

Stage 06: Final CUSC Modification Report

Connection and Use of System Code (CUSC)

CMP199 Reactive Despatch Network Restrictions

What stage is this document at?

01	Initial Written Assessment
02	Workgroup Consultation
03	Workgroup Report
04	Code Administrator Consultation
05	Draft CUSC Modification Report
06	Final CUSC Modification Report

This CUSC Modification Proposal seeks to align the CUSC with the Grid Code to allow payments to generators which have a reactive despatch restriction in place whereby they will be paid accordingly if have been despatched for reactive power by National Grid.

Published on: 10 November 2011



CUSC Modifications Panel Recommendation:

CMP199 should be implemented as it better facilitates Applicable CUSC Objective (a) and (b)



High Impact:

None



Medium Impact:

National Grid Transmission Plc, Industry Parties



Low Impact:

None

Contents



Any Questions?

Contact:

Steve Lam

Code Administrator



Steven.lam@uk.ngrid.com



01926 653534

Proposer:

Steve Lam

National Grid

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About this document

This document is the Final CUSC Modification Report which contains the responses to the Code Administrator Consultation and the recommendation of the CUSC Modifications Panel. This document has been prepared and issued by National Grid under the rules and procedures specified in the CUSC. The purpose of this document is to assist the Authority in their decision whether to implement CMP199.

Document Control

Version	Date	Author	Change Reference
0.1	07 October 2011	National Grid	Draft for industry review
0.2	20 October 2011	National Grid	Draft for Panel vote
0.3	01 November 2011	National Grid	Draft for Panel review
1.0	10 November 2011	National Grid	Final version to Authority

1 Summary

- 1.1 The implementation of CAP169 Working Group Alternative Amendment 3, and its consequential Grid Code modification E/09, prohibited National Grid from instructing embedded generators which are under a network restriction, to provide reactive services. This had the effect of preventing National Grid from despatching those generators whose reactive capability range was only marginally less than the obligations specified in the Grid Code. This was an unintended consequence of CAP169 as the Ofgem CAP169 decision letter stated that one of the contributing reasons for the approval of WGAA3 was that under the other alternatives, National Grid may not be able to instruct such generators to 0 MVar. Therefore reactive payments would be made even if the reactive services were not aiding system operation. These costs would then ultimately fall to consumers which would not be economical. However, the approval of Working Group Alternative Amendment 3 also impacted embedded generators which could be dispatched to zero but could not provide the full MVar range as specified in the Grid Code, due to the DNO network restriction.
- 1.2 To address this issue, the Grid Code Modification E/11 proposed to allow the despatching of network restricted generators by adding in a new definition of a “Reactive Despatch to Zero MVar Network Restriction” to include only those generators which cannot provide 0 MVar. On 10 October 2011, the Authority approved the Grid Code Modification E/11 with an implementation date to be decided by National Grid which would be dependent on the outcome of CMP199. The decision letter for E/11 can be found in Annex 4 of this document.
- 1.3 This CUSC Modification Proposal aligns the CUSC with the Grid Code to allow payments to generators which have a reactive despatch restriction in place whereby they will be paid accordingly if have been despatched by National Grid.
- 1.4 CMP199 was proposed by National Grid and submitted to the CUSC Modifications Panel for their consideration on 18 August 2011. The Panel determined that the proposal should be sent to the Code Administrator Consultation phase and that they should report back to the CUSC Modification Panel in October 2011.

National Grid Opinion

- 1.5 National Grid supports the implementation of CMP199 as it better facilitates the Applicable CUSC Objectives. This is achieved by facilitating the payment to “restricted” generators for reactive power and therefore prevent discrimination to generators with a deemed restriction, thereby facilitating effective competition.

CUSC Modifications Panel Recommendation

- 1.6 At the CUSC Modifications Panel meeting on the 28 October 2011, 8 Panel Members unanimously voted that CMP199 better facilitates the Applicable CUSC Objectives and should be implemented.

2 Why Change?

- 2.1 Currently the Grid Code definition for generator Reactive Despatch Network Restriction means that any generator that cannot meet the full reactive range is subject to a network restriction. This includes generators which cannot reach the extremities of the range, i.e. they may only be able to provide 90% of the specified range. As a consequence, National Grid cannot despatch such generators for reactive power, limiting the overall number of generators that can be despatched.
- 2.2 For embedded generators, some may be under a Distribution Network Operator (DNO) restriction, rather than a self imposed restriction which means that they cannot provide the reactive power range specified in the Grid Code.
- 2.3 The result of this is that some Embedded Generators are prevented from providing a reactive service to National Grid within the range the DNO network can accommodate, which may be just short of the Grid Code defined range. This has a consequential effect on maintaining the integrity of the transmission system and could be seen as inefficient as a generator may have the ability to provide a reactive service but is not permitted due to the DNO network restriction.
- 2.4 A proposed solution was initially taken to the Grid Code Review Panel (GCRP) which agreed that it should be developed at the Balancing Services Standing Group (BSSG). The BSSG believed that a change was required to both the Grid Code and CUSC to allow the technical aspects and the commercial aspects of the proposal to be addressed separately.
- 2.5 At the May 2011 GRCP, it was agreed that a consultation should be issued to the industry to propose a new definition of “Reactive despatch to Zero Network Restriction” within the Grid Code. This proposed to limit the definition of a network restriction to only those instances where National Grid cannot despatch generators to 0 MVar. In other words, the network restriction would only apply where National Grid cannot despatch the generator to 0 MVar. The consultation titled E/11 (Reactive Despatch Network Restrictions) was published on 11 July 2011 and closed on 08 August 2011 whereby 3 responses were received which were fully supportive of the modification. E/11 has now been approved by the Authority. The link to the consultation and Authority decision letter can be found below:
<http://www.nationalgrid.com/uk/Electricity/Codes/gridcode/consultationpapers/>
- 2.6 Currently as the CUSC still refers to the general Grid Code definition of a “reactive despatch network restriction” it prohibits any payments to generators with such restrictions in place. When E/11 is implemented, it will introduce an inconsistency whereby certain restricted generators can be despatched but they would not be paid for the service.
- 2.7 The key defect is that the CUSC definition for reactive despatch network restrictions will not align with the Grid Code definition when E/11 is implemented. This modification proposal does not discuss the merits of whether the despatching of restricted generators should be allowed as this is covered in the Grid Code Modification E/11. By aligning the CUSC with the new proposed Grid Code definition this will then allow payments to be made to generators which can provide zero MVar even if they have a wider Reactive Despatch Network Restriction.

3 Solution

- 3.1 In order to resolve the inconsistency between the CUSC and the Grid Code which would be introduced when E/11 is implemented, CMP199 proposes to align the definition of “Reactive despatch to Zero MVar Restriction”. This will allow payments to generators which do not have such a restriction in place when they have been despatched by National Grid.
- 3.2 Therefore CMP199 proposes to edit the existing CUSC definition of “reactive despatch network restriction” to “reactive despatch to zero MVar network restriction. The actual description of the definition will remain within the Grid Code. As there are several references to the current definition with Schedule 3 of the CUSC, these will also have to be updated. The proposed legal text can be found in Annex 2 of this consultation.

4 Impacts

Impact on the CUSC

- 4.1 CMP199 requires amendments to the following parts of the CUSC:
- Section 11 [Interpretation and Definitions]
 - Schedule 3 – Appendix 1
 - Schedule 3 – Appendix 2
- 4.2 The text required to give effect to this proposal is contained in Annex 2 of this document.

Impact on Greenhouse Gas Emissions

- 4.3 The proposer has not identified any material impacts on Greenhouse gas Emissions

Impact on Core Industry Documents

- 4.4 The proposer has not identified any impacts on Core Industry Documents.

Impact on other Industry Documents

- 4.5 CMP199 is a consequential change to the Grid Code Modification E/11. On the 10 October 2011 the Authority directed that the proposed change under E/11 should be made which would introduce a new definition of “Reactive despatch to Zero MVar Restriction” into the Grid Code.

Costs

Industry costs (Standard CMP)	
Resource costs	£908 – 1 Consultation <ul style="list-style-type: none">• 1.5 man days effort per consultation response• £605 charge out rate per day• 1 consultation respondent• 0 Workgroup meetings
Total Industry Costs	£908

5 Proposed Implementation

- 5.1 National Grid proposes CMP199 should be implemented 10 business days after an Authority decision. The respondent to the Code Administrator Consultation agreed with this approach.

6 The Case for Change

Assessment against Applicable CUSC Objectives

- 6.1 The proposer considers that CMP199 would better facilitate the following CUSC Objectives
- (a) the efficient discharge by the licensee of the obligations imposed upon it under the Act and by this licence;

When the Grid Code Modification E/11 has been implemented, this CUSC Modification will ensure that National Grid can facilitate payment for the despatching of network restricted generators. This will increase the pool of potential providers of reactive power and result in increased efficiency by the Company.

- (b) facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the sale, distribution and purchase of electricity.

The proposal will also ensure appropriate remuneration through ensuring payment is made only in instances where access to the service is available for the purposes of Transmission system operation, whilst no payment is made when restrictions on instruction to 0 MVar are in place. Thereby ensuring the system is operated and managed in the most economic and efficient manner.

National Grid Opinion

- 6.2 National Grid supports CMP199 as it better facilitates the Applicable CUSC Objectives. This is achieved by facilitating the payment to “restricted” generators for reactive power and therefore prevent discrimination to generators with a deemed restriction, thereby facilitating effective competition.

CUSC Modifications Panel Recommendation

6.3 At the CUSC Modifications Panel meeting on the 28 October 2011, 8 Panel Members unanimously voted that CMP199 better facilitates the Applicable CUSC Objectives and should be implemented. The details of the voting can be found below:

Panel Member	Better facilitates Applicable Objective (a)?	Better facilitates Applicable Objective (b)?
Bob Brown	Yes, for consistency.	Yes, it removes potential restrictions so facilitates competition.
Barbara Vest	Yes, consistent with Grid Code.	Yes, removes restrictions so facilitates competition.
Barbara Vest for Simon Lord	Yes, consistent with Grid Code.	Yes, removes restrictions so facilitates competition.
Paul Mott	Yes, consistent with Grid Code.	Yes, facilitates competition.
Paul Jones	Yes, consistent with Grid Code.	Yes, facilitates competition.
Garth Graham	Yes, for consistency.	Yes, for the reasons set out in 6.1 of the CUSC Modification Report.
Ian Pashley	Yes, for consistency.	Yes, facilitates payments and enables a better pool of providers.
Fiona Navesey	Yes, align with Grid Code.	Yes, increases pool of providers.

7 Responses

7.1 Only 1 response was received to the Code Administrator Consultation for CMP199. The following table provides a summary of the response received.

No.	Respondent	Support?	Further Comments
1	EDF Energy	Yes on the basis that Grid Code Modification E11 is implemented	<ul style="list-style-type: none">• Believes that CMP199 better facilitates applicable CUSC objective (a) and (b)• Ensures payment to restricted generators for reactive power better facilitating competition• Increases the pool of generators that can provide reactive power

CUSC Modification Proposal Form	CMP199
<p>Title of the CUSC Modification Proposal: <i>(mandatory by Proposer)</i></p> <p>Reactive Despatch Network Restrictions</p>	
<p>Submission Date <i>(mandatory by Proposer)</i></p> <p>18 August 2011</p>	
<p>Description of the CUSC Modification Proposal <i>(mandatory by Proposer)</i></p> <p>This modification proposal is a consequential change from the Grid Code Modification E/11 (Reactive Despatch Network Restrictions) which introduces a new definition of a “Reactive Despatch to Zero MVar Network Restriction” to allow National Grid to despatch such restricted generators providing they can provide zero MVar.</p> <p>This CUSC Modification Proposal aligns the CUSC with the Grid Code to allow payments to generators which have a reactive despatch restriction in place whereby they will be paid accordingly if have been despatched by National Grid.</p>	
<p>Description of Issue or Defect that CUSC Modification Proposal seeks to Address: <i>(mandatory by Proposer)</i></p> <p>Currently the Grid Code definition for generator “Reactive Despatch Network Restriction” means that any generator that cannot meet the full reactive range is subject to a network restriction. This includes generators which cannot reach the extremities of the range, i.e. they may only be able to provide 90% of the specified range. As a consequence, National Grid cannot despatch such generators for reactive power, limiting the overall number of generators that can be despatched.</p> <p>To address this issue, the Grid Code Modification E/11 proposed to allow the despatching of network restricted generators by adding in a new definition of a “Reactive Despatch to Zero MVar Network Restriction” to include only those generators which cannot provide 0 MVar. The consultation for E/11 was published on 11 July 2011 and closed on 08 August 2011 whereby 3 responses were received which were fully supportive of the modification.</p> <p>Currently the CUSC prohibits any payments to generators which are deemed to have a Reactive Despatch Network Restriction in place. By aligning the CUSC with the new proposed Grid Code definition this will then allow payments to be made to generators which can provide zero MVar even if they have a wider Reactive Despatch Network Restriction.</p> <p>The key defect is that the CUSC definition for reactive despatch network restrictions will not</p>	

align with the Grid Code definition if E/11 is implemented. This modification proposal does not discuss the merits of whether the despatching of restricted generators should be allowed as this is covered in the Grid Code Modification E/11.

For information the E/11 consultation can be found on the following link:

<http://www.nationalgrid.com/uk/Electricity/Codes/gridcode/consultationpapers/>

Impact on the CUSC (*this should be given where possible*)

Changes are proposed to the following sections of the CUSC:

- Section 11 – Definitions
- Schedule 3 – Appendix 1
- Schedule 3 – Appendix 2

Do you believe the CUSC Modification Proposal will have a material impact on Greenhouse Gas Emissions? Yes/No (*assessed in accordance with Authority Guidance – see guidance notes for website link*)

No

Impact on Core Industry Documentation. Please tick the relevant boxes and provide any supporting information (*this should be given where possible*)

BSC

Grid Code

STC

Other

(*please specify*)

Urgency Recommended: Yes / No (optional by Proposer)

No

Justification for Urgency Recommendation (mandatory by Proposer if recommending progression as an Urgent Modification Proposal)

Self-Governance Recommended: Yes / No (mandatory by Proposer)

No

Justification for Self-Governance Recommendation (Mandatory by Proposer if recommending progression as Self-governance Modification Proposal)

Should this CUSC Modification Proposal be considered exempt from any ongoing Significant Code Reviews? (Mandatory by Proposer in order to assist the Panel in deciding whether a Modification Proposal should undergo a SCR Suitability Assessment)
There is currently an SCR on electricity transmission charging under TransmiT which will focus on the options for potential changes to the TNUoS charging Arrangements.

This CUSC Modification Proposal does not relate to this scope of work under the SCR and so should be exempt.

Impact on Computer Systems and Processes used by CUSC Parties: (this should be given where possible)

None

Details of any Related Modification to Other Industry Codes (where known):

Grid Code Modification E/11 has been raised which proposes to add a new definition of a Reactive Despatch to Zero MVAR Network Restriction to include only those generators which cannot provide 0 MVAR. The Modification will be sent to the Authority shortly for a decision. If E/11 is implemented this CUSC Modification Proposal aims to align the CUSC with the new definition of a reactive despatch network restriction from the Grid Code.

Justification for CUSC Modification Proposal with Reference to Applicable CUSC Objectives: (mandatory by proposer)

Please tick the relevant boxes and provide justification:

(a) the efficient discharge by The Company of the obligations imposed upon it by the Act and the Transmission Licence

Assuming that the Grid Code Modification E/11 will be implemented, this CUSC Modification will ensure that National Grid can facilitate payment for the despatching of network restricted generators. This will increase the pool of potential providers of reactive power and result in increased efficiency by the Company.

The proposal will also ensure appropriate remuneration through ensuring payment is made only in instances where access to the service is available for the purposes of Transmission system operation, whilst no payment is made when restrictions on instruction to 0 MVAR are in place. Thereby ensuring the system is operated and managed in the most economic and efficient manner

(b) facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the sale, distribution and purchase of electricity.

This modification will facilitate the payment to “restricted” generators for reactive power and therefore prevent discrimination to generators with a deemed restriction, thereby facilitating effective competition.

These are defined within the National Grid Electricity Transmission plc Licence under Standard Condition C10, paragraph 1

Details of Proposer: (Organisation Name)	National Grid Electricity Transmission Plc
Capacity in which the CUSC Modification Proposal is being proposed: (i.e. CUSC Party, BSC Party or “National Consumer Council”)	CUSC Party
Details of Proposer’s Representative: Name: Organisation: Telephone Number: Email Address:	Steven Lam National Grid Electricity Transmission Plc 01926 653534 Steven.lam@uk.ngrid.com
Details of Representative’s Alternate: Name: Organisation: Telephone Number: Email Address:	Alex Thomason National Grid Electricity Transmission Plc 01926 656379 Alex.thomason@uk.ngrid.com

Attachments (Yes/No):

If Yes, Title and No. of pages of each Attachment:

Annex 1 Proposed Legal Text to the CUSC

Annex 1 - Proposed Legal text to the CUSC

CUSC SCHEDULE 3

APPENDIX 1

7.1.1 **Obligatory Reactive Power Service**

7.1.2 **– Default Payment Arrangements**

Y = 1, except that Y shall be 0 in all **Settlement Periods** from and including that in which the **BM Unit** is affected by a **Reactive Despatch to Zero Mvar Network Restriction** until (and including) the **Settlement Period** in which notification is given to **The Company** pursuant to the **Grid Code** that such **Reactive Despatch to Zero Mvar Network Restriction** is no longer affecting that **BM Unit**

CUSC SCHEDULE 3

Appendix 2

Obligatory Reactive Power Service and Enhanced Reactive Power Services –
Market Payment Mechanism

(e) the **BM Unit** is affected by a **Reactive Despatch to Zero Mvar Network Restriction** until (and including) the **Settlement Period** in which notification is given to **The Company** pursuant to the **Grid Code** that such **Reactive Despatch to Zero Mvar Network Restriction** is no longer affecting that **BM Unit**

SECTION 11

“Reactive Despatch to Zero Mvar Network Restriction”

As defined in the **Grid Code**

CUSC SCHEDULE 3

APPENDIX 1

7.1.3 **Obligatory Reactive Power Service**

7.1.4 **– Default Payment Arrangements**

Y = 1, except that Y shall be 0 in all **Settlement Periods** from and including that in which the **BM Unit** is affected by a **Reactive Despatch to Zero Mvar Network Restriction** until (and including) the **Settlement Period** in which notification is given to **The Company** pursuant to the **Grid Code** that such **Reactive Despatch to Zero Mvar Network Restriction** is no longer affecting that **BM Unit**

CUSC SCHEDULE 3

Appendix 2

Obligatory Reactive Power Service and Enhanced Reactive Power Services –
Market Payment Mechanism

(e) the **BM Unit** is affected by a **Reactive Despatch to Zero Mvar Network Restriction** until (and including) the **Settlement Period** in which notification is given to **The Company** pursuant to the **Grid Code** that such **Reactive Despatch to Zero Mvar Network Restriction** is no longer affecting that **BM Unit**

SECTION 11

“Reactive Despatch to Zero Mvar Network Restriction”

As defined in the **Grid Code**

Annex 3 – Code Administrator Consultation Response

This section contains the 1 response to the Code Administrator Consultation

CMP199 – Reactive Despatch Network Restrictions

Industry parties are invited to respond to this consultation expressing their views and supplying the rationale for those views, particularly in respect of any specific questions detailed below.

Please send your responses by **03 October 2011** to cusc.team@uk.ngrid.com

Please note that any responses received after the deadline or sent to a different email address may not receive due consideration by the CUSC Modifications Panel when it makes its recommendation to the Authority

Any queries on the content of the consultation should be addressed to Steve Lam at Steven.lam@uk.ngrid.com.

These responses will be included in the Final CUSC Modification Report which is submitted to the CUSC Modifications Panel.

Respondent:	<p><i>Hannah McKinney</i></p> <p><i>T - +44 (0)203 126 2652</i></p> <p><i>M - +44(0)787 511 3674</i></p> <p><i>Email: Hannah.mckinney@edfenergy.com</i></p>
Company Name:	<p><i>EDF Energy</i></p>
Do you believe that the modification proposal better facilitates the Applicable CUSC Objectives? Please include your reasoning.	<p><i>For reference, the Applicable CUSC Objectives are:</i></p> <p>Yes – on the basis that Grid Code modification E11 is implemented we believe that the CUSC modification proposal CMP 199 facilitates the relevant objectives as below :</p> <p><i>(a) the efficient discharge by the licensee of the obligations imposed upon it under the Act and by this licence;</i></p> <p>If passed, CMP199 would ensure that National Grid can facilitate payment for the despatching of network restricted generators. This change could increase the available pool of generators that can provide reactive power which should aid increased transmission system stability and security.</p> <p><i>and</i></p> <p><i>(b) facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the sale, distribution and purchase of electricity.</i></p> <p>If passed, CMP199 would ensure there is payment to “restricted” generators for reactive power. CMP199 would therefore effectively prevent possible discrimination to generators with a deemed restriction - better facilitating effective competition.</p>

Do you support the proposed implementation approach? If not, please state why and provide an alternative suggestion where possible.	Yes, this modification principally provides necessary consistency and clarification across the codes by amending the CUSC definition for reactive despatch network restrictions which currently would not align with the Grid Code definition, if E/11 is implemented.
Do you have any other comments?	We have no additional comments at this time.

Annex 4 – Grid Code Modification E/11 Authority Decision Letter

This section contains the Authority decision letter for the Grid Code Modification E/11: Reactive Despatch Network Restrictions.

Change proposal:	Grid Code E/11: Reactive Despatch Network Restrictions		
Decision:	The Authority ¹ directs that the proposed change to the Grid Code ² be made		
Target audience:	National Grid Electricity Transmission PLC (NGET), Grid Code users and other interested parties		
Date of publication:	10 October 2011	Implementation Date:	To be confirmed by NGET

Background to the change proposal

A generator connected to a Distribution Network Operator's (DNO) network (an embedded generator), may be restricted by the DNO in the reactive power services it can despatch. This restriction is known in the Grid Code as a Reactive Despatch Network Restriction. Where a restriction applies, both the generator and the relevant DNO must notify NGET of the existence of the restriction³. As a result, NGET cannot instruct a restricted embedded generator to despatch reactive power services which it could use to assist it with balancing of the National Electricity Transmission System (NETS).

In December 2009, the Authority approved an amendment to the CUSC (CAP169 Working Group Alternative Amendment (WGAA) 3) and a consequential Grid Code change E/09⁴ to take effect in March 2010. Amongst other things, one of the impacts of these changes means that the current Grid Code definition of Reactive Despatch Network Restriction provides that generators that cannot despatch across the full MVAR range⁵ are classed as under restriction and cannot be instructed by NGET to despatch.

Some embedded generators operating under a restriction imposed by the relevant DNO may be able to despatch to 0 MVAR outside of the restriction but not across the full MVAR range and therefore have the capability to provide a limited reactive power service. In NGET's view, the current broad definition of Reactive Despatch Network Restriction in the Grid Code limits its ability to instruct all the restricted embedded generation that could assist it with balancing the NETS in an efficient and economic way. Separately, NGET is also unable to make payments to these generators under the CUSC, proportionate to the metered output of the reactive service they can provide.

A wider review of all reactive power service provision and the associated payments for providing the service by NGET is currently underway.

¹ The terms 'the Authority', 'Ofgem' and 'we' are used interchangeably in this document. Ofgem is the Office of the Gas and Electricity Markets Authority.

² This document is notice of the reasons for this decision as required by section 49A of the Electricity Act 1989.

³ Grid Code PC.A.3.2.2 (c) (ii) sets out the obligation on the DNO, to be communicated through Data Registration Code (DRC) Schedule 11 (Embedded Generation Data). The obligation on the generator is set out in Grid Code Operating Code (OC) 2 Appendix 1.

⁴ More information about CAP169 is available on NGET's website:

http://www.nationalgrid.com/uk/Electricity/Codes/systemcode/amendments/amendment_archive/. More

information about E/09 is available on NGET's website:

<http://www.nationalgrid.com/uk/Electricity/Codes/gridcode/consultationpapers/2009/>.

⁵ The steady state tolerance on reactive power transfers to and from the NETS is measured in MVAR (Mega Volt-ampere reactive).

The change proposal

Grid Code change E/11 was initially raised by NGET at the Grid Code Review Panel (GCRP) in November 2010. The GCRP agreed that the proposal should be developed by the Balancing Services Standing Group (BSSG) before it was formally raised. The BSSG agreed that a change was required to the Grid Code to address the technical issues of the proposal and a separate CUSC modification⁶ to address commercial aspects. The GCRP agreed with NGET that a formal proposal should be raised.

E/11 would amend the definition of Reactive Despatch Network Restriction in the Grid Code to those instances of a DNO network restriction where NGET cannot despatch generators to 0 MVAR and introduce a new definition of Reactive Despatch to Zero MVAR Network Restriction to allow those generators able to despatch to 0 MVAR to be instructed by NGET. Otherwise, and as discussed in the Authority's decision on CAP169, there would be a risk that NGET would instruct the despatch of generators which could contribute to ineffective balancing actions and incur unnecessary additional system costs to other users.

NGET's recommendation

In NGET's view, the ability to instruct more generators would assist in its balancing of the transmission system, thereby better facilitating Grid Code objectives (i), (ii) and (iii). The proposal would allow NGET to source reactive power services from appropriate generation which would contribute to efficient and economic operation of the transmission system, increased security and stability of the transmission system and benefit competition in the provision of reactive power services.

The Authority's decision

The Authority has considered the issues raised by the change proposal and in the final Report dated 5 September 2011. The Authority has considered and taken into account the responses to NGET's consultation on the change proposal which are included in the final Report⁷. The Authority has concluded that:

1. implementation of the change proposal will better facilitate the achievement of the objectives of the Grid Code⁸; and
2. approving the change is consistent with the Authority's principal objective and statutory duties⁹.

Reasons for the Authority's decision

We agree with NGET and the respondents to the E/11 consultation that the proposal would better facilitate the Grid Code objectives. We state our views against each objective below.

⁶ CUSC modification CMP199 was raised by NGET on 18 August 2011.

⁷ Grid Code proposals, final reports and representations can be viewed on NGET's website at: <http://www.nationalgrid.com/uk/Electricity/Codes/gridcode/consultationpapers/>

⁸ As set out in Standard Condition C14(1)(b) of NGET's Transmission Licence, see: http://epr.ofgem.gov.uk/document_fetch.php?documentid=14343

⁹ The Authority's statutory duties are wider than matters which NGET must take into consideration and are detailed mainly in the Electricity Act 1989 as amended.

Grid Code objective (i) 'to permit the development, maintenance and operation of an efficient, co-ordinated and economical system for the transmission of electricity'

We note NGET's view that the current Grid Code definition of Reactive Despatch Network Restriction restricts it from accessing reactive power from a wider group of generators. The proposal seeks to address this issue by creating a new definition for generation which can despatch reactive power to 0 MVAR, differentiating it from other restricted generation.

The ability for NGET to access more embedded generation operating under a DNO network restriction, so long as it is able to despatch reactive power services to 0 MVAR, would broaden the provision of those services. This should enable NGET to access the necessary services in a more efficient manner than currently.

For this reason, we agree that the proposal better facilitates this objective.

Grid Code objective (ii) 'to facilitate competition in the generation and supply of electricity (and without limiting the foregoing, to facilitate the national electricity transmission system being made available to persons authorised to supply or generate electricity on terms which neither prevent nor restrict competition in the supply or generation of electricity)'

We note that a wider pool of generation providers from which NGET can instruct despatch of reactive power services should, subject to appropriate commercial arrangements being in place, improve the competitive provision of these services and assist NGET to potentially source these services at lower cost. The providers who are capable of meeting the new Grid Code definition would be able to compete with existing providers to provide these services to NGET which should better facilitate this objective.

We note that a consequential CUSC modification (CMP199) is currently being assessed and would allow NGET to pay those generators who provide reactive power services in line with this proposal. We will make a decision on CMP199 at the appropriate time.

Grid Code objective (iii) 'to promote the security and efficiency of the electricity generation, transmission and distribution systems in the national electricity transmission system operator area taken as a whole'

We note that a consequence of increased provision of reactive services is that NGET has greater choice in its balancing actions and this should assist in improving the overall security and stability of the NETS. We therefore agree that the proposal would better facilitate this objective.

Decision notice

In accordance with Standard Condition C14 of NGET's Transmission Licence, the Authority, hereby directs that change proposal Grid Code E/11 '*Reactive Despatch Network Restrictions*' be made.

Hannah Nixon

Acting Senior Partner, Smarter Grids and Governance - Transmission

Signed on behalf of the Authority and authorised for that purpose