**Stage 03**: Attachment A - Detailed Assessment for P238

What stage is this document in the process?

01 Initial Written Assessment

02 Definition Procedure

03 Assessment Procedure

04 Report Phase

# P238: Removal of the requirement to Meter each Boundary Point for Offshore Power Park Modules

## Contents



## About this document:

This is Attachment A to the P238 Assessment Report.

ELEXON has updated this attachment for the Draft Modification Report, to give further clarity on how connections for Offshore Power Park Modules are treated compared with those for 'standard' Onshore Power Park Modules.

This document explains how the Group's discussions have led it to its recommendations. It also includes a summary of the industry responses to the Group's consultation.

You can download copies of the full industry consultation responses and the Transmission Company's impact assessment here.

# 1 Background & Related Changes

## What is a Power Park Module?

The term **Power Park Module** (PPM) relates to Generators who use an Intermittent Power Source. The Grid Code defines an Intermittent Power Source as being 'the primary source of power for a Generating Unit that cannot be considered as controllable (e.g. wind, wave or solar)'. A wind turbine generator is therefore one example of an intermittent Generating Unit.

The new regime for Offshore Transmission came into effect ('Go Active') on 24 June 2009, and is expected to 'Go Live' in June 2010. As part of Go Active, changes to the industry codes (including the Grid Code and the Balancing and Settlement Code) were made by the Secretary of State to support the intended offshore arrangements.

As a result, the Grid Code now makes a distinction between Onshore PPMs and Offshore PPMs. The new Grid Code definitions are:

- **Onshore Power Park Module** – A collection of Onshore Generating Units (registered as a Power Park Module under the PC[1]) that are powered by an Intermittent Power Source, joined together by a System with a single electrical point of connection to the Onshore Transmission System (or User System if Embedded). The connection to the Onshore Transmission System (or User System if Embedded) may include a DC Converter.
- **Offshore Power Park Module** – A collection of one or more Offshore Power Park Strings (registered as a Power Park Module under the PC). There is no limit to the number of Power Park Strings within the Power Park Module, so long as they either:
  - Connect to the same busbar[2] which cannot be electrically split; or
  - Connect to a collection of directly electrically connected busbars of the same nominal voltage and are configured in accordance with the operating arrangements set out in the relevant Bilateral Agreement.

The BSC continues to refer generically to Power Park Modules. It cross-refers to the Grid Code's definition of this term, which makes the distinction between Onshore and Offshore.

The Grid Code's definition of an Offshore PPM also introduces the following new term:

- **Offshore Power Park String** - a collection of Offshore Generating Units that are powered by an Intermittent Power Source, joined together by cables forming part of a User System with a single point of connection to an Offshore Transmission System. The connection to an Offshore Transmission System may include a DC Converter.

*The new definition of an Offshore PPM differs from that for onshore, in that it requires these Offshore Power Park Strings to be connected to the same busbar or to a set of connected busbars.*

**Where can I find full technical definitions of these terms?**

You can find the full BSC definitions of Power Park Module, Generating Unit and BM Unit in Annex X-1 and Section K3.

All Grid Code definitions are contained in the Grid Code Glossary and Definitions.

[1] Planning Code (part of the Grid Code).

[2] A busbar is a system of conductors in which the power from the Generating Units is collected for transmission.

## What changes are being progressed from Issue 37?

The P238 solution developed through discussions within the Issue 37 Group. The Panel raised Issue 37 to consider whether the current requirements for metering and BM Unit configurations are suitably flexible to accommodate the changing designs for generation, in particular for new offshore generation build.

The Issue Group recommended 4 changes to the BSC, which have all since been raised as Modification Proposals. Table 1 below summarises each issue and the Issue Group's proposed solution. It also gives the corresponding Modification Proposal numbers for reference.

Three of the Issue 37 changes impact offshore Generators. While there are individual benefits associated with each of these changes, the Issue Group considered that the combined benefits of all 3 together will be greater. If all the changes are approved, there will therefore be efficiency benefits in implementing them in parallel.

***Table 1 – Proposed changes arising from Issue 37***

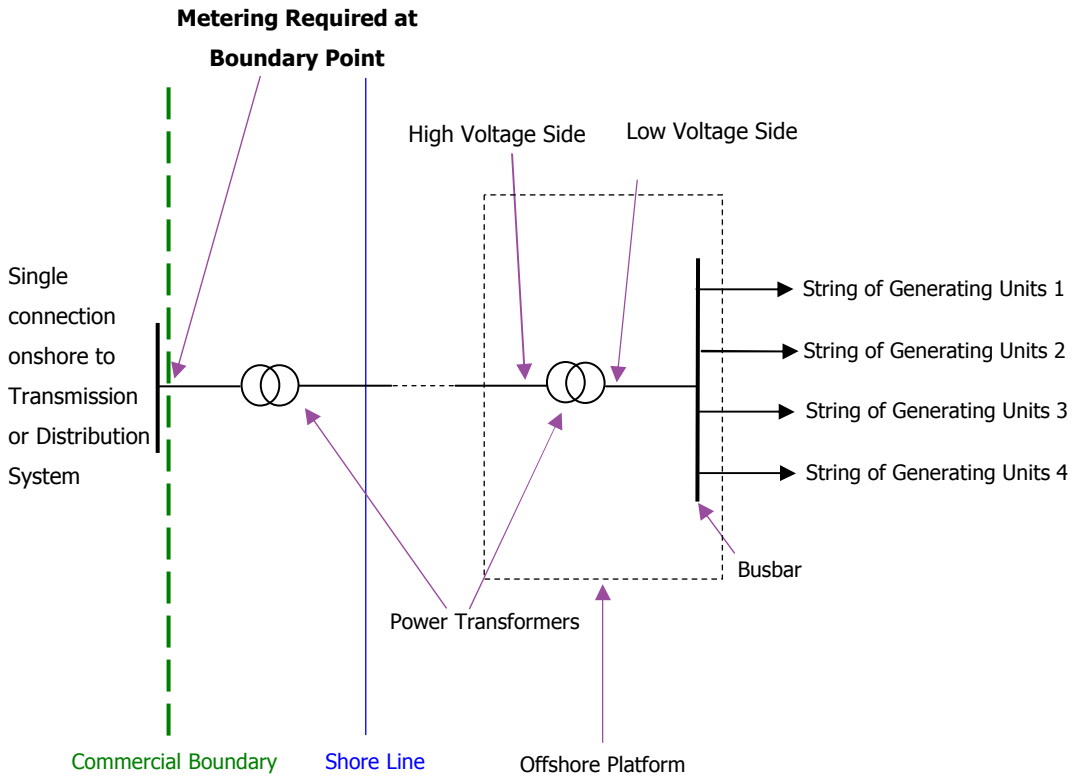
| Modification Proposal | Description of change |
|---|---|
| P237 - Standard BM Unit configuration for Offshore Power Park Modules | Allows Parties the option of having a single BM Unit (or reduced number of BM Units), subject to the Transmission Company's agreement, in order to reduce costs and administration. |
| P238 - Removal of the requirement to Meter each Boundary Point for Offshore Power Park Modules | Allow Parties to treat all Exports from (or Imports to) a BM Unit comprising Offshore Power Park Modules as a single Export (or Import). The Party must ensure appropriate compensation is applied to meter readings to account for electrical losses between the location of the metering and the commercial boundary (Boundary Point (s)). |
| P240 - Switching Plant and Apparatus between BM Units | Allows Parties to switch output between BM Units (without the need to re-register the BMU) to resolve issues such as loss of connection or partial plant failure. |
| P241 - Relaxation of Requirement to Separately Meter Licensable Generating Units | Removes the requirement to separately Meter the flows to each Generating Unit within a Combined Cycle Gas Turbine (CCGT) Module with a single Boundary Point.<br>Many sites only meter the net output at the CCGT Module's single Boundary Point, so they would be non-compliant with the BSC. |

## Examples of metering locations – current and with P238

The BSC currently requires metering to be installed at each point of connection to the Transmission System (or a Distribution System) in order to determine the Export and/or Import flows at each Boundary Point.

## Example 1 – Before the Offshore Transmission Regime

Prior to the Offshore Transmission Regime Settlement metering would normally be installed onshore at the point at which an onshore or an offshore intermittent Generator's assets connected to the Transmission System[3] or a Distribution System. The Grid Code definition of a PPM at the time meant that each connection onshore would represent a single PPM. P191 'Revised definition of Balancing Mechanism Unit to include Power Park Module' introduced the term Power Park Module into the BSC and this allowed for a PPM to be considered to satisfy the requirements to form a single Balancing Mechanism (BM) Unit (Section K3.1.4). By installing Settlement metering at that single Boundary Point it was possible to determine BM Unit volumes of energy using a minimum amount of metering. This example is illustrated in the diagram below.




**Example 1**

## Example 2 – Under the new Offshore Transmission Regime (without P238)

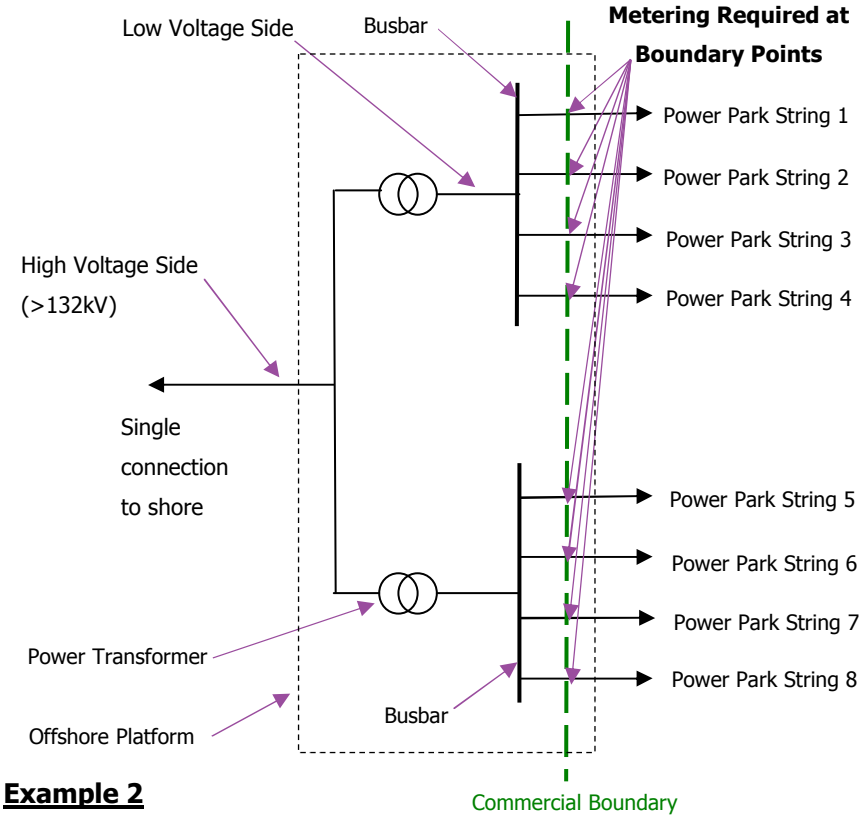
**What is a Power Transformer?**

A Power Transformer is a device used to transfer energy from one circuit to another, which may be at different voltage levels.

[3] Under normal circumstances the commercial boundary will be at the 'transmission' side of the generator transformers, referencing the provisions in Section 2.12.1(a) of the Connection and Use of System Code (CUSC) which refer to the physical point at which the generator circuits (including generator-owned generator transformers) connect to the Transmission System busbar.

Under the new Offshore Transmission Regime the BSC still requires the individual flows at Boundary Points to be determined via metering, so Settlement metering would have to be installed at the point at which an offshore intermittent Generator's assets connected to the offshore Transmission System (i.e. the ownership boundary on the offshore platform[4]).

It is immediately obvious from the diagram below that more metering would be required in such cases because the number of Boundary Points at which flows need to be determined has increased from 1 onshore, to 8 offshore (in this example). So, even though changes were made to the Grid Code to allow multiple connections to a single busbar being considered as a PPM, and hence a single BM Unit, the BSC would still require metering at each Boundary Point. The effect of this would mean that the metered data would have to be aggregated up to a BM Unit level.




**Example 2**

## Impact of P238 and other related changes

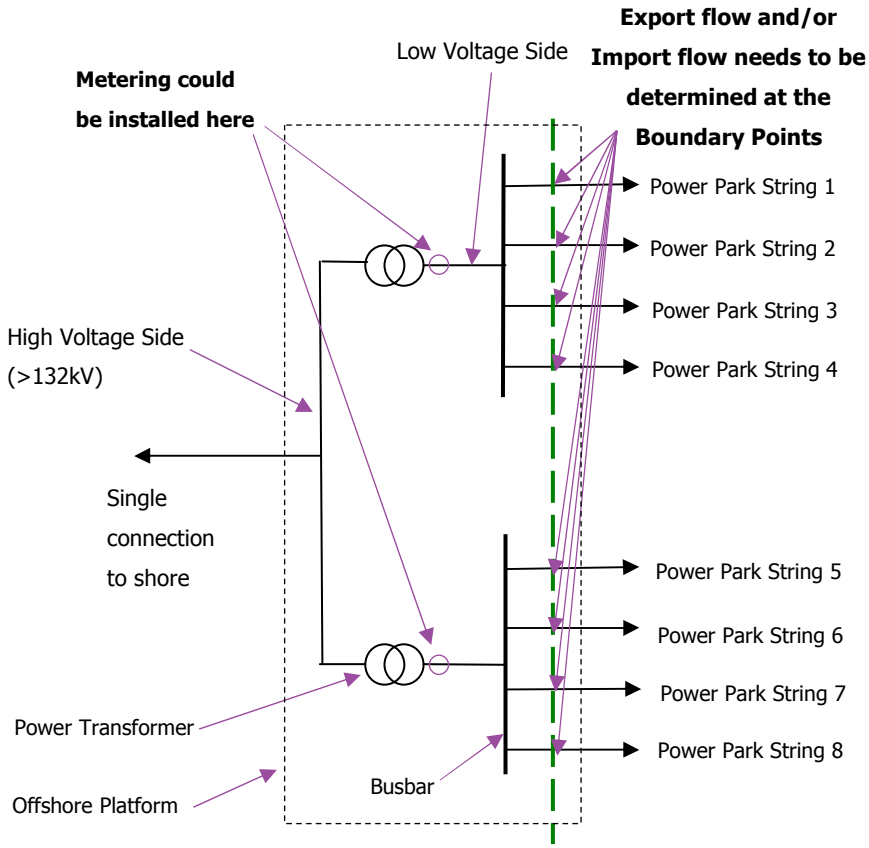
Under P238 changes would be made to Section K to allow the flows to or from BM Units comprising Offshore PPMs to be considered as a single Export or Import. Changes to the Codes of Practice would allow metering to be installed anywhere on the offshore platform in order to determine the aggregated energy flowing across the commercial boundary (with appropriate compensation) without the need for a Metering Dispensation for the metering not being at the commercial boundary (Boundary Point (s)).

[4] The Grid Code's Offshore Power Park Module definition does not refer to the point of connection to the transmission network. Instead, it refers to Power Park Strings connected to a point which cannot be electrically split. For offshore intermittent Generators, the commercial boundary will therefore not necessarily be on the HV side of the transformer(s). This is what gives rise to the different 'standard' circumstances and ownership boundaries offshore.

The Group considered three different scenarios for where metering could be installed on the offshore platform and still determine the aggregated energy across the commercial boundary.

## Example 3 – Metering on each LV side of Platform Power Transformers (with P238)

The first scenario would be to place the metering on the LV sides of the offshore platform power transformers:




**Example 3**

***Benefits of P238***

*By installing metering on the LV sides of the offshore platform power transformers the total energy flowing across each set of four commercial Boundary Points could be determined in aggregate and, under the Grid Code definition of Offshore PPM[5] and BSC standard BM Unit rules, Parties could register 2 BM Units.*

*This would:*

- *Reduce the amount of Metering Equipment (and associated costs) required;*
- *Reduce the space and amount of ancillary equipment required on the offshore platform for Metering Equipment;*
- *Reduce the complexity of the Aggregation Rules and the amount of metered data to be collected and stored (by the CDCA);*

[5] The definition of Offshore Power Park Module impacts the number of BM Units that Parties can register without going through the non-standard BM Unit application route allowed for in Section K3 'Configuration and Registration of BM Units'.

- *Potentially reduce the number of Outstations the CDCA has to dial; and*
- *Remove the requirement to seek a Metering Dispensation.*

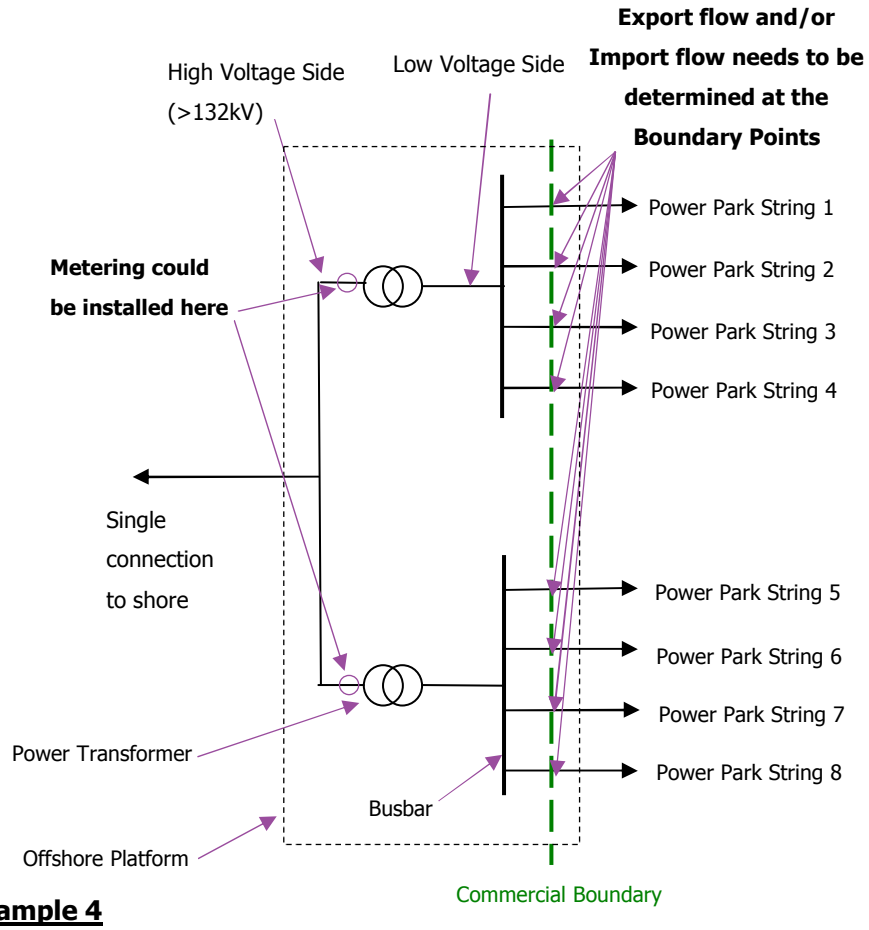
*A further benefit could be achieved by applying for a non-standard BM Unit configuration which, if approved by the BSC Panel, would allow for a single BM Unit to be registered - metered data would require aggregation.*

***Benefits of P238 with P237***

*P237 is seeking to allow flexibility in respect of BM Unit configurations as a result of impact that the recent changes will have on offshore intermittent generation. Using P237 (if approved) a Party could avoid the need to apply for a non-standard 'single' BM Unit configuration and simply register a single BM Unit – metered data would require aggregation.*

## Example 4 – Metering on each HV side of Platform Power Transformers (with P238)

The second scenario the group considered was to place the metering on the HV sides of the offshore platform power transformers:




**Example 4**

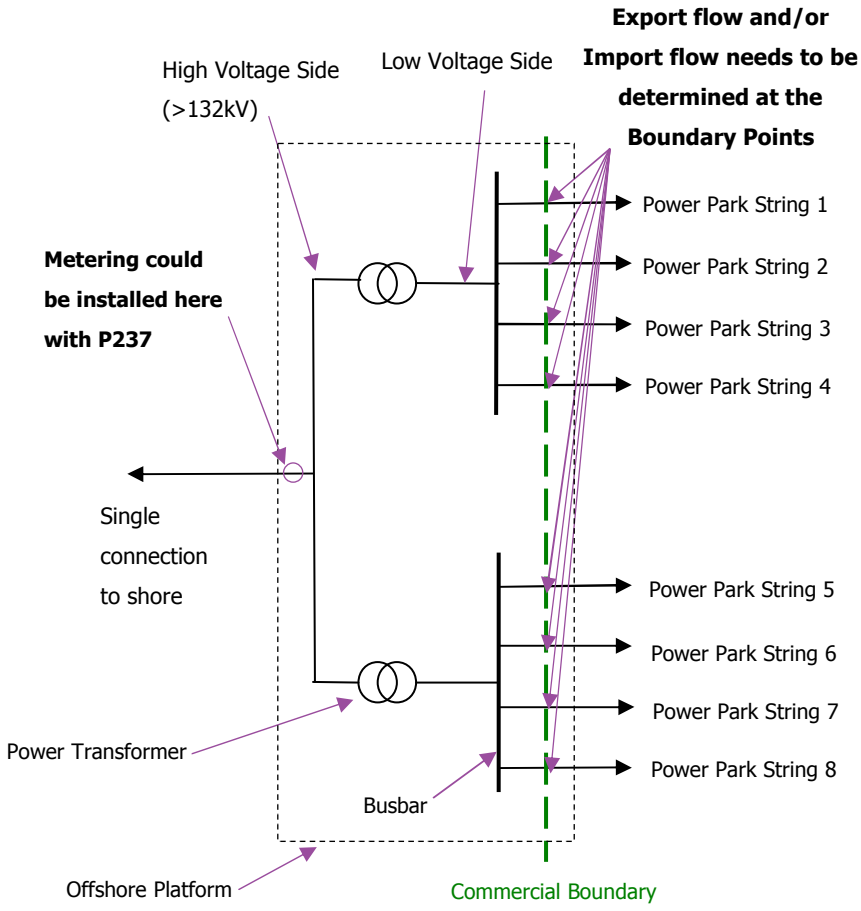
Again, by installing metering on the HV sides of the offshore platform power transformers the total energy flowing across the each set of four commercial Boundary Points could be determined in aggregate and, under the Grid Code definition of Offshore PPM and BSC rules, Parties could register 2 BM Units. The option of applying for a non-standard 'single' BM Unit configuration, or via the P237 solution (if approved), would still be open – metered data would need to be aggregated to a BM Unit level.

***Benefits***

*This scenario would delivery similar benefits to Example 3, however metering costs could be marginally higher because of the higher voltages involved (132kV voltage transformers for the Meters may be more expensive than 33kV ones) and more space may be required around the metering positions on the platform for safety reasons.*

## Example 5 – Metering on HV side of Platform Power Transformers (with P238)

The third option the group considered would be viable via a non-standard 'single' BM Unit configuration application or in conjunction with P237, if it was approved. Either way, P238 would allow for metering to be installed on the HV side of the common circuit of the offshore power transformers and eliminate the need for aggregating metered data:




**Example 5**

***Benefits of P238***

*P238 could deliver further benefits in conjunction with a non-standard BM Unit application by allowing metering costs to be reduced still further.*

***Benefits of P238 with P237***

*If P237 was approved then the need for a non-standard BM Unit application could be avoided and a single BM Unit registered with no need to aggregate metered data[6].*

***Benefits of P238 with P237 and P240***

*The Group also agreed that P238 could deliver benefits in conjunction with P240[7], as well as P237, but felt that until P240 was fully discussed it was difficult to quantify the inter-relation of the Modification Proposals.*

## Does P238 only affect offshore intermittent Generators?

The Group considered that P238 only affects offshore intermittent Generators as the issue arises from the Grid Code definition of Offshore Power Park Module allowing Generating Units that connect to the Transmission System at more than one Boundary Point to form a single PPM. This then means that metered data will need to be aggregated up to a BM Unit level. Other types of Generating Plant are not affected by this issue. In particular, the Grid Code definition of Onshore Power Park Module does not allow Generating Plant that connects at more than one Boundary Point to form a single PPM.

The Transmission Company and all consultation respondents agree with this view.

**The Group is therefore satisfied that P238 does not disadvantage onshore intermittent Generators and note that the Transmission Company supports their view.**

## Metering and Operational Costs

The Group agreed that P238 would deliver savings in metering and operational costs. The Group felt that there would be savings in the number of Meters and measurement transformers (current and voltage transformers) required and the costs required for Meter calibrations and fault repairs.

The Group did note that the cost of installing a 'higher' Code of Practice Meter would be marginal compared to a 'lower' Code of Practice Meter but that the cost of measurement transformers increases more rapidly with higher voltages and accuracy classes.

Some cost estimates show the effect of where and how many metering points there are on the offshore platform:

If we take an offshore wind farm with the same configuration as in Example 1 and with each string of wind turbines producing up to 20MW of export:

**What are Measurement Transformers?**

Measurement transformers are devices that are used to provide Meters with current and voltage signals that are a proportional factor of the actual current flowing in, and voltage of, the circuit being measured. Meters that are 'fed' these signal use multiplication factors to reverse these proportional factors in order to calculate the actual energy flowing in the circuit. e.g. A current transformer may transform an actual circuit current of 2,000 Amps down to 1 Amp, and a voltage transformer may transform an actual voltage of 132,000 Volts down to 110 Volts, to feed the Meter.

[6] Aggregation rules would still need to be submitted because they still define the relationship between the Export flow and the Import flow.

[7] For example, if the Party responsible for the Exports from the two PPMs shown in the example wanted to keep 2 BMUs (i.e. not use P237) but had the ability to close a switch and connect the two busbars together (in the event of a Power Transformer fault on one PPM circuit), the energy from the Generating Units of that PPM could be routed through the other PPM, and hence become part of the other BMU. i.e. P240 could help to facilitate this operational process.

| CoP/Voltage | CoP2 (132kV) | CoP2 (33kV) | CoP2 (33kV) |
|---|---|---|---|
| Location of Metering | Offshore HV side | Offshore LV side | Offshore LV each string circuit |
| Number of Circuits (multiplication factor) | 1 | 1 | 4 |
| Meter pair (Main + Check) and ancillary equipment per circuit | £1,500 | £1,500 | £1,500 |
| Measurement Transformers per circuit | £130,000 | £40,000 | £40,000 |
| Maintenance Costs per Meter pair per year[8] | £600 | £600 | £600 |
| **Total** | **£132,100** | **£42,100** | **£168,400** |

From this example it is apparent that, whilst savings can be made in costs for measurement transformers by metering at the LV side of the offshore platform transformer, the number of strings that need to be metered is a significant contributing factor to the overall cost of metering and maintenance.

As a second example, if we take a wind farm with a configuration similar to that given in Example 2, 3, 4 and 5 and with each string of wind turbines producing up to 20MW of export, the costs might look like this:

| CoP/Voltage | CoP1 (132kV) | CoP2 (132kV) | CoP2 (33kV) | CoP2 (33kV) |
|---|---|---|---|---|
| Location of Metering | Offshore HV (common) side | Offshore HV side of transformers | Offshore LV side of transformers | Offshore LV each string circuit |
| Number of Circuits (multiplication factor) | 1 | 2 | 2 | 8 |
| Meter pair (main + check) and ancillary equipment per circuit | £5,000 | £1,500 | £1,500 | £1,500 |
| Measurement Transformers per circuit | £130,000 | £130,000 | £40,000 | £40,000 |

[8] These costs do not include the additional cost of having to get to the offshore platform.

| | | | | |
|---|---|---|---|---|
| Maintenance Costs per Meter pair per year[8] | £600 | £600 | £600 | £600 |
| **Total** | **£135,600** | **£264,200** | **£84,200** | **£336,800** |

Again the calculation indicates that metering each string on the LV side of the offshore platform contributes to a significant increase in the overall cost of metering despite the lower cost for each set of measurement transformers.

### ***Estimated Cost Savings***

Two respondents to the consultation provided cost saving estimates under P238. One provided confidential estimates because they reflected actual costs and one respondent estimated that P238 could save their organisation £1.57m in Metering Equipment and maintenance costs. The figure quoted by this respondent was based on the estimated costs given in the examples above and the fact that the actual costs savings could be different depending on how much Metering Equipment would actually need to be installed on their platforms. This respondent also highlighted the fact that there is potentially 33GW of offshore wind generation to be built in the next 20 years (including Round 3 projects) and that even though designs may vary they would still expect the industry benefit to be a multiple of the figure they quoted.

Another respondent highlighted that even though there would be little impact on their existing intermittent generation there would clearly be benefits to the Generator and System Operator in reducing the number of Meters offshore. They also:

- emphasised the increased capital costs concerned, particularly where the weight and size of the offshore platform is increased to accommodate metering; and
- noted that maintenance is both more expensive and less productive (due to travel time and accessibility - due to rough seas).

# 3 Assessment Consultation Responses

Table 2 summarises the responses which the Group received to its industry consultation.

***Table 2 – P238 Assessment Consultation responses***

| | Question | Industry | TC | Group's conclusion: | See: |
|---|---|---|---|---|---|
| 1 | The Group considers that the specific issue which P238 identifies is limited to offshore intermittent Generators.<br>It therefore believes that P238 creates no disadvantage for onshore intermittent Generators.<br>Do you agree? | 4 Yes<br>0 No | Yes | P238 will not disadvantage onshore intermittent Generators. | Main document: Sections 1 & 2<br>Attachment A: Sections 1 & 2 |
| 2 | Would P238 deliver efficiency/administrative benefits for your organisation? | 4 Yes<br>0 No | - | P238 will deliver efficiency/administrative benefits | Main document: Sections 1, 3, 4 & 5<br>Attachment A: Sections 1 & 2 |
| 3 | The Group believes that CoP1, 2 and 3 are the relevant Codes of Practice that should be changed to deliver the P238 solution. Do you agree with the Group that any redline changes should be made to these Codes of Practice only?<br>If you agree or disagree please provide a view as to whether the Defined Metering Points appendices (Appendix A in CoP5 and 10) should be aligned for consistency or not. | 4 Yes<br>0 No | Yes | Group agreed that changes should be made to CoP5 and 10 as well. | Main document: Sections 1 & 3<br>Attachment A: Section 4 |

**What are consultation respondents' views?**

Respondents unanimously support P238 and the Group's conclusions.

No new arguments have been raised, although some respondents have provided supporting details of the cost and/or efficiency savings to their organisations from P238.

| | Question | Industry | TC | Group's conclusion: | See: |
|---|---|---|---|---|---|
| 4 | Do you believe that there any alternative solutions to the issue which the Modification Group has not identified, and which it should consider? | 0 Yes<br>4 No | No | Chosen solution is appropriate. | Main document: Section 3 |
| 5 | The Group believes that the P238 changes to Section K and the relevant Codes of Practice should be implemented 5 Working Days after an Authority decision.<br>Do you agree? | 4 Yes<br>0 No | Yes | This approach is appropriate. | Main document: Section 4 |
| 6 | The Group believes that P238 will better facilitate the achievement of Applicable BSC Objectives (c) and (d) when compared with the existing BSC requirements.<br>Do you agree? | 4 Yes<br>0 No | Yes | Better facilitates. | Main document: Section 5 |
| 7 | The Group believes that the combined benefits of P237 and P238 will be greater than those which arise individually from each proposal.<br>Although P240 has yet to receive further assessment, the Group believes it is likely that P240 will also have additional benefits in combination with P237/P238.<br>Do you agree? | 4 Yes<br>0 No | Yes | P238/P237 and P240 will deliver additional benefits if combined. | Main document: Section 5<br>Attachment A: Section 2 |
| 8 | The Group felt it would be useful, as part of the assessment of P238, to quantify the benefits that P238 could deliver in terms of savings in metering and operational costs and would like respondents to provide input.<br>Please provide an estimate of the saving in metering and operational costs that P238 could deliver to your organisation over the existing requirements. | 3 Yes<br>0 No | - | Saving estimates provided. | Main document: Section 4<br>Attachment A: Section 2 |

| | Question | Industry | TC | Group's conclusion: | See: |
|---|---|---|---|---|---|
| 9 | Do you have any further comments on P238? | 0 Yes<br>4 No | No | No further comments were added by the Group. | - |

# 4 Group's Membership, Terms of Reference & Timetable

## Who has participated in the Group's discussions?

The P238 Modification Group consists of members of the **Settlement Standing Modification Group** (SSMG) who have previously been part of the Issue 37 Group, supplemented with the Transmission Company's expertise on the Grid Code requirements for intermittent generators.

The same Group has considered P237 in parallel. Table 3 contains full details of the Group's membership.

***Table 3 – P238 Modification Group attendance***

| Member | Organisation | 17/07/09 | 14/08/09 |
|---|---|---|---|
| David Jones | ELEXON (Chair) | Y | Y |
| Mike Smith | ELEXON (Lead Analyst) | Y | Y |
| Chris Stewart | Centrica (Proposer) | Y | Y |
| Ian Pashley | National Grid | Y | Y |
| Gary Henderson | SAIC | Y | Y |
| Esther Sutton | E.ON UK | Y | Y |
| Andy Colley | SSE | Y | Y |
| Fiona Irwin | Greater Gabbard Offshore Winds Limited | Y | Y |
| Ed Marr | RWE Npower | Y | Y |
| **Attendee** | **Organisation** | **17/07/09** | **14/08/09** |
| John Lucas | ELEXON (Technical Support) | Y | Y |
| Natalie Pike | ELEXON (Lawyer) | Y | Y |
| Yvonne Naughton | Ofgem | Y | Phone |

## What areas did the Panel ask the Group to consider?

Table 4 summarises:

- The different areas which the Group has considered as part of its P238 Terms of Reference, as set by the Panel; and
- The Group's conclusion in each area.

For each area, the table also shows whether you can find further details of the Group's discussion within the main consultation document or in this Attachment A.

***Table 4 – P238 Assessment Procedure Terms of Reference***

| Area of Terms of Reference | Group's conclusion | See: |
|---|---|---|
| Does the identified issue only affect offshore, and not onshore, Power Park Modules? | Yes, the specific issue which P238 identifies is limited to Offshore. The solution will therefore not unduly disadvantage onshore intermittent Generators. | Main document: Sections 1 & 2<br>Attachment A: Sections 1 & 2 |

**Who is the SSMG?**

A standing group of industry experts, who the Panel has appointed to consider potential BSC changes in a number of subject areas – including BM Unit issues.

| | | |
|---|---|---|
| What changes are required to Section K and what legal drafting is required? | The legal text for Section K changes have been drafted in parallel with this consultation. Section K will deem the Boundary Point to be where the metering is installed on the offshore platform provided that compensation to account for electrical losses between the metering and the commercial boundary (actual Boundary Points) is in accordance with the relevant CoP. | Main document: Section 1 Attachment B |
| How the CoPs need to be changed and what CoP drafting is required? | The Group agreed that the drafting of the CoP changes should be carried out in parallel with the consultation. The redlined CoPs give flexibility to Registrants about where metering can be installed on an offshore platform provided that compensation for any electrical losses between the metering and the commercial boundary are accounted for. Dispensation will not be required. | Main document: Sections 1 & 3 |
| Which CoPs are affected? | The Group believes that Codes of Practice 1, 2 and 3 will be affected by the proposed changes and also that CoP5 and 10 should be changed for consistency. | Main document: Sections 1 & 3 |
| Does P238 impact any BSC Agents? | The Group undertook an impact assessment in parallel with the consultation, to establish the extent of any impact. There is no impact on the CDCA or CRA. | Main Document Section 1 & 4 |
| What are the specific benefits of P238? | The Group concluded that P238 on its own will reduce the amount and cost of Metering Equipment required to determine flows across Boundary Points at offshore Power Park Modules. It will also reduce maintenance costs, the associated administrative burden of registering metering related information and data collection requirements). P238 will deliver additional benefits in combination with P237 and P240. See the Group's worked examples for details of these benefits. | Attachment A Section 2 |

## What process and timetable has the Group followed?

Table 5 shows the timing of the key assessment activities which the Group has undertaken, while Table 6 contains the costs of progressing P238 through the process.

***Table 5 – P238 timetable (showing interaction with other Issue 37 changes)***

| Date | Assessment activity |
|---|---|
| 28/04/09 | ISG discusses issues with Offshore metering and BM Units |
| 14/05/09 | Panel raises Issue 37 |
| 03/06/09 | Issue 37 Group holds its first meeting |
| 23/06/09 | Issue 37 Group holds its second and final meeting |
| 26/06/09 | Centrica raises P237 and P238 |
| 09/07/09 | ELEXON presents the Issue 37 report to the Panel |
| 09/07/09 | ELEXON presents the P237 and P238 IWAs to the Panel / Panel submits P237 and P238 to the Assessment Procedure |
| 17/07/09 | Modification Group holds its first meeting for P237 and P238 |
| 21/07/09 | RWE Npower raises P240 and P241 |
| 28/08/09 | ELEXON issues the P237 and P238 Assessment Consultation Documents for industry consultation, and for impact assessment by BSC Agents and the Transmission Company |
| 11/08/09 | Participants return Assessment Consultation responses / BSC Agents and the Transmission Company return impact assessments |
| 13/08/09 | ELEXON presents P240 and P241 IWAs to the Panel |
| 14/08/09 | Modification Group holds its second meeting for P237 and P238 |
| 21/08/09 | Modification Group holds its first meeting for P240 and P241 |
| 04/09/09 | ELEXON submits the Group's P237 and P238 Assessment Reports to the Panel |
| 10/09/09 | ELEXON presents the Group's P237 and P238 Assessment Reports to the Panel |

***Table 6 – Estimated P238 progression costs up to an Authority decision***

| Meeting cost | External legal/ expert cost | BSC Agent impact assessment cost | ELEXON resource |
|---|---|---|---|
| £500[9] | £0 | £7,000 | c.43 man days, equating to c.£12k[10] |

[9] This has reduced from the £750 estimate in the IWA, as only 2 rather than 3 meetings will be needed.

[10] This has reduced from the original IWA estimate of 57 man days (c.£15k), as there has been less Group discussion (and therefore less time spent drafting documents) than ELEXON originally envisaged.