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for energy consumers

National Grid Electricity  
Transmission plc, all transmission  
system users, parties to the  
CUSC and all other interested  
parties

Date: 26 August 2014

Dear colleague

### **Impact assessment on CMP222: User Commitment for Non-Generation Users**

The Connection and Use of System Code (CUSC) Panel has submitted the CUSC modification proposal 222: User Commitment for Non-Generation Users (CMP222). CMP222 proposes changes to the liabilities that users other than generators face if they delay or cancel their projects after they have received an offer to connect to the electricity transmission network, as well as the security they must make available to cover those liabilities. These liabilities and securities financially secure the network reinforcement and investment needed to connect those users. These are known as 'user commitment'.

CMP222 proposes to extend the user commitment arrangements that apply to generators to interconnectors and pumped storage. This will generally lead to lower liabilities and lower securities for these users. Their securities will also be profiled and reduce as those users reach key stages in their projects. Our initial view is that this will more accurately reflect the impact these users have on the transmission network if they cancel their projects.

The workgroup assessing CMP222 developed an original proposal and one Workgroup Alternative CUSC Modification (WACM1). WACM1 proposes that interconnectors should face liabilities both before and after they connect to the transmission network while the original proposes they should only face liabilities before.

The CMP222 workgroup also looked at the liabilities and securities that distribution network grid supply points (GSPs) and directly connected demand face. CMP222 proposes that these liabilities and securities should not change.

We are minded to approve WACM1 as we think it will better support the relevant CUSC objectives, and better facilitate our principal objectives. This letter explains the background to CMP222, the potential impact of CMP222, and our reasons for our position.

We are seeking your views on our current position. We also have specific questions for you that will help guide our decision.

Your responses should be submitted by 23 September 2014, preferably by email, to Aled Moses ([aled.moses@ofgem.gov.uk](mailto:aled.moses@ofgem.gov.uk)). We will also accept postal submissions; these should be sent to:

Aled Moses  
Electricity Transmission  
Ofgem  
9 Millbank

London  
SW1P 3GE

We will publish responses on our website unless they are marked confidential. Subject to your responses, we expect to publish a decision in November 2014.

## Background

National Grid Electricity Transmission (NGET) and the other transmission owners (TOs) invest in and reinforce the National Electricity Transmission System (NETS) to accommodate the needs of currently connected users and users expected to connect in the future. However, a user may decide to cancel its project or reduce the capacity it requires after any network reinforcement has begun. The costs for the unneeded reinforcement may then be passed on to other network users, and ultimately be borne by the end consumer.

User commitment places liabilities on users which trigger specific reinforcement works. This means that users financially secure the network reinforcement and investment needed to connect them. This is vital to ensure that TOs have enough information to plan and develop the network economically and efficiently. As a result, this commitment protects the interests of consumers and the wider industry. This gives users an incentive to provide accurate and timely information about their needs. It also ensures the risk of stranded assets<sup>1</sup> is placed on the parties that are best placed to mitigate and manage that risk.

Enduring user commitment arrangements for generators were put in place under CMP192 and were implemented from 1 April 2013. These are set out in section 15 of the CUSC. The key elements of the arrangements are:

- Liability - there are two elements to the liabilities faced by generators if they cancel their project:
  - Pre-commissioning – this is the money a user has to pay NGET for any reinforcement works undertaken. It is based on both the works required to connect the user to the network and any wider reinforcement of the transmission network reduced by a number of factors. Appendix 1 sets out how the pre-commissioning liability is calculated in more detail.
  - Post-commissioning – this is a penalty faced by users if they reduce their requirements or cancel their project without giving at least two years notice<sup>2</sup>. It is based on the wider works that were required to connect the user to the network.
- Security – this is the security that users must place to cover their liabilities. There is no security required for post-commissioning liabilities. For pre-commissioning the amount of security required is based on a project's status and reduces as projects become more certain, reflecting the reduced risks of a user cancelling. Four years before a user is due to connect they must cover 100 per cent of their liabilities, this reduces to 42 per cent from four years to the point they achieve project consents, and after they achieve project consents the security required is 10 per cent of the liability. If the users have a sufficiently high credit rating then they do not need to provide any security to cover their liabilities.

These arrangements only apply to generators. Ofgem agreed interim arrangements for users who are not generators to allow more time for the ongoing regime for these users to be developed. Under these arrangements, there are two user commitment arrangements in place for non-generation users. These are the Interim Final Sums (Local) and the Interim

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<sup>1</sup> Stranded assets are assets built to reinforce the network which become unnecessary. Assets can become stranded for various reasons, including users cancelling or delaying their capacity requirements.

<sup>2</sup> This notice is based on the financial year, starting on the 1 April. For example if a user gives notice on 15 March 2015 that they are closing their project from 1 April 2016 they will not face a penalty.

Generic User Commitment Methodology (IGUCM). Currently, a user may decide between the two options.

#### *Interim Final Sums (Local)*

- Liability: if users terminate their contract, they are liable for the full cost of works undertaken by the TO to connect them to the NETS (local works<sup>3</sup>). There is no liability for the costs of undertaking additional reinforcement on the wider network.
- Security: users are required to provide security to cover this liability in full. If the users have a sufficiently high credit rating then they do not need to provide any security to cover their liabilities.

#### *Interim Generic User Commitment Methodology (IGUCM)*

- Liability: if users terminate their contract, a user's liability is calculated as a multiple of the Transmission Network Use of System (TNUoS) Charges that user would face. These charges increase as reinforcement works are undertaken. TNUoS charges are used as a basis so that the liabilities approximate both the local and wider works undertaken.
- Security: users are required to provide security to cover this liability in full. If the users have a sufficiently high credit rating then they do not need to provide any security to cover their liabilities.

### **The CMP222 proposals**

CMP222 proposes that the enduring user commitment regime for distribution networks grid supply points (GSPs) and directly connected demand remains the same. For interconnectors and pumped storage it proposes to align the approach with the one taken for generators. Two options were presented to us, the only difference between the two is that under the alternative (WACM1), interconnectors would be subject to post-commissioning liability, whereas in the original proposal interconnectors would only face pre-commissioning liabilities.

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<sup>3</sup> The definition of local works for this purpose is different to how the works required to connect a user to the transmission network for the purposes of the pre-commissioning liability are calculated. These are known as 'attributable works'. Local works are the minimum works that are required to allow a user to connect to the network. Attributable works are the works required to connect a user to the main interconnected sections of the electricity transmission network.

User	Original		WACM1	
	Pre-Commissioning	Post-Commissioning	Pre-Commissioning	Post-Commissioning
<b>Interconnectors</b>	CUSC Section 15 (using import capacity above B11, <sup>4</sup> export capacity below B11)	None	CUSC Section 15 (using import capacity above B11, export capacity below B11)	CUSC Section 15 (using import capacity above B11, export capacity below B11)
<b>Distribution Network GSPs</b>	Final Sums (Local)	None	Final Sums (Local)	None
<b>Directly Connected Demand</b>	Final Sums (Local)	None	Final Sums (Local)	None
<b>Pumped Storage</b>	CUSC Section 15	CUSC Section 15	CUSC Section 15	CUSC Section 15

CMP222 and WACM1 both calculate user commitment for interconnectors using import capacity above the B11 boundary and export capacity below the B11 boundary. This is because interconnectors can both import and export electricity. User commitment needs to be based on when interconnectors will cause reinforcements on the NETS. Above B11 interconnectors are likely to cause reinforcement on the NETS from importing electricity, whereas below B11 the same thing is likely to be a result of exporting electricity.

### CUSC panel

The CUSC panel voted that both CMP222 and WACM1 better facilitated the objectives of the CUSC. Between the two options the panel preferred WACM1.

### Potential impact on non-generation users' liabilities and securities

Both CMP222 and WACM1 would change the user commitment arrangements for interconnectors and pumped storage sites. CMP222 does not propose any changes to distribution network GSPs and directly connected demand. As a result there will be no impact on those users. They will remain liable for the costs of local works if they cancel their projects with no liability for wider works. They will continue to need to provide securities for this liability in full. However, because the Distribution Network Operators, who own the GSPs, and Network Rail, who makes up the majority of directly connected demand, have high credit ratings, they will continue to not need to provide security. The impacts on interconnectors and pumped storage are explored below.

#### Interconnectors

If CMP222 is approved, interconnectors will face pre-commissioning liabilities that cover both works to connect them to the grid and wider grid reinforcement works. However, overall, it is likely that interconnectors will face lower liabilities and much lower securities compared to the existing Final Sums arrangements because:

- liabilities and securities will be profiled according to the project status
- the CUSC Section 15 Arrangements introduce several scaling factors that reduce the liabilities and securities required.

<sup>4</sup> The B11 boundary is in northern England. In general, above B11 electricity is exported south, and below B11 electricity is imported from the north.

Appendix 1 sets out how the pre-commissioning liabilities will be calculated.

NGET has provided high-level analysis that shows how liabilities could change for interconnectors currently contracted to connect to the NETS if CMP222 was approved. The approximate liabilities interconnectors would face in 2014/15 are:

<b>Current</b>	Liability	£67.8m
	Security	£67.8m
<b>New (attributable + wider)</b>	Liability	£49m
	Security	£30m

Currently there is no post-commissioning user commitment for interconnectors. CMP222 wouldn't change this, while WACM1 would extend the CUSC Section 15 post-commissioning user commitment arrangements to interconnectors. This would impose costs on interconnectors if they were to cancel or reduce their capacity allocations without giving NGET sufficient notice.

#### Pumped storage

Both options presented to us would extend the CUSC Section 15 Arrangements for both pre and post-commissioning liabilities and securities to pumped storage.

Under the CUSC Section 15 Arrangements, it is likely that liabilities and securities for pumped storage sites would fall. The workgroup has not provided any data regarding the level of the fall, but this is consistent with the effect on generators when the Section 15 Arrangements were introduced and with the effect on interconnectors shown above. Similarly, it is likely the post-commissioning liabilities for pumped storage would rise.

### **Our view**

#### Summary

User commitment is an important element of ensuring the transmission network is planned and developed efficiently. User commitment arrangements that reflect the costs that generators impose on the network and the risks they present of causing stranded assets are key to allowing the network to be developed efficiently. In addition, it is important that user commitment does not unduly discriminate between different types of generators. Undue discrimination can prevent effective competition between users of the network, and harm consumers in the long run. We have taken into account these factors as part of considering whether, and which, of the proposed options better facilitates the relevant CUSC objectives and furthers our principal objective to protect consumers than the status quo.

Overall, our initial view is that WACM1 better supports CUSC objectives (a)<sup>5</sup> and (b)<sup>6</sup>, is neutral on (c)<sup>7</sup> and provides the most benefit to consumers. It will create user commitment

<sup>5</sup> The efficient discharge by the licensee (National Grid) of the obligations imposed upon it under the Act (Electricity Act 1989) and by the licence (National Grid's electricity transmission licence).

<sup>6</sup> 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.

arrangements that more accurately reflect the impact that non-generation users have on the transmission network and ensures there is no unnecessary discrimination between users of the transmission network. We have set out our views of the proposed treatment of each of the non-generation users below. We have also included a summary of the high level impacts in Appendix 1.

#### *Pre-commissioning user commitment for interconnectors*

Our initial view is that it is appropriate for interconnectors to face the pre-commissioning user commitment arrangements that currently apply to generators under the CUSC Section 15 Arrangements. We think that this is more cost reflective as interconnectors will face liabilities and securities that reflect both their local impact and their impact on the wider network. In addition, interconnectors will have liabilities and securities that are profiled, depending on the timing and status of the project. This will more accurately reflect that interconnectors are less likely to be delayed or cancelled the further they are in the project.

There is limited evidence on the actual risk profiles for interconnectors. The user commitment risk profile for generators was based on historical data for generators cancelling and delaying projects. We would not expect interconnectors to have exactly the same probabilities of cancellations and delays as generators. However, there is limited historical data and we think that assuming the same cancellation and delay profiles as generators is appropriate as a proxy measure. These profiles will be more accurate than the current Final Sums (Local) arrangements, which are not profiled.

In addition, as our view is that interconnectors have a similar impact on the network as generators, with a similar risk of stranding assets, they should both be subject to the same user commitment arrangements. We do not consider that there is an objective justification for treating them differently.

#### *Post-commissioning user commitment for interconnectors*

Our initial view is that imposing post-commissioning user commitment on interconnectors will be more cost reflective as it more accurately reflects the costs interconnectors impose on the NETS. When interconnectors reduce their capacity without giving sufficient notice to NGET, they may affect the investment decisions that NGET and the TOs have to make. User commitment gives interconnectors the appropriate incentives to provide timely information to the TOs when deciding whether to maintain or reduce their levels of capacity. This will also again ensure that there is no discrimination between generators and interconnectors as they will face similar liabilities consistent with imposing similar risks on the network.

#### *Pumped storage*

Our initial view is that pumped storage sites can effectively be considered as generators as they have the same impact on the network and the same risk of stranded assets. As a result, there is no justification for discriminating between them and generators. We therefore consider that the Section 15 User Commitment Arrangements for both pre and post-commissioning liabilities should apply to them.

#### *Directly connected demand*

Our initial view is that it is appropriate to apply the existing Final Sums (Local) user commitment arrangements to directly connected demand on an enduring basis. We do not consider that the liabilities faced by directly connected demand should be extended to include a liability for costs on the wider transmission system. This is because sites are small in size and number and therefore they present a low risk to wider transmission investment

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<sup>7</sup> Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency.

plans. In addition, most directly connected demand is with the rail network, a regulated monopoly with reliable investment plans. We agree with the workgroup that post-commissioning user commitment is not required for the same reasons.

We are aware that several industrial users are currently connected directly to the transmission network. Under current arrangements they do not have any post-commissioning user commitment. They may pose similar risks to the transmission networks as generators do of cancelling or reducing their capacity. However, we consider that not extending the Section 15 Arrangements to these industrial users should not impose additional risks on consumers because of their small number and impact.

### *Distribution network GSPs*

Our initial view is that it is appropriate to apply the existing Final Sums (Local) user commitment arrangements to distribution network GSPs. Generally, these users present a low risk to wider transmission investment plans. This is due to changes in demand mostly being gradual and predictable. New distribution network GSPs also tend to lower demand at neighbouring GSPs, reducing the impact on any wider transmission investment.

It may be possible for new distribution network GSPs with embedded generators to affect wider transmission investment plans. If these situations arise and have a material impact, we would expect changes to be made to the arrangements in the future to reflect this.

User commitment for distribution network GSPs does not cover embedded generators. Embedded generators can potentially impact transmission investment plans and have their own arrangements.<sup>8</sup>

### **Cap and floor interconnector policy**

We recently published a decision on implementing the regulatory cap and floor framework for interconnectors.<sup>9</sup> Any interconnector using this framework will have its revenues restricted by an upper limit (the cap) and a lower limit (the floor).

As the cap and floor framework is a new policy, the CMP222 workgroup did not consider its impact. In our view, it is likely that the cap and floor framework will affect how interconnectors connect to the NETS as it gives interconnectors more certainty over their revenues and incentivises them to stick to their connection dates. However, it's not possible to quantify this impact or what it implies for the risks of interconnectors cancelling projects which might result in stranded assets. We therefore think it is appropriate to implement the CUSC Section 15 Arrangements at this time. We do not consider that this results in additional risks to consumers or results in a barrier to entry to new interconnection. The levels of liability and security should be reviewed if new evidence suggests that different arrangements would be more appropriate for interconnectors.

### **Interconnectors and European law**

Under European Union (EU) law interconnectors must be considered as transmission system operators (TSOs), not as generators. We consider the proposals to be consistent with this principle. Although the CUSC Section 15 Arrangements were originally designed for generators the principles behind them are applicable to other users as well.

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<sup>8</sup> The CUSC panel has submitted to us CMP223: Arrangements for Relevant Distributed Generators under the Enduring Generation User Commitment, which looks to modify these arrangements. We will be issuing a consultation on CMP223 shortly.

<sup>9</sup> <https://www.ofgem.gov.uk/publications-and-updates/decision-roll-out-cap-and-floor-regime-near-term-electricity-interconnectors>

## Questions

- Do you agree with our assessment of the impacts of implementing WACM1?
- Do you agree with our view on interconnectors?
- Have we appropriately considered the interactions with our cap and floor policy?
- Have we appropriately considered the interactions with EU law?

## Contact us

If you have any questions about this consultation please contact Aled Moses (020 7901 3850, [aled.moses@ofgem.gov.uk](mailto:aled.moses@ofgem.gov.uk)).

Kind regards,

**Kersti Berge**

Partner, Electricity Transmission



## **Appendix 1 – Impact Assessment**

This appendix summarises our view on the impacts but is not a standalone assessment. This consultation, as a whole, is the impact assessment required by our duties under section 5A of the Utilities Act 2000.

In line with our Impact Assessment guidance, as part of CMP222 we have considered:

- (i) the monetised costs and benefits;
- (ii) any distributional impacts;
- (iii) as well as any other impacts that would be hard to monetise, such as strategic and sustainability impacts.

### *Monetised costs and benefits*

Our initial view is that there will not be any direct impact on any consumers, the transmission companies or users of the network. This is because user commitment is only triggered when and if a user delays or cancels their project.

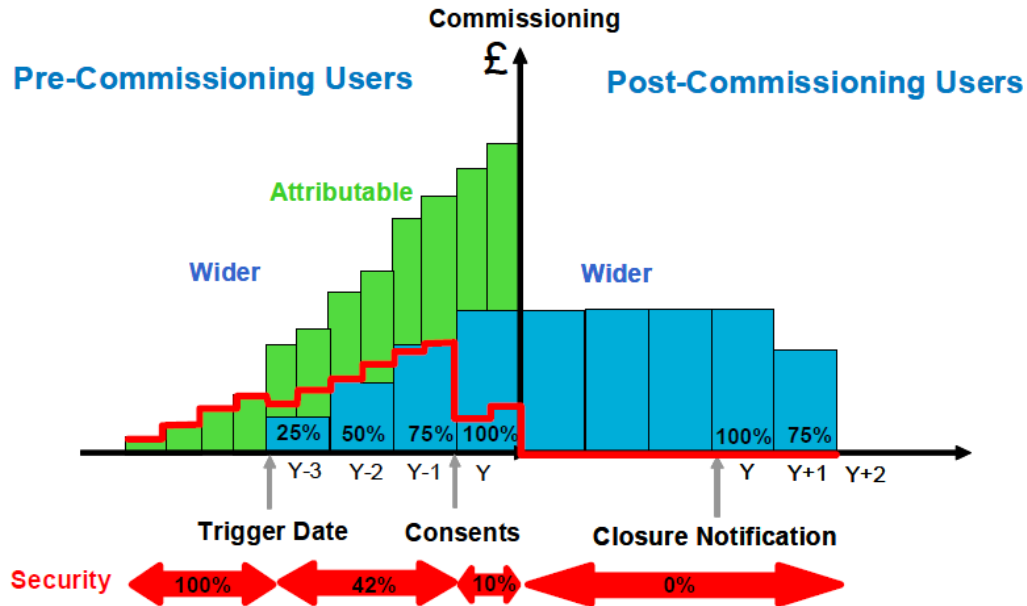
### *Distributional impacts*

Our initial view is that there will not be any negative distributional impacts. As explained within the main text, our preferred option, WACM1, will ensure that there is no undue discrimination between generators and interconnectors.

### *Strategic and Sustainability Impacts*

Our initial view is that WACM1 puts in place cost reflective user commitment arrangements and removes barriers to entry, while ensuring consumers are protected and do not face any undue risks. WACM1 should make it easier for interconnectors and pumped storage users to connect to the transmission network. Due to the benefits interconnectors and pumped storage provide, WACM1 should improve our security of supply and assist in meeting the UK's legally binding energy targets.

## Appendix 2 – Diagram of the CUSC Section 15 Arrangements



Liabilities for attributable works – Liabilities for attributable works are shown as the green bars in the diagram. As these works are undertaken by the TOs the liabilities increase. After the user connects there is no liability for any attributable works. Aside from the profile, the liabilities for attributable works are calculated using the value of the attributable works and then scaling it by several factors – the strategic investment factor, local asset reuse factor and the distance factor.

Liabilities for wider works – Liabilities for wider works are shown as the blue bars. They increase by 25 per cent annually until they reach 100 per cent before the user connects. After the user connects (labelled commissioning in the diagram) their liability depends on how much notice they give to NGET of reducing or cancelling their capacity. If users give NGET two or more years' notice of their reductions in capacity, this liability drops to zero. If they provide one or more year of notice this liability drops to 75 per cent. Notice between five days and one year requires paying the full liability. Aside from the profile, the liabilities for wider works are calculated using the value of the wider works and then scaling it by several factors – the user risk factor and the global asset reuse factor.

Securities – The level of security is shown by the red line. The security is based on both the attributable and wider liability. Four years before a user is due to connect they must cover 100 per cent of their liabilities, before they achieve project consents they must cover 42 per cent of their liabilities, and after they achieve project consent they must cover 10 per cent. After a user has connected no securities are required.

Scaling factors – These factors are used to calculate liabilities based on the principle that both attributable and wider works should not be solely attributable to one project.

- Strategic Investment Factor – calculates the proportion of an investment a user has triggered
- Local Asset Reuse Factor – estimates the proportion of the investment that can be reused and therefore does not need to be covered by liability
- Distance Factor – when a TO connects a user further away than their nearest suitable connection point their liabilities are scaled down
- User Risk Factor – wider liabilities are scaled by 50 per cent to reflect that consumers benefit from these works and should bear part of the risk
- Global Asset Reuse Factor – this is set at 33 per cent to reflect that a proportion of the assets used for wider investment (roughly a third) could be reused and should not be covered by any liability.