

P224 Assessment Consultation Responses

Consultation Issued on 1 July 2008

Representations were received from the following parties

No	Company	File number	No BSC Parties Represented	No Non-Parties Represented
1.	Central Networks	P224_AR_01	2	0
2.	Scottish & Southern Energy plc	P224_AR_02	6	1
3.	Western Power Distribution	P224_AR_03	2	0
4.	TMA Data Management Ltd	P224_AR_04	0	3
5.	E.ON UK	P224_AR_05	3	0
6.	E.ON UK Energy Services Limited	P224_AR_06	0	1
7.	Good Energy	P224_AR_07	1	0
8.	SAIC Ltd (for and on behalf of ScottishPower)	P224_AR_08	6	0
9.	RWE Npower plc	P224_AR_09	10	0
10.	Electricity North West Limited	P224_AR_10	1	0
11.	EDF Energy	P224_AR_11	6	0
12.	EDF Energy Networks	P224_AR_12	3	0
13.	Renewable Energy Association	P224_AR_13	0	1 ¹

Question 1: Do you believe Proposed Modification P224 would better facilitate the achievement of the Applicable BSC Objectives?

Summary

Yes	No	Neutral/Other
13	0	0

¹ REA response is on behalf of a large number of embedded generators, which form a substantial part of the 530 REA members.

Responses

Respondent	Response	Rationale
Central Networks	Yes	The modification will facilitate correct allocation of responsibility for reactive power flows, preventing inappropriate distribution use of system charges for import/export, and removing the need for costly workarounds currently used by some distributors and suppliers. This will better facilitate relevant objective 'C' (Promoting effective competition in the generation and supply of electricity) by reducing industry costs and risks, and thus promoting competition.
Scottish & Southern Energy plc	Yes	It will provide a cost reflective solution.
Western Power Distribution	Yes	<p>Applicable object (b). An appropriate cost message to parties causing reactive power flows will tend to reduce those flows that have a negative impact on the transmission system. Where reactive power flows are seen as advantageous, a reactive power market could benefit the operation of the transmission system by reducing the requirement for reactive power compensation</p> <p>Applicable object (c). P224 will encourage distributors to make appropriate charges to the parties causing reactive power flows that will tend to reduce barriers to the installation of new generating plant. Also, possible development of a reactive power market will create competition.</p> <p>Applicable object (d). Avoidance of the need for workarounds by distributors and suppliers will improve and reduce administrative burden</p>
TMA Data Management Ltd	Yes	The proposed modification will allow the correct allocation of reactive power to the import and export responsible parties to ensure the Distribution Use of System charges are distributed accurately.
E.ON UK	Yes	<p>We believe this modification better facilitates the following BSC Objectives.</p> <p>The efficient discharge by the licensee [i.e. the Transmission Company] of the obligations imposed upon it by this licence [i.e. the Transmission Licence];</p> <p>By sending appropriate cost signals to parties that are responsible for reactive power should help reduce the Reactive Power load on the network.</p>

Respondent	Response	Rationale
		<p>This then helps to reduce the amount of Reactive Power load on the Transmission Network ultimately facilitating the efficient running of the Transmission system.</p> <p>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;</p> <p>Targeting Reactive Power charges to the parties that are responsible for them should help facilitate competition in the supply of electricity. Under the present situation the true costs are inflated for the supplier of the import supply and not cost reflective of the load they put onto the network.</p>
E.ON UK Energy Services Limited	Yes	-
Good Energy	Yes	-
SAIC Ltd (for and on behalf of ScottishPower)	Yes	<p>We would support the groups views as expressed within the consultation document.</p> <p>In terms of BSC Objective B we believe that the Modification would achieve this through accurate allocation of reactive energy as this would focus both parties to take the costs of such generation into account and thus lead to efforts to reduce reactive energy to reduce costs thus helping to improve the network in the process.</p> <p>In terms of BSC Objective C we believe that the better allocation of reactive energy and more accurate DUoS billing will stimulate competition in this segment of the market as more Suppliers would in our opinion be willing to accept these sites as Customers as they will be satisfied that they are not being unduly charged due to the incorrect allocation of DUoS charges and thus disadvantaged.</p>
RWE Npower plc	Yes	<p>We believe that Proposed Modification P224 would better facilitate the achievement of Applicable BSC Objectives (b) and (c) when compared to the current baseline for the following reasons:</p> <ul style="list-style-type: none"> Parties will have more suitable cost signals against which to measure the most economic manner of operation, and any investment by Parties to reduce Reactive Power will feed

Respondent	Response	Rationale
		<p>through benefits to the operation of the transmission system – Objective (b);</p> <ul style="list-style-type: none"> • Rectifying inappropriate allocation of Reactive Power and directing accurate Reactive Power charges to the Party responsible for the associated flow of Active Power will give greater transparency in DUoS charging and facilitate competition – Objective (c); • Appropriate allocation and measurement of Reactive Power will assist the development of a competitive market in trading Reactive Power volumes – Objective (c).
Electricity North West Limited	yes	The modification will correct the current anomalies with the allocations of Reactive Power flows, assist in the efficient operation of the Transmission System and improve the accuracy and allocation of DUoS charges linked with Reactive Power flows.
EDF Energy	Yes	At present reactive power, if charged, is always levied upon party registered to import MPAN. This modification would better allocate reactive power charges to both MPAN making costs more cost reflective. However, if both MPANs are registered to same market participant then this could be considered as having no material impact. If all sites currently have a single Supplier for both MPANs then this modification would have no material impact. Overall we feel that objective c should be better facilitated, but are not convinced that these improvements are currently significant ones as have no view of those systems that are registered to different parties.
EDF Energy Networks	Yes	<p>The modification better allocates reactive power charges to both import and export MPANs by ensuring the allocation of reactive power flow instant by instant to its corresponding active power flow whether either is import or export, enabling a truer assessment of power factor and reactive power flows based on data fully available to the specific licenced Supplier, making costs more cost reflective and fully transparent.</p> <p>Since the majority of licence exempt generation sites, the main beneficiary of the proposed change, utilise differing Suppliers in respect of import and export MPANs, the improvement is material in the breadth of beneficial impact to those licence exempt generating parties. Very few licence exempt generators utilise the same Supplier for both export and import.</p>

Respondent	Response	Rationale
Renewable Energy Association	Yes	<p>The REA is not familiar with the details of the BSC objectives, and we do not have the resources to understand the technical complexity of the issue.</p> <p>As a general principle we subscribe to cost-reflective pricing and charging. Some of our members have been subject to inaccurate billing for reactive power not caused by their own generation. Some of our members may be being charged inaccurately, but are unaware of it.</p> <p>Others may be benefitting from their supplier absorbing charges which should rightfully fall on the generator.</p> <p>Overall we would like to see more accurate billing for reactive power charges, even if it means that some generators are charged when they were not formerly charged. These generators could then take corrective action to improve their power factor.</p>

Question 2: Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered?

Summary

Yes	No	Neutral/Other
1	12	0

Responses

Respondent	Response	Rationale
Central Networks	No	-
Scottish & Southern Energy plc	No	-
Western Power Distribution	No	-
TMA Data Management Ltd	No	The proposed modification is the best solution to resolve the issue of Reactive Power for shared import/export sites.
E.ON UK	No	-
E.ON UK Energy Services Limited	No	-
Good Energy	No	-

Respondent	Response	Rationale
SAIC Ltd (for and on behalf of ScottishPower)	No	We support the solution offered in P224 as it stands. It is clear the solution provided will address the issue of reactive energy allocation and feel that it offers a robust and clear solution to the problem
RWE Npower plc	No	We believe that the given the time available, the Modification Group has given due consideration to a number of alternative solutions and that there are no alternatives over those already discussed.
Electricity North West Limited	Yes	In addition to the original P224 solution there should be a time limit, say two years, against which BSC parties and/or their agents have to ensure the solution has been implemented for existing affected import/export sites, not just newly connected sites.
EDF Energy	No	-
EDF Energy Networks	No	Given the existing volume of leading reactive power premises and the expected significant growth of distributed generation into the future the solution provides the only transparent means of allocating reactive power flows more correctly at source upon which distributor charging can be conducted to the billable Supplier on the basis of only data presented by that Supplier.
Renewable Energy Association	No	-

Question 3: Given that P224 will impact Reactive Power allocation for Parties associated with shared Import/Export sites, do you believe the P224 solution will deliver appropriate Reactive Power-related charging (i.e. DUoS charges for excess Reactive Power and exceeding agreed Maximum Capacity)?

Views are particularly sought from Suppliers and License Exempt Generators

(see sections 3.1 and 3.7 of Consultation Document)

Summary

Yes	No	Neutral/Other
12	0	1

Responses

Respondent	Response	Rationale
Central Networks	Yes	By ensuring that reactive power 'follows' the direction of flow of active power (from moment to moment) P224 facilitates correct charging.
Scottish & Southern Energy plc	Yes	We believe that following the introduction of P224 DUoS charging will be adjusted to correctly reflect distribution costs. At present as distributor and supplier we are adjusting (absorbing) misallocated costs to make the services equitable to end users.
Western Power Distribution	Yes	P224 would permit the allocation of reactive charges to the appropriate party. Reactive charges associated with export kWh will be allocated to the export party and reactive power charges associated with import will be allocated to the import party. This will avoid inappropriate calculation of power factor and adjustment to capacity charges relating to the import party
TMA Data Management Ltd	Yes	-
E.ON UK	Yes	Allocating Reactive Power charges correctly to the party that is responsible for them must be more appropriate than the current solution.
E.ON UK Energy Services Limited	Yes / No	Not applicable
Good Energy	Yes	Currently we hold sites that are not correctly charged for reactive power and feel that P224 should deliver correct charging in the future, but only if the LDSOs make changes to systems that currently bill reactive power incorrectly. If they are not obliged and do not make changes then P224 will not offer the changes that Suppliers such as ourselves need.
SAIC Ltd (for and on behalf of ScottishPower)	Yes	<p>As an import Supplier to a number of affected sites we are aware of being charged excessively for reactive energy (RE) when it is clear to us that we are not responsible for the majority of the RE being billed for. We believe that the P224 solution will resolve this issue over time and lead to more accurate charges being levied on all parties.</p> <p>The evidence we have suggests that from an import perspective we are at a disadvantage due to excess RE and exceeded authorised capacity charges. If the solution works in the way suggested i.e. moment-by-moment allocation of reactive to the responsible party then the majority of the charging issues (including changeover half hours) should disappear.</p>

Respondent	Response	Rationale
RWE Npower plc	Yes	<p>We are aware through our settlement and validation of DUoS charges that anomalous Reactive Power and Supply (Demand) Capacity charging exists for shared Import/Export sites.</p> <p>Providing meters are re-configured correctly to allocate the Reactive Power flow to the correct quadrant on a moment by moment basis then we believe the P224 solution will allow LDSOs to target Reactive Power and Supply (Demand) Capacity charges more appropriately to Parties associated with shared Import/Export sites.</p> <p>We concur with the analysis and implications for Reactive Power charging contained in the Consultation Document. The P224 solution will rectify anomalous charging and provide greater transparency, facilitating improved DUoS validation and providing a rational approach to Reactive Power billing to those shared Import/Export sites that we are associated with.</p>
Electricity North West Limited	Yes	<p>P224 allows us, as a Distributor, to accept the appropriately allocated data for each site and for each registered party, and calculate and levy the correct DUoS charges accordingly.</p>
EDF Energy	Yes	<p>We agree that this modification will deliver more appropriate reactive power charges than current regime. However, this benefit is only likely to be significant if export and import MPANs are registered to different parties. It would be of interest to note what percentage of all such sites are registered to different parties to determine full impact of this modification.</p>
EDF Energy Networks	Yes	<p>This modification will deliver more appropriate reactive power charges than the current regime since it will allocate instance by instance the reactive power flow according to the instance of active power flow. By making the appropriate cost signals the customer may take action to improve his power factor and hence reduce his charges. This will have benefit in that reinforcement may be avoided helping there to be economic and efficient distribution and transmission systems.</p> <p>However, we are not aware of any formal requirements/processes for estimating missing reactive data and believe that if so, consideration should be given to amending BSCPs to provide for this.</p> <p>The solution will support licence exempt generation sites in particular who predominantly use differing licenced</p>

Respondent	Response	Rationale
		suppliers for import and export MPANs.
Renewable Energy Association	Yes	It should result in more accurate billing.

Question 4: Do you agree with the inclusion in the P224 solution of exemption criteria (limited by maximum materiality thresholds) to provide for potential new technologies and future developments (e.g. in support of small scale shared Import/Export)?

(see sections 2.1 and 3.5 of Consultation Document)

Summary

Yes	No	Neutral/Other
11	1	1

Responses

Respondent	Response	Rationale
Central Networks	Yes	-
Scottish & Southern Energy plc	Yes	We were happy with the original proposal, but accept that it is prudent to future proof the proposals to allow for half hour export trading of smart meters without reactive power under a future CoP.
Western Power Distribution	Yes	Although it is difficult to predict the future impact of Smart metering technology it is clear there is significant focus on its development and creating a potential barrier to that would not be beneficial. If Smart metering encourages more HH settlement then that is positive.
TMA Data Management Ltd	Yes	-
E.ON UK	Yes	This seems a sensible solution to the smart metering issue.
E.ON UK Energy Services Limited	Yes	-
Good Energy	Yes	-
SAIC Ltd (for and on behalf of ScottishPower)	No	The addition of a threshold may at first look like a means to prevent the P224 solution acting as a further barrier to microgeneration and Smart metering within the UK. However it is unlikely that microgeneration would ever be affected by P224 as most if not all sites would be traded

Respondent	Response	Rationale
		<p>under P81 in the NHH market. Where a micro-generator deems they can benefit from HH metering it would suggest that it is of such a scale as to warrant the use of P224 and thus should be included. We are also not convinced that a threshold would act as a barrier to Smart Metering. The most robust and effective solution would be not to include a threshold at all as first proposed at the IA stage.</p> <p>The problem we are here to resolve is the inappropriate allocation of reactive energy and this should be first and foremost in our minds and to do this we must offer a robust solution to the industry and not reduce its scope for some potential future risk that may turn out to be unfounded. Were it to later turn out that P224 if approved was causing a problem with the adoption of Smart metering then Industry should address that problem at that time. There is still no firm evidence that the solution will cause issues.</p>
RWE Npower plc	Yes	<p>We agree with the inclusion in the P224 solution of exemption criteria.</p> <p>The availability of Reactive data at HH intervals can be of significant benefit to the LDSOs, but applying Reactive power metering for small loads does not appear to be economic. We believe that the exemption criteria included as part of the P224 solution has the following merits:</p> <ul style="list-style-type: none"> • It will target those shared Import/Export sites that are the source of the issue; • It does not place an enduring obligation on all future elective HH settled Import/Export sites which could be a barrier to the roll out of smart metering and microgeneration; • It appears to be more economic; • The rules which determine whether a site is exempt from the P224 provisions are easy to apply.
Electricity North West Limited	Yes	<p>We do not advocate the use of the two criteria as we do not believe that it is appropriate to impose the threshold at 100kW for IMPORT and 30kW for EXPORT. The imposition of a threshold means that half hourly sites operating at 1kW either side of the threshold would be treated differently. We also recognise the potential barrier that this could impose on smart metering and so would advocate that only one exemption criteria for P224 is required, namely, "There is specific provision for exception from the P224 provisions in the applicable metering CoP".</p>

Respondent	Response	Rationale
EDF Energy	Yes	We agree that no retrospection is a reasonable approach as this minimise chances of cost increases due to additional site visits and possible unusable metering assets. We have no strong views on if a materiality threshold is worthwhile, but our preference would be for all HH sites to be treated in same manner for simplicity.
EDF Energy Networks	Yes	The Half Hourly metering threshold is in practical terms the level at which the metering and charging for reactive and active components occurs.
Renewable Energy Association	Don't know	-

Question 5: Do you agree with the provisional recommended Implementation Date for P224 of November 2009?

Summary

Yes	No	Neutral/Other
11	1	1

Responses

Respondent	Response	Rationale
Central Networks	Yes/No	
Scottish & Southern Energy plc	Yes	
Western Power Distribution	Yes	As indicated in the Impact assessment, P224 will have significant impact on distributor billing systems that could be implemented by November 2009.
TMA Data Management Ltd	No	June 2009 is more appropriate
E.ON UK	Yes	-
E.ON UK Energy Services Limited	Yes	Very limited if any changes will be required to our systems and processes to accommodate the proposed changes.
Good Energy	Yes	Although we would like to see as earlier an implementation as possible.
SAIC Ltd (for and on behalf of ScottishPower)	Yes	November 2009 is a realistic date which would allow ample time to implement changes to party and agent

Respondent	Response	Rationale
		<p>systems where necessary and crucially, distribution DUoS systems.</p> <p>We would not support the implementation being brought forward to June 2009 as suggested in the consultation document. The pace of progressing the modification to the point of Panel approval could potentially reduce the time between approval and go-live.</p>
RWE Npower plc	Yes	We are comfortable that the necessary P224 changes to systems and processes are achievable through our governance process in readiness for a November 2009 release.
Electricity North West Limited	Yes	However, an earlier date would also be acceptable i.e. Jun-09 where the LDSO's are excluded.
EDF Energy	Yes	Provided that a decision is made by June 2009.
EDF Energy Networks	Yes	We would support a backstop implementation date BUT provide for the parties (LDSO, import and export Suppliers and the affected LEG) to implement changed metering arrangement in line with the solution, if implemented, at an earlier date of their choosing.
Renewable Energy Association	Yes	The REA would like to see this implemented as soon as is practical, and if this is before November 2009, all the better.

Question 6: The Group considered that because LDSOs are not obliged to revise their processes/systems under P224, P224 implementation should exclude LDSO impacts; this may permit an implementation lead time of less than 9 months, i.e. implementation in the June 2009 Release may be achievable - do you agree that a June 2009 Implementation Date would be appropriate?

(see section 3.9 and Appendix 3 section c) of Consultation Document)

Summary

Yes	No	Neutral/Other
7	5	1

Responses

Respondent	Response	Rationale
Central Networks	Yes	-

Respondent	Response	Rationale
Scottish & Southern Energy plc	Yes	-
Western Power Distribution	No	The modification will change the convention for population of the D0268 and increase the number of registers against which reactive power is recorded. Distributors may need to make system changes to accept the data in the new form. Although there is not a mandatory requirement on Distributors to implement new charging methodologies under P224, it is likely that a number will choose to do so and it would be preferable if all the changes were implemented at the same time. A June 2009 implementation for P224 may result in Distributors having to introduce changes in two phases which is not desirable and implementation in November 2009 would be preferred as it would be the lower cost option.
TMA Data Management Ltd	Yes	-
E.ON UK	Yes	If LDSO'S are considered not to impacted then we would support the bringing forward of the release date. We would expect LDSO's to revise the way they invoice to take account for the change in the data they would receive.
E.ON UK Energy Services Limited	Yes	Very limited if any changes will be required to our systems and processes to accommodate the proposed changes.
Good energy	Yes	-
SAIC Ltd (for and on behalf of ScottishPower)	No	Though there will be no obligation on LDSOs to implement the P224 solution it can be reasonably assumed that some or all may indeed choose to implement the solution. Therefore adequate lead times should be allowed for those Distributors who choose to implement for the go-live date of P224. It should be an objective of the modification to facilitate all parties having ample time to implement the solution if they so wish.
RWE Npower plc	No	We do not believe that an implementation lead time of less than 9 months is achievable. This will not allow sufficient time for us to push the necessary changes to systems and processes through our governance process without incurring additional costs over those identified in our Impact Assessment response and will also divert

Respondent	Response	Rationale
		resource away from other projects.
Electricity North West Limited	Yes	Our implementation would be carried out as soon as possible following system changes by the relevant affected parties.
EDF Energy	No	Although LDSOs are not obliged to make changes some may chose to do so. We would prefer if this was taken into account with regard to this modification to ensure that all who intend to make changes can implement on same day. Furthermore we are not convinced that even by November 2009 that impact of this modification will be significant. Therefore, attempting to bring forward this implementation does not seem to be worthwhile.
EDF Energy Networks	No	We would support a backstop implementation date of June 2009 BUT would prefer that the change provides for the parties (LDSO, import and export Suppliers and the affected LEG) to implement changed metering arrangement in line with the solution, if implemented, at an earlier date of their choosing if their own metering and data collection and billing arrangements can support earlier implementation in relation to the specific site.
Renewable Energy Association	-	See above.

Question 7: Are there any further comments on P224 that you wish to make?

Responses

Respondent	Response	Rationale
Central Networks	No	-
Scottish & Southern Energy plc	No	-
Western Power Distribution	No	-
TMA Data Management Ltd	No	-
E.ON UK	No	-
E.ON UK Energy Services Limited	No	-
Good energy	Yes	We would want to impress the fact that there are LDSOs which are currently charging what is, in theory, the Export Reactive charges to the associated Import MPAN. We would hope that P224 would oblige any LDSO that is

Respondent	Response	Rationale
		currently charging in this way to make changes. Without the changes some of the benefit of implementing P224 is lost.
SAIC Ltd (for and on behalf of ScottishPower)	Yes	<ol style="list-style-type: none"> 1. It would be prudent for the group to consider the issue of one Supplier blocking the other who wishes to trade using P224 on an existing site. This could prevent a Supplier who wishes to see improved data being passed to the LDSO being unable to due to the other Supplier applying what would effectively be a veto. 2. The costs on LDSOs to implement P224 have the potential to be considerable and any implementation plans should pay particular heed to the fact that LDSOs could be required not only to implement P224 but also to maintain their existing work around for sites which are not trading using P224. Therefore we would suggest that the impact on LDSOs be at the forefront of the groups considerations. 3. Further consideration and information should be provided to examine the consequences of the situation where a site can be both importing and exporting simultaneously. It is still to be explained how the P224 solution will cope with such an occurrence. This is a crucial issue if the claim that P224 will deliver accurate allocation of reactive energy is to be substantiated.
RWE Npower plc	No	
Electricity North West Limited	Yes	The full cost-saving benefits will only be achieved once P224 applies to the full population of import/export sites.
EDF Energy	No	-
EDF Energy Networks	No	-
Renewable Energy Association	No	-