission	No	N/A
ScottishPower PLC	No	No, while the exact requirements remain unknown, we believe that at least one of the two solutions being explored will facilitate the delivery of CMP264 and the Applicable BSC Objectives.
RWE Npower	N/A	At this time we are unsure of any other potential Alternative Modifications within the scope of P349.

Question 6: Will your organisation be impacted by the implementation of the P349 proposed solution?

Summary

Yes	No	Neutral/No Comment	Other
8	0	0	0

Responses

Respondent	Response	Rationale
LondonWaste Limited	Yes	We are an embedded generator and currently receive the TNUoS embedded benefit, so depending on the final form of P349 we are concerned we may lose out.
Tees Valley Combined Authority	Yes	We are concerned that the proposals in their final form will impact generating business in our area and act to deter future investment in the area.
SmartestEnergy	Yes	We are an aggregator of embedded generation and as such have many hundred exporting MPANs registered.
Good Energy	Yes	There will be additional initial & ongoing annual costs associated with validating the more complex charging arrangements.
EDF Energy	Yes	As a Supplier, we will be impacted, both through reduced demand side TNUoS charges as a result of the implementation of CUSC CMP264/BSC P349, and through our potential involvement, via offtake contracts, with SVA-metered embedded generation. We do not wish in this non-confidential response to disclose any such contracts; there is no need to.
National Grid Electricity Transmission	Yes	As the recipient of the P02010 file we would be required to update a number of IS system to allow this data to be receive and processes in to our core TNUoS billing system.
ScottishPower PLC	Yes	Yes, if implemented we will have to forecast and supply both Supplier Volume Allocation (SVA) metered data for any New Embedded Generators we register to the Transmission Company , via Elexon, to allow it to forecast and calculate Transmission Charges in accordance with CMP264. The Transmission Company should already receive metered data for metering systems registered in CMRS (i.e. BMU data)
RWE Npower	Yes	Npower's systems will be impacted by implementing

Respondent	Response	Rationale
		P349. These changes need to be accommodated in the timeline for implementation as our internal pricing and billing systems would require changes along with customer contractual arrangements.

Question 7: Will your organisation incur any costs due to the implementation of the P349 proposed solution?

Summary

Yes	No	Neutral/No Comment	Other
6	1	0	1

Responses

Respondent	Response	Rationale
LondonWaste Limited	Yes	We are an embedded generator and currently receive the TNUoS embedded benefit, so depending on the final form of P349 we are concerned we may lose out.
Tees Valley Combined Authority	Yes	We are concerned that the proposals in their final form will impact generating business in our area and act to deter future investment in the area
SmartestEnergy	Yes	The cost to us will vary depending on the ultimate solution. If as originally envisaged, this only covers "new" sites we would have to review our systems and processes to ensure that we send information/flows as appropriate and this would likely be a manual solution. However, if as now seems likely, the reach of this modification extends to all embedded sites we would find ourselves with a choice of a massive manual exercise or a very costly IT solution. At this stage we cannot say. It is totally inappropriate that this consultation should have been issued before further clarity has been given on which WACMs under P264 are to be taken forward.
Good Energy	Yes	There will be additional initial & ongoing annual costs associated with validating the more complex charging arrangements.
EDF Energy	No	As a Supplier, we have not identified any systems or agent costs that would result from the implementation of either of the P349 proposed solutions, nor do we anticipate having to recruit extra staff to deal with it
National Grid Electricity Transmission	Yes	<p>We are currently undertaking detailed assessment of the likely cost impact of the P349 proposed solution, and hope to provide this information prior to the next Workgroup.</p> <p>At a high-level, we will require changes to the systems that accept and process additional data</p>

Respondent	Response	Rationale
		<p>received in the P02010 file.</p> <p>Note in our assessment (ongoing) any changes to the billing / invoicing functionality of our systems arising from the changes to tariff structures and chargeable volumes proposed under CMP264 will not be included (as these are outside the scope of this modification)</p>
ScottishPower PLC	Not Significant	<p>Once the New Embedded Generators have been appropriately identified we believe that the processes will become largely automated. The HHDC and HHDA are likely to charge a minimal fee for the incremental additional work they will need to carry out.</p>
RWE Npower	Yes	<p>As mentioned prior, implementing P349 will necessitate system changes which will be costly. Further, existing contracts may need amending/renegotiating. Also as a low number of metering systems will be impacted by the implementation of P348, we do not think that the costs for implementation will outweigh the benefits.</p>

Question 8: Will your organisation be impacted by the implementation of the P349 potential alternative solution?

Summary

Yes	No	Neutral/No Comment	Other
8	0	0	0

Responses

Respondent	Response	Rationale
LondonWaste Limited	Yes	We do not consider either version to be acceptable, we have issues with the overall concept, as described above
Tees Valley Combined Authority	Yes	We do not consider either version to be acceptable, we have issues with the overall concept, as described above.
SmartestEnergy	Yes	We are an aggregator of embedded generation and as such have many hundred exporting MPANs registered.
Good Energy	Yes	There will be additional initial & ongoing annual costs associated with validating the more complex charging arrangements.
EDF Energy	Yes	Will your organisation be impacted by the implementation of the P349 potential alternative solution?
National Grid Electricity Transmission	Yes	<p>Under the proposed alternative solution National Grid would be required to accept and process data submissions directly from third parties, for these to them be used in billing / invoicing of TNUoS charges.</p> <p>Our systems are not setup at present to deal with data of this nature and significant IS changes are likely to be required. We are currently undertaking detailed assessment of the likely cost impact of the P348 alternative solution, and hope to provide this information prior to the next Workgroup. We feel that, given the new data is well aligned to the data in the P0210 file; it seems appropriate that that file be updated as per the original proposal.</p>
ScottishPower PLC	Yes	Yes, if implemented we will have to forecast and supply both Supplier Volume Allocation (SVA) metered data for any New Embedded Generators we register to the Transmission Company to allow it to forecast and calculate Transmission Charges in

Respondent	Response	Rationale
		accordance with CMP264. The Transmission Company should already receive metered data for metering systems registered in CMRS (i.e. BMU data)
RWE Npower	Yes	Yes, Npower will be impacted by the implementation of P349's alternative solution.

Question 9: Will your organisation incur any costs due to the implementation of the P349 potential alternative solution?

Summary

Yes	No	Neutral/No Comment	Other
6	1	0	1

Responses

Respondent	Response	Rationale
LondonWaste Limited	Yes	We are an embedded generator and currently receive the TNUoS embedded benefit, so depending on the final form of P349 we are concerned we may lose out.
Tees Valley Combined Authority	Yes	We are concerned that the proposals in their final form will impact generating business in our area and act to deter future investment in the area.
SmartestEnergy	Yes	The cost to us will vary depending on the ultimate solution. If as originally envisaged, this only covers "new" sites we would have to review our systems and processes to ensure that we send information/flows as appropriate and this would likely be a manual solution. However, if as now seems likely, the reach of this modification extends to all embedded sites we would find ourselves with a choice of a massive manual exercise or a very costly IT solution. At this stage we cannot say. It is totally inappropriate that this consultation should have been issued before further clarity has been given on which WACMs under P264 are to be taken forward.
Good Energy	Yes	There will be additional initial & ongoing annual costs associated with validating the more complex charging arrangements.
EDF Energy	No	As a Supplier, we have not identified any systems or agent costs that would result from the implementation of the P349 potential alternative solution, nor do we anticipate having to recruit extra staff to deal with it
National Grid Electricity Transmission	Yes	It has not been possible to undertake a detailed analysis of the cost impact of the alternative solution. However, as it increases the number of data flows to National Grid and requires us to undertake processing of that data once received compared to an updated P0210 file, the likely cost, complexity and risks and likely to be significantly

Respondent	Response	Rationale
		higher than under the original solution.
ScottishPower PLC	Not significant	Once the New Embedded Generators have been appropriately identified the processes will become largely automated. The HHDC and HHDA are likely to charge a minimal fee for the incremental additional work they will need to carry out.
RWE Npower	Yes	As mentioned in our previous response, implementing P349's proposed or alternate solution will have cost implications.

Question 10: How many Metering Systems do you believe will be affected by the implementation of P349?

Summary

Yes	No	Neutral/No Comment	Other

Responses

Respondent	Rationale
LondonWaste Limited	In our case around 40 MW (on Metering System)
Tees Valley Combined Authority	There are a significant number of embedded generators in the area, but cannot give a precise number.
SmartestEnergy	Again, this very much depends on the final solution under CMP264. It is also not clear whether this question is asking about metering systems we have or metering systems industry wide. However, we can really only comment on metering systems we have and that will initially be a very small number but under certain scenarios could be the entirety of our embedded generation portfolio which runs to many hundreds of MPANs.
Good Energy	We are not able to provide an accurate view of the number of meters across the industry that will be affected by P349.
EDF Energy	We are unsure of this. If it weren't for the grandfathering aspect, the number of relevant generators would be up to one order of magnitude up on P348, as there will be up to 10 times as many relevant embedded generators that are not in the CM, as are; however, P349 excludes all relevant (>80 amps, i.e. G59/2 commissioned, not G83/2 commissioned) embedded generators commissioned before June 2017, which will reduce the number from up to say 1000, to a much lesser number, that will grow fairly steadily over time. We note from table 8 in the CMP264/5 (CUSC) consultation document, that assuming an average relevant embedded generator capacity of 12.8 MW, Grid estimated 90 relevant installations by the end of the first year (2017/18), with an extra 122 in the next year, (2018/19), with an extra 61 in the next year and an extra 29 in 2020/21. We have no basis to improve on these estimates.
National Grid Electricity Transmission	Data on this has been provided in the CMP264 Workgroup Consultation Report – See Table 8 on Page 43 http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=8589936195
ScottishPower PLC	Table 8 in the CMP264/265 Workgroup report indicates that the

Respondent	Rationale
	<p>number of affected sites (assuming CMP264 does not reduce the number of new embedded generators that come forward) would be between 12 and 122 per annum in the period 2017/18 to 2020/21. In practice, we believe that implementation of CMP264 would lead to lower volumes than this, especially in later years. As a supplier, we do not foresee any issues. The output from these sites based on the outcome of the first two capacity auctions, could be as high as 3GWs during a TRIAD period.</p>
RWE Npower	<p>We believe a relatively low number of metering systems will be affected by implementing P349.</p>

Question 11: Please validate (if possible) the accuracy and frequency of Scenarios 1 and 2 (discussed by the Workgroup on page 14) and identify additional scenarios that highlight complex configurations that require net data to be provided.

Responses

Respondent	Rationale						
LondonWaste Limited	We do not have views on this technical detail						
Tees Valley Combined Authority	We do not have views on this technical detail						
SmartestEnergy	We are not in a position to comment on this in the time available.						
Good Energy	<p>We consider that there is greater variation between scenarios depending on the scale of the site in question, some of which overlap with scenarios set out in the consultation.</p> <p>Scenario A: Demand only customers.</p> <p>Scenario B: Mixed site with small demand, $\leq 30\text{kW}$ installed capacity of generation, not equipped with an export meter, most/all output used on site leading to little/no spill onto the network.</p> <p>Scenario C: Mixed site with large demand, $> 30\text{kW}$ installed capacity of generation, equipped with an export meter, most/all output used on site leading to little/no spill onto the network.</p> <p>Scenario D: Mixed site with large demand, $> 30\text{kW}$ installed capacity of generation, not equipped with an export meter, most/all output used on site leading to little/no spill onto the network.</p> <p>Scenario E: Mixed site with large or small demand, $> 30\text{kW}$ installed capacity of generation, equipped with an export meter, most/all output exported to the network.</p> <p>Scenario F: Generation only site (minimal operational on-site demand), $\leq 30\text{kW}$ installed capacity of generation, not equipped with an export meter, almost all output spills onto the network.</p> <p>Scenario G: Generation only site (minimal operational on-site demand), $> 30\text{kW}$ installed capacity of generation, equipped with an export meter, almost all output exports onto the network.</p> <p>The approximate proportions of these different categories in the generation portfolio are set out below.</p> <table border="1"> <thead> <tr> <th>Scenario</th> <th>Percentage of Portfolio (No. Sites)</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>0.35%</td> </tr> <tr> <td>B</td> <td>97.42%</td> </tr> </tbody> </table>	Scenario	Percentage of Portfolio (No. Sites)	A	0.35%	B	97.42%
Scenario	Percentage of Portfolio (No. Sites)						
A	0.35%						
B	97.42%						

Respondent	Rationale	
	C	0.12%
	D	1.12%
	E	0.72%
	F	0.01%
	G	0.25%
EDF Energy	No comment; we have no further complex configurations to highlight.	
National Grid Electricity Transmission	We do not have any evidence to support this discussion	
ScottishPower PLC	<p>Note - we have changed this question to align with the consultation. We believe that the intent of the original drafting was for inclusion in the P348 pro forma.</p> <p>In terms of the different scenarios we believe that there is a requirement to formulate industry rules for at least the following four outcomes.</p> <p>(a) Existing export meter, where demand is reduced and the site exports for the first time or increases export. In this scenario, the generation plant is long standing, will not require to complete the G59 commissioning process and the generator should not be classed as a New Embedded Generator.</p> <p>(b) Increase in generation capacity behind an export meter where there is existing export redundancy. The connection of additional generating capacity behind an existing exporting meter should require commissioning via the G59 process and should be classified as New embedded generation if commissioned after the cut-off date.</p> <p>(c) Increase in generation capacity behind an export meter that creates a requirement for a new export meter. The connection of additional generating capacity at an export meter should require commissioning via the G59 process and should be classified as New Embedded generation if commissioned after the cut-off date.</p> <p>(d) Meter Replacement of metering equipment at a mixed site where there is no change to the generation plant connected will not trigger the G59 commissioning process and should not be considered New Embedded Generation</p>	
RWE Npower	N/A	

Question 12: Do you believe that the P349 potential alternative solution will facilitate the Applicable BSC Objectives better than the baseline and the proposed solution?

Summary

Yes	No	Neutral/No Comment	Other
1	3	1	3

Responses

Respondent	Response	Rationale
LondonWaste Limited	N/A	We do not have views on this technical detail
Tees Valley Combined Authority	N/A	We do not have views on this technical detail
SmartestEnergy	N/A	We are not in a position to comment on this in the time available.
Good Energy	No	<p>We consider that the P349 potential alternative solution will not facilitate Applicable BSC Objectives (a) & (c) better than the baseline and is neutral to the other Applicable BSC Objectives.</p> <p>As for the P349 proposed solution, the P349 potential alternative solution introduces changes that may be unnecessary depending on the outcome of Ofgem’s review of the charging arrangements for embedded generation. Should OFGEM’s final decision on the future of the TNUoS charging regime not align with CMP264, there are likely then to be significant abortive costs to be borne by the industry.</p> <p>In implementing CMP264, the P349 potential alternative solution risks undermining investor confidence, leading to decreased competition in the generation market in addition to increasing cost of capital for investors. The proposals are likely to introduce perverse incentives encouraging economically inefficient investment to create behind-the-meter arrangements. Such generators generally do not participate in the wholesale market, which could result in reduced numbers of participants in the wholesale market, leading to a reduction in both competition and market liquidity. It is also likely to significantly increase barriers to entry to the smaller generation market, again</p>

Respondent	Response	Rationale
		<p>reducing competition going forward.</p> <p>We consider that compared to the P349 proposed solution, the potential alternative solution will not facilitate Applicable BSC Objective (c) and is neutral with regard to the other Applicable BSC Objectives.</p> <p>The potential alternative solution places a greater burden on individual parties to design and maintain their own solutions which would tend to be relatively more onerous for smaller Parties not facilitating competition.</p>
EDF Energy	Yes	Not sure; its apparent greater simplicity, for parties other than Grid, has attractions. So at this stage, a provisional yes.
National Grid Electricity Transmission	No	<p>No. We do not feel that the potential alternative better facilitates the Applicable BSC objectives compared to the proposed solution.</p> <p>Compared to the proposed solution, the alternative meets objective (a) less well as it places new obligations and requirements on NGET which we feel are more efficiently and better discharged through an amendment to the existing processes such as P0210.</p>
ScottishPower PLC	Yes/No	<p>Despite Ofgem stating in its open letter, published on 29 July 2016, that there will be no Significant Code Review (SCR) for this defect, we can still envisage outcomes where elements of P349 may be implemented as temporary measures. For instance, it is possible that the authority approves an Alternative Modification that introduces elements of CMP264 from June 2017, but also has wider implications from a later date. From the perspective of delivering Applicable BSC Objective (c), we believe that it is important that non-cost reflective charging benefits are removed from prospective embedded generator projects as quickly as practically possible. By delaying implementation until 2020 (and assuming CMP264 is not also adopted) there is the opportunity for embedded generators to bid into the capacity market on the basis of receipt of escalating embedded benefits in the period between construction and CMP265 implementation. The NPV of these benefits could amount to as much as £17/kW which could represent a significant distortion in the CM auction. An earlier implementation date would prevent this potential distortion. Alternatively, if CMP264 were also to be adopted, we would support the proposed</p>

Respondent	Response	Rationale
		<p>implementation approach.</p> <p>Accordingly, we believe that weighing up the implementation and operational costs of both solutions remains important. We understand that the implementation of the alternative would avoid needing to make changes to the registration systems and the DTC, which, if you follow our rationale above, could be temporary. However, we also recognise the benefits of a more formal 'BSC Heavy' solution.</p> <p>We believe that until such time that the outcome of the CMP 264 and 265 work becomes clearer, given the commonalities of both solutions, that the Working Group should continue to develop both.</p>
RWE Npower	No	No, we do not think that either P349's proposed or alternative solution will better facilitate the BSC objectives.

Question 13: Do you believe that the proposed changes to the BSC should be prescriptive or allow Suppliers the flexibility to use non-BSC approaches for reporting metered data and associated losses to the SVAA?

Summary

Yes	No	Neutral/No Comment	Other

Responses

Respondent	Rationale
LondonWaste Limited	We do not have views on this technical detail
Tees Valley Combined Authority	We do not have views on this technical detail
SmartestEnergy	The BSC should be prescriptive. The BSC has built-in checks and audits. These would not exist in an arrangement which allows non-BSC approaches.
Good Energy	We are concerned that unless the proposed changes to the BSC are prescriptive there is a strongly likelihood of data accuracy becoming compromised.
EDF Energy	The proposed changes to the BSC should allow Suppliers the flexibility to use non-BSC approaches for reporting metered data and associated losses to the SVAA, because some (rare) sites may for example have a mix of CM and non-CM embedded generation behind the same site export meter, and this allows the Supplier and Customer to co-operate to exclude the non-CM embedded generation from the export data reported to Grid. There is no need for the rigidity of obligations on any parties in this regard; suppliers and their customers have every incentive to co-operate with one another in this regard, as their position can only be improved as a result in this scenario. Equally, as the proposer of CMP264 has commented in the past, a solution in BSC space that ignores all mixed sites (excludes them) may be a good way forward. BSC P349, and CMP264, only have to be better than baseline, not absolutely theoretically "perfect" solutions.
National Grid Electricity Transmission	We do not have a view on the approach taken, but rather we must be assured that the data ultimately received by National Grid is timely and accurate to allow us to discharge our obligations.
ScottishPower PLC	Where practicable, the solutions should be prescriptive.
RWE Npower	We do not believe that suppliers should have flexibility to use non-BSC approaches for reporting metered data as this opens up wider

Respondent	Rationale
	questions on the governance framework required on the data quality.

Question 14: Do you believe that the Transmission Company requirements needed for the calculation of relevant volumes for Transmission Charges should be included in the BSC or are they better placed under the CUSC?

Summary

Yes	No	Neutral/No Comment	Other
2	2	2	2

Responses

Respondent	Response	Rationale
LondonWaste Limited	N/A	We do not have views on this technical detail
Tees Valley Combined Authority	N/A	We do not have views on this technical detail
SmartestEnergy	No	They should be included in the BSC. See answer to Q13 for rationale.
Good Energy	No	As the requirements are solely for the calculation of transmission charges there is some merit in them being included in the CUSC. However, the BSC may include better provisions for performance assurance in which case we would favour the requirements being included in the BSC.
EDF Energy	Yes/No	Under the potential alternative the following steps may need to be specified in the CUSC as they are necessary for the Transmission Company to calculate the relevant volumes specifically for Transmission Charging purposes. Under the main version of the mod in BSC space, the requirements could equally well sit in the BSC (it doesn't really matter)
National Grid Electricity Transmission	Yes	We do not support the alternative proposal that would require these requirements. If the alternative were to be adopted, we would suggest that the requirement sat in the CUSC along with the remaining requirements alongside the TNUoS charging methodology.
ScottishPower PLC	Yes/No	We believe that the Transmission Company requirements may sit better in the CUSC. However, this may be dependent on which solution prevails, and we believe that until such time that the outcome of the CMP 264 and 265 work becomes

Respondent	Response	Rationale
		clearer, given the commonalities of both solutions, that the Working Group should continue to develop both.
RWE Npower	Yes	We believe the Transmission Company requirements needed for the calculation of relevant volumes for Transmission Charges should be included in the CUSC. Any changes to charging methodology should be controlled by the CUSC where possible.

Question 15: Do you have any further comments on P349?

Summary

Yes	No
3	5

Responses

Respondent	Response	Comments
LondonWaste Limited	No	N/A
Tees Valley Combined Authority	No	N/A
SmartestEnergy	Yes	We note that there is no question about whether the alternative better meets the BSC objectives compared with the proposed. For the record, we consider that the primary consideration should be for accuracy. We are inclined to think that the proposed (DA) solution (i.e. the proposed) is less prone to error.
Good Energy	No	N/A
EDF Energy	No	N/a
National Grid Electricity Transmission	Yes	<p>As a modification reliant on the requirements of CMP264, this BSC modification seems to be ahead of the related CUSC modification which has not yet fully defined the set of potential solutions, however, we recognise the need for the BSC discussion to inform the CUSC Workgroup.</p> <p>We recognise the need for a 'joined up approach' and note that there is Elexon representation on the CMP264 workgroup. In addition, there will be meetings of a subset of the CMP264 workgroup to consider CUSC legal text and we note particular the strong interaction between this BSC modification and the CUSC modifications in the regard.</p>
ScottishPower PLC	Yes	<p>We believe that it is important to clearly separate some of the potential mixed site complexities associated with P348, from P349.</p> <p>A NEG is defined in CMP264 as a half hourly metered, licence exempt, and embedded generating units (see page 11).</p> <p>Page 15 (Gross import and export): The last</p>

Respondent	Response	Comments
		sentence states that "P348 and P349 should only focus on reporting volumes of exported energy for EGCMUs". This is incorrect as it applies only to P348.
RWE Npower	No	N/A