Stage 01: Initial Written Assessment

What stage is this document in the process?

01 Initial Written Assessment

02 Definition Procedure

03 Assessment Procedure

04 Report Phase

P242: Treatment of Exemptable Generation Connected to Embedded Offshore Transmission Networks

Currently Offshore Exemptable Generators that connect onshore to a Distribution Network are treated in the same way as onshore Exemptable Embedded Generators. However, when the Offshore Transmission arrangements 'Go Live', Offshore Exemptable Generators will be treated in the same way as directly-connected Generators.

P242 proposes to continue to treat Offshore Exemptable Generators in the same way as onshore Exemptable Embedded Generators following 'Go Live'.

ELEXON recommends
A 3 month Assessment Procedure

High Impact:
Generators, Licence Exemptable Generators and the Transmission Company

Contents

About this document:

This document is an Initial Written Assessment (IWA), which ELEXON will present to the Panel on 13 August 2009. The Panel will consider the recommendations and agree how to progress P242.

Further information is available in the P242 Modification Proposal which is Attachment A of this document.

Any questions?

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1 Why Change?

What is the Offshore Transmission Regime?

The Government and Ofgem have introduced a competitive Offshore Transmission regime which will Go Live in the summer of 2010. In preparation for Go Live, the Government made changes to the industry codes, including the BSC, on 24 June 2009 (Go Active).

One of the effects of the regime is that all Offshore transmission through 132 kilovolt (kV) cables and above will be treated as being part of the Transmission System.

How will the new regime affect Offshore Exemptable Embedded Generators?

Embedded Generators are located in Distribution Networks and therefore are deemed to not make use of the Transmission System. Embedded Generators that typically generate less than 100MW generally do not need a Generation Licence and therefore are Licence Exemptable.

Currently, Offshore Exemptable Generators connected directly to a distribution network are treated the same as onshore Embedded Exemptable Generators. They are treated the same as the only difference between the two is that the Offshore Exemptable Generator is connected to the relevant Distribution System with a discrete length of undersea cable which forms part of the generator's assets.

When the new arrangements 'Go Live', Offshore Exemptable Generators that are connected directly to a Distribution System by cables rated 132kV or above will stop being treated as Embedded Exemptable Generators. Instead they will be considered as a directly-connected Generator. This is in contrast to Offshore Exemptable Generators that are connected directly to a Distribution System below 132kV who will continue to be treated as Embedded Exemptable Generators.

The reason for the change in status is that under the new regime the 132kV cable (and potentially part of the Offshore substation) connecting the Offshore Exemptable Generator to the Distribution System will be classed as being transmission assets and consequently part of the Transmission System. Therefore, the Offshore Generator connected to such Embedded transmission assets will be classified as being a directly-connected Generator.

Furthermore, because the 132kV cable is considered part of the Transmission System the Boundary Point will move. Before Go Live the Boundary point is where the Offshore 132kV cable connects to the onshore Distribution System. After Go Live the Boundary point will be where the Offshore Generator connects to the Transmission System (i.e. the Offshore end of the 132kV cable).

Also due to the change in ownership of the 132kV cable to a new Offshore Transmission Operator, it's system operation becomes the responsibility of the Transmission Company, with the Meter registration also falling under the remit of the Transmission Company. Currently both the 132kV cable and Meter registration falls under the responsibility of the Offshore Exemptable Generator who owns it.

What is a directly-connected Generator?

A Generator that connects to and uses the Transmission System.

What is Embedded Transmission?

Embedded Transmission is where an offshore Transmission System connects directly into an onshore Distribution System.

What is a Boundary Point?

A Boundary point is where a Generator or customer connects to the Total System (Transmission and each Distribution System).

The Issue

The change in the treatment of Offshore Exemptable Generators that are connected directly to a Distribution System will impact their commercial position due to the reclassification of the 132kW cable. They will be liable for the costs and benefits of a fully directly-connected Generator. These changes are summarised in the table below:

	Treatment before Go Live	Treatment after Go Live
Charges/revenue (TNUoS, BSUoS and RCRC)	Not Liable – as the Exemptable Generator is not considered as being connected to the Transmission System (it is an Embedded Generator).	Liable – as the Exemptable Generator will be considered to be connected to the wider Transmission System (i.e. it ceases to be an Embedded Generator).
Transmission losses	Offshore losses are attributed to the Exemptable Generator. However Exemptable Generators are not liable for onshore losses.	Offshore losses caused by the Exemptable Generator will be spread across other market participants. Also the Generator will be liable for onshore transmission losses.
Meter Registration	SMRS or CMRS –The Offshore Exemptable Generator has the same choice as any other Exemptable Embedded Generator to register meters in either CMRS or SMRS.	CMRS – The Exemptable Generator will only be able to register meters in CMRS. This is due to it being considered as a directly-connected Generator.

What is SMRS?

Supplier Meter Registration Service, which is the service provided by Licensed Distribution System Operators (LDSOs) for the registration of Metering Systems at Boundary points on their Distribution Systems.

What is CMRS?

Central Meter Registration Service, which is for the registration of CVA Metering Systems data.

Also, as mentioned previously, at Go Live the Boundary point will move from between the Generator and Distribution System to between the Generator and the discrete piece of Transmission System (which divides the Generator from the Distribution System). In order for an Offshore Generator to be classified as an Embedded Generator, the Boundary point in these situations would need to remain the point where the Generator connects to the Distribution System onshore.

The above issues have an immediate effect on current Offshore Exemptable Generators going through transition to the new Offshore Transmission regime. However they may also affect future decisions made by Parties about how new builds of Offshore Generation are connected, as the current proposed regime is likely to cause them to request a full extension of the onshore Transmission System to the shoreline, even if connection to the nearest Distribution System is the most efficient solution.

2 Solution

How will P242 resolve this issue?

P242 seeks to maintain the current treatment of Offshore Exemptable Generators that are connected directly to a Distribution System at 132kV or above, and remove any inconsistencies with the treatment of onshore Exemptable Generators (or Offshore Exemptable Generators connected to a Distribution system below 132kV) that will occur at Go-Live.

As such it is proposed that Offshore Exemptable Generators that are connected directly to a Distribution System:

- are metered at the point where the Offshore Exemptable generator connects the distribution system;
- are responsible for any Losses from the Offshore Exemptable network, and not spread across other market participants;
- qualify for embedded benefits;
- have a choice as to whether they register in Supplier Meter Registration Service (SMRA) or Central Meter Registration Service (CMRS); and
- are the Registrant for the meters as they are responsible for the Exports from the Generator.

This aim of P242 will be achieved through changes to clauses in Section K and definitions in Annex X-1.

What are Embedded benefits?

Embedded benefits are savings incurred by the Exemptable Generator, as they are not liable for some of the charges that directly-connected Generators are. This is due to them making little or no use of the Transmission System.

Applicable Objectives

The Proposer believes that P242 will better facilitate the achievement of Applicable BSC Objectives (a) and (c).

The benefits identified by the Proposer are summarised in the following table:

Applicable BSC Objective	Benefit identified by Proposer for P242
Objective (a)	P242 would promote efficient network design solutions. As by removing the distortion in the current arrangements, Embedded Transmission Systems would not be avoided if they are considered the most efficient solution.
Objective (c)	P242 would promote competition in generation by removing undue discriminatory treatment of similar classes of generator, whilst ensuring that the costs associated with the Offshore transmission assets are appropriately targeted at the relevant Offshore generator.

3 Proposed Progression

Modification Group membership

ELEXON recommends that the P242 Modification Group will be formed from members of the Settlement Standing Modification Group (SSMG), supported by members of the Issue 37 Group

Terms of Reference

The Group will need to consider the following areas in relation to the treatment of Offshore Exemptable Generators following the Offshore Transmission regime Go Live.

Ref	Area	Reason for inclusion in Terms of Reference
1	Is there a reason why Offshore Exemptable Generators that are connected directly to a Distribution System should not be treated similarly to onshore Embedded Exemptable generators?	To determine whether the principle of P242 is sound.
2	Where should the Boundary Point lie?	See page 3.
3	What BSC definition changes are needed?; and are there wider implications of changing BSC definitions on other industry codes?	To fully assess the impact of the change.
4	What are the wider impacts of P242 outside of the BSC?	Modification Group awareness of the wider impacts, noting that they cannot be resolved by P242.
5	Are there any issues caused by the Party responsible for the Exports from the relevant generator also being the Registrant of the onshore metering?	To determine if there are any issues preventing the exporting Offshore Generator being the registrant of the onshore metering.
6	How will the Offshore Losses be directly attributed to the offshore Exemptable Generator?	To agree how Losses will be attributed in this situation.
7	What are the benefits and drawbacks of P242? Including: • Costs/benefits to all Parties and the Transmission Company.	To identify the benefits of the P242 solution.
8	How does current treatment of Offshore Exemptable Generation result in discrimination, and how will the P242 solution resolve this?	To determine how P242 solution resolves the issue.
9	Is an Alternative Modification required?	-
10	How does the P242 solution better meet the Applicable BSC Objectives?	-

Timetable and costs

ELEXON recommends that P242 undergoes a 3-month Assessment Procedure.

This will enable P242 to be progressed in parallel with other Offshore Modifications in the process (see section 6).

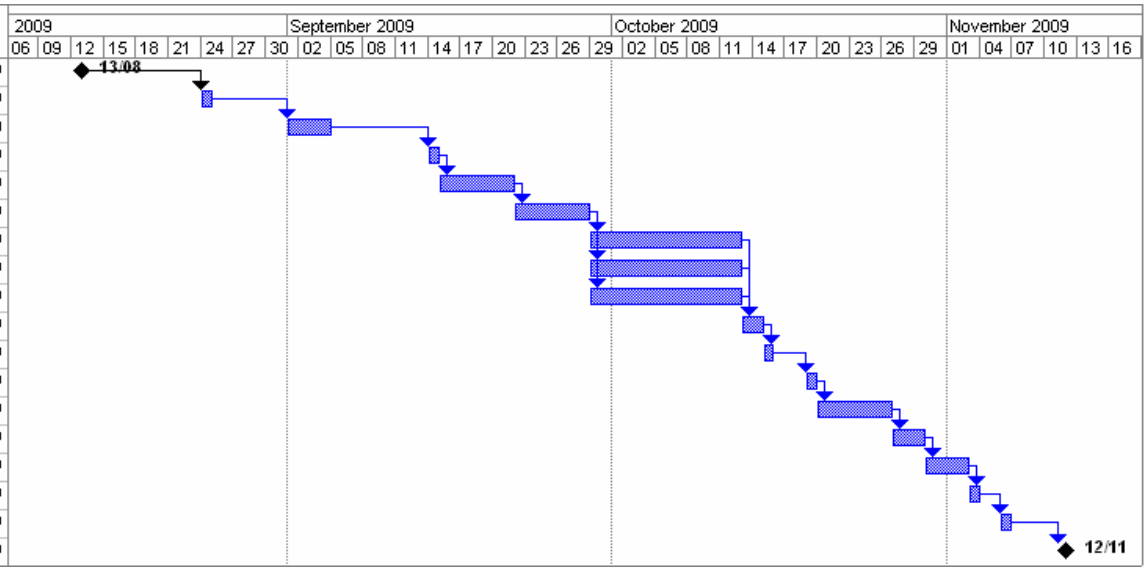
The following page shows the full recommended timetable, which includes:

- A 2-week joint industry consultation/impact assessment;
- A BSC Agent impact assessment (in parallel with the consultation/impact assessment);
- A Transmission Company impact assessment (in parallel with the consultation/impact assessment); and
- 3 Modification Group meetings, (flexibility has been left in the timetable to include a second pre-consultation meeting, should it prove necessary).

Estimated progression costs based on proposed timetable	
Meeting costs	£1,500 (2-3 meetings)
ELEXON resource	75 man days, equating to £16,590

Timetable and Costs

ID	Task Name	Duration	Start
1	IWA presented to Panel	0 days	Thu 13/08/09
2	Mod Group Meeting 1	1 day	Mon 24/08/09
3	ELEXON drafts legal text	4 days	Tue 01/09/09
4	Mod Group Meeting 2	1 day	Mon 14/09/09
5	ELEXON drafts consultation document	5 days	Tue 15/09/09
6	Group review by email	5 days	Tue 22/09/09
7	Industry consultation	10 days	Tue 29/09/09
8	BSC Agent impact assessment	10 days	Tue 29/09/09
9	Transmission Company impact assessment	10 days	Tue 29/09/09
10	ELEXON reviews draft legal text	2 days	Tue 13/10/09
11	ELEXON internal legal text walkthrough	1 day	Thu 15/10/09
12	Mod Group Meeting 3	1 day	Mon 19/10/09
13	ELEXON drafts Assessment Report	5 days	Tue 20/10/09
14	Group reviews report/legal text by email	3 days	Tue 27/10/09
15	ELEXON updates report/legal text	2 days	Fri 30/10/09
16	Internal paper day	1 day	Tue 03/11/09
17	External paper day	1 day	Fri 06/11/09
18	Assessment Report presented to Panel	0 days	Thu 12/11/09



4 Likely Impacts

Impact on BSC Systems and process	
BSC System/Process	Potential impact
CDCA	A new type of connection point may be needed to distinguish between Licensed and Exemptable Offshore connections.
CRA	A new type of connection point may be needed to distinguish between Licensed and Exemptable Offshore connections.
TOMAS	Updates may be needed to the software and documentation to reflect changes to CRA and CDCA systems.

Impact on BSC Agent/service provider contractual arrangements	
BSC Agent/service provider contract	Potential impact
None	None

Impact on BSC Parties and Party Agents
Generators and Licence Exemptible Generators would be impacted by this change. It will also affect Offshore Transmission regime transition activities that existing Offshore Exemptable Generators are currently undertaking prior to Go Live.

Impact on Transmission Company
ELEXON does not anticipate that any changes will be required to the Grid Code. However Transmission Company expertise is needed as part of the Modification Group's discussion to ensure the P242 solution and legal text is consistent and does not deviate from the Grid Code requirements over the treatment of Offshore transmission.

Impact on ELEXON	
Area of ELEXON's business	Potential impact
Change Implementation	Update the BSC and Code Subsidiary Documents.
Service Delivery	Update Guidance notes, LWIs and review BSCP changes.

Impact on Code	
Code section	Potential impact
Section K	Section K will need to be modified to meet the specific aims of the Modification.
Annex X-1	Definitions in Annex X-1 may need amendment to cover situations where an Offshore generator is treated as being Embedded.

Impact on Code Subsidiary Documents	
CSD	Potential impact
BSCP20	BSCP20 would need to be amended to allow Offshore Exemptable Generators to be registered in CVA.
BSCP25	BSCP25 would need to be amended to reflect revised definitions and registration processes for Boundary Points arrangements for Boundary Points.
CRA and CDCA Service Description	The CRA and CDCA Service Descriptions may need to be amended to reflect any changes made to section K, BSCP20 and BSCP25 to distinguish between Offshore directly connected and Embedded generation.

Impact on Core Industry Documents and other documents	
Document	Potential impact
Ancillary Services Agreements	None
Connection and Use of System Code	None
Data Transfer Services Agreement	None
Distribution Code	None
Distribution Connection and Use of System Agreement	Any changes to the clauses in Section K or the definitions in Annex X-1 may cause them to deviate from the Grid Code and therefore DCUSA.
Grid Code	Any changes to the clauses in Section K or the definitions in Annex X-1 may cause them to deviate from the Grid Code.
Master Registration Agreement	None
Supplemental Agreements	None
System Operator-Transmission Owner Code	None
Transmission Licence	None
Use of Interconnector Agreement	None

Impact on other Configurable Items	
Configurable Item	Potential impact
None	None

5 Recommendations

On the basis of the initial written assessment, ELEXON invites the Panel to:

- DETERMINE that Modification Proposal P242 progresses to the Assessment Procedure;
- AGREE the Assessment Procedure timetable of 3 months such that an Assessment Report will be completed and submitted to the Panel at its meeting on 12 November 2009;
- DETERMINE that the P242 Modification Group should be the same group being used for P237, P238, P240 and P241, formed from members of the Settlement Standing Modification Group, supplemented with members of the Issue 37 Group and with expertise from the Transmission Company on the Grid Code requirements; and
- AGREE the Modification Group's Terms of Reference.

Recommendation

ELEXON recommends a 3 month Assessment Procedure

6 Further Information

Related changes

There are four other Offshore transmission Modifications in the Modification Process, raised to address the issues identified by the Issue 37 Group, and consist of:

Modification	Title	Current status
P237	Standard BM Unit Configuration for Offshore Power Park Modules	In the Assessment Phase.
P238	Removal of the requirement to Meter each Boundary Point for Offshore Power Park Modules	
P240	Switching Plant and Apparatus between BM Units	In the IWA phase
P241	Relaxation of Requirement to Separately Meter Licensable Generating Units	

Attachment A: P242 Modification Proposal form

Further information is included in the P242 Modification Proposal form, which is included as Attachment A to this document.