



Interested parties

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Dear Colleague

**CAP170: current thinking and further consultation on competition issues –
reference number 11/10**

This open letter sets out Ofgem's current thinking on some of the key issues associated with Connection and Use of System Code ('CUSC') amendment proposal CAP170: Category 5 system-to-generator operational intertripping scheme¹ ('CAP170'). Our current thinking has been formulated in light of, amongst other things, responses to our May 2009 impact assessment² and July 2009 consultation³. In particular, the letter provides interested parties with a further opportunity to consider and provide views on the competition issues that Ofgem considers are relevant to its assessment of CAP170.

CAP170 was raised as an urgent proposal by National Grid Electricity Transmission plc ('NGET') in February 2009, to seek to reduce the costs associated with intertrip. NGET's latest estimate of potential cost savings under CAP170 (if approved) is £35m for the period 2010/11. Urgent treatment of CAP170 was justified by NGET on the basis of, amongst other things, the high forecast constraint costs expected to arise over the 2009 summer outage period. This period has now passed and we consider this provides an opportunity to give further consideration to the competition issues associated with CAP170.

We set out in our May 2009 impact assessment that Ofgem was concerned that the high level of market concentration behind the Cheviot boundary may influence the prices NGET pays for services such as intertrip and other ancillary services. A number of respondents to our impact assessment and to our July 2009 consultation argued that we had not presented sufficient evidence to demonstrate that there was a competition issue in the provision of these services that would justify replacing an existing market mechanism with an administered price arrangement. This consultation seeks to address these comments.

We set out below the background to this issue, our current thinking on some of the matters respondents have raised in response to our earlier consultations, and the analysis we have undertaken on the potential for market power issues behind the Cheviot boundary to influence the price that NGET pays for intertrip services.

We would welcome respondents' views on the issues discussed in this open letter, and the analysis we have presented, by 23 February 2010⁴. We will take responses to this

¹ <http://www.nationalgrid.com/uk/Electricity/Codes/systemcode/amendments/currentamendmentproposals/>

² <http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=49&refer=Licensing/ElecCodes/CUSC/Ias>

³ <http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=78&refer=Licensing/ElecCodes/CUSC/Ias>

⁴ It is Ofgem's usual practice, whenever possible and appropriate, to consult with parties for a period of six weeks. In this instance Ofgem has made the decision to limit this consultation period to four weeks as we consider it is appropriate to proceed with our decision on CAP170 as soon as practicable to either facilitate timely

consultation, as well as responses to our May 2009 impact assessment and July 2009 consultation on CAP170, into account when we make our decision on the proposal.

Background

Ofgem has longstanding concerns about rising constraints costs. Constraints costs have risen from £70m in 2007/08 to £261m in 2008/9 and are forecast to be approximately £206m in 2009/10⁵ and £322m for 2010/11⁶. These rising costs should be seen in the context of our recent consideration of market power issues and the potential for market power to influence the costs of constraints.

Whilst we closed a Competition Act investigation into Scottish Power ('SP') and Scottish and Southern Energy ('SSE') in 2009 on the grounds of administrative priority, we did identify competition concerns in the provision of balancing services. These included the fact that, on occasion at times of constraint, output from some or all of the generation plant in Scotland appears to have been much more expensive than comparable generation in England and Wales; we stated that this could indicate the existence of market power. Following closure of our investigation, we consulted on options for addressing market power concerns, including the possibility of introducing a Market Power Licence Condition ('MPLC'). Subsequently, the Government has announced that it proposes to give Ofgem the ability to address cases of undue exploitation of market power in the generation market, and that it intends to legislate on this additional power at the earliest opportunity⁷.

We expressed concerns about the current and forecast level of constraint costs in an open letter to NGET in February 2009. In that open letter, we asked NGET to conduct an urgent review to consider (and if appropriate consult on) whether urgent changes to the existing commercial and charging arrangements for access to the transmission system are necessary to more effectively manage the costs of constraints, and to ensure that any constraint costs are recovered on an equitable basis from customers, suppliers and generators.

CAP170 was raised by NGET on 27 February 2009 as an urgent amendment proposal, with the aim of addressing the concerns set out in our February 2009 letter. CAP170 seeks to reduce potential constraints costs by limiting the costs associated with certain intertrip schemes. An intertrip is a device that may be armed so that it automatically reduces output, or temporarily disconnects a generator from the grid, in certain circumstances (such as a fault on a specific part of the system). When an intertrip is in place, more energy can flow over the transmission system than would otherwise be the case, because the intertrip ensures that the system will be protected and will not be overloaded in the event of a fault.

Under the existing rules, the prices for some intertrip services are administered, whilst the price for other intertrip services are the product of commercial negotiations between NGET and a relevant generator. CAP170 would extend administered intertrip prices to certain generators⁸ behind transmission system boundaries for which the relevant transmission licensee has been granted a derogation by the Authority from the requirement to comply with the NETS SQSS planning criteria⁹.

implementation of the proposal if approved or, if rejected, to signal as early as possible the need for alternative solutions to be developed. In any event, CAP170 has been through industry and Ofgem consultation, and accordingly we expect that industry is already familiar with the proposal and the issue it seeks to address.

⁵ <http://www.nationalgrid.com/NR/rdonlyres/F061C4F9-DA1C-48D6-929C-0E79BADD34A4/38908/201112ConstraintsForecast.pdf>

⁶ <http://www.nationalgrid.com/uk/Electricity/soincentives/docs/>

⁷ See http://www.decc.gov.uk/en/content/cms/publications/lc_trans_plan/lc_trans_plan.aspx

⁸ Alongside and in support of CAP170, NGET has proposed and consulted on a number of consequential changes to other documents to clarify the criteria NGET would apply in choosing a generator to provide this type of intertrip, and the circumstances in which the intertrip would be utilised. These changes are proposed modifications to the Grid Code and NGET's Procurement Guidelines and Balancing Principles Statement.

⁹ There is currently one boundary for which the Authority has granted derogation from the National Electricity Transmission System Security and Quality of Supply Standard (NETS SQSS) – the Cheviot boundary. There are

Process to date

Impact assessment

Our May 2009 impact assessment set out and sought views on the impacts we had identified in respect of CAP170. An overview of some of the key impacts we identified is set out below:

- **Consumers:** based on the forecast of constraint costs provided by NGET at the time, we set out that CAP170 may reduce the costs to NGET of managing constraints across the Cheviot boundary (the transmission boundary between Scotland and England), on average, by around £40m per annum. This would be expected to provide a positive impact on consumers, as the costs NGET incurs to manage constraints ultimately find their way onto consumers' bills.
- **Competition:** we noted that CAP170 may have a positive impact on competition in generation and supply, to the extent that it results in a reduced level of volatility of Balancing Services Use of System ('BSUoS') costs for all users of the system.

We noted in our impact assessment that we support the principle of having a competitive ancillary services market, with market-driven prices. Extending administered price intertrip arrangements could be perceived to be at odds with the principle of market-based prices. However, whilst we fully support the principle of competitive ancillary services markets, we must be satisfied that the markets are competitive in practice. We noted that there is a high level of concentration in the generation market behind the existing derogated boundary (the Cheviot boundary)¹⁰, and that this may potentially influence the prices NGET pays for intertrip and other ancillary services. To the extent that there may be concerns about effective competition in such markets, then extending administered arrangements may be regarded as more appropriate than relying on a market-based solution.

- **Sustainable development:** we did not identify any impacts on sustainable development.
- **Process:** we recognised that certain procedural limitations have applied to the development of the CAP170 proposal¹¹. We set out that we were disappointed that, given NGET's licence and statutory obligations, it did not review this issue sooner, to provide industry with more time to consider these issues and the options available. However, given the magnitude of the impact that high constraints costs has on consumers, with costs at around £261m for the period 2008/09, we explained that we remained of the view that it was appropriate that the issue was reviewed urgently.

July consultation on cost savings

On 28 July 2009, we issued a further consultation which set out updated analysis on the potential cost savings arising from CAP170. In its response to our May consultation NGET explained that it had reduced its forecast constraint costs for 2009/10 and therefore expected lower savings under CAP170 (if approved) for 2009/10 than had been previously identified. However, NGET indicated that it expected significant cost savings in 2010/11

likely to be further derogated boundaries as a result of the approach we have stated we will take to NETS SQSS derogations to facilitate earlier connection of additional generation.

¹⁰ We discussed concentration in generation ownership in our consultation on market power issues. We noted that concentration levels in the generation market in Scotland are high relative to GB as a whole, with an HHI (Hirschman-Herfindahl Index) at around 3300 compared to 1000 for GB. The HHI is a measure of market concentration. The HHI is calculated as the sum of the square of the market shares of each firm in the market.

¹¹As a result of it having been treated as urgent.

and thereafter. NGET has since advised Ofgem that it expects savings under CAP170, if approved, of around £35m for the period 2010/11.

NGET has explained that the lower savings expected in 2009/10 arose because (a) since the completion of our impact assessment, NGET had been able to secure new time-limited contracts which resulted in a significant reduction in the unit cost of constraints; and (b) CAP170 if approved, would now be implemented after the summer outage programme, and therefore the volume of constraints to which it would apply would be lower.

We sought views on whether the new information NGET had provided, and our updated analysis on cost savings, would cause respondents to come to a different view on the issues discussed in our May 2009 impact assessment.

Responses

All non-confidential responses to our May 2009 impact assessment and July 2009 consultation are available on our website¹². A high level summary of some of the key issues raised by respondents to both consultations is set out below:

- **Urgency:** several respondents agreed with Ofgem that it is necessary to address the high costs of constraints, but did not think CAP170 was the right solution. Many respondents commented on the urgent process followed, stating that it did not provide adequate time for industry to consider CAP170 (and the related proposals), or to develop alternatives. Respondents to the July consultation considered that the cost savings NGET has secured for 2009/10 reinforce the view that the proposal is not urgent and that this provided time for the issue to be given fuller consideration.
- **Competition:** some respondents considered that replacing existing commercial arrangements with an administered price solution undermines existing market arrangements, increases regulatory risk and that this would deter investment in GB. A number of respondents questioned why the Competition Act investigation into SP and SSE was closed, and considered that if there is a competition issue this should be addressed using competition law, rather than by means of CAP170. Some respondents considered that our impact assessment and subsequent consultation had not set out the evidence for a competition issue relevant to CAP170. Some considered that the recent cost savings secured by NGET demonstrate that competition is effective and that, in light of this, there is no justification for imposing an administered price solution.
- **Remuneration:** respondents were concerned that the administered price proposed (ie that which applies to certain existing categories of operational intertrip) is not cost-reflective and does not adequately remunerate generators.
- **TAR:** some respondents were unclear how CAP170 would interact with the Transmission Access Review ('TAR'). One queried why CAP170 was proposed as an interim measure if it delivers enduring benefits. One considered that the 'interim' nature of CAP170 should have been 'hard coded' and another noted that the arrangements CAP170 would introduce would have to be reviewed following implementation of TAR.

Current thinking and further analysis

We welcome all responses to our impact assessment and July 2009 consultation on CAP170. The Authority will take account of these points when making its decision on CAP170. The purpose of this letter is not to address the individual points raised by

¹² Follow links at footnotes 2 and 3.

respondents, although we set out below at a high level our current thoughts on some of the key issues we have identified in responses.

Longevity

CAP170 was originally intended to be a short term measure. If we were to approve CAP170 we agree with respondents that it would be relevant to consider how long it might be appropriate for the proposal to remain in place.

Urgency

As set out above, urgent treatment of CAP170 was justified by NGET on the basis of the high forecast constraint costs expected to arise over the 2009 summer outage period. We continue to consider that our March 2009 decision consenting to CAP170 being treated as urgent, and the process followed for CAP170, was appropriate. However, we also recognise that circumstances have changed since our urgency decision was made, and the urgency associated with the summer 2009 outage period has passed. We agree with respondents that this provides an opportunity to give further consideration to some of the issues associated with CAP170, and have taken this opportunity to consult further on the competition issues associated with CAP170 (see below).

We continue to consider it is important to address the issue of high constraint costs urgently. We consider any proposed changes (such as CAP170 or any alternative proposal to address the issue of high constraints costs) should be developed in time to realise cost savings for 2010/11. NGET's latest forecast is for constraint costs of around £86m¹³ on the Cheviot boundary for 2010/11. Against this forecast, and as noted above, NGET estimate potential cost savings under CAP170 (if approved) of around £35m for that period.

Competition

We note a number of respondents do not agree that sufficient evidence has been presented to justify replacing an existing market-based mechanism with an administered price solution.

We note that it is at least implicit in a number of responses that intertrips are one potential substitute to other balancing actions taken by NGET in Scotland. This suggests that commercial intertrips are either in the same product market as locational balancing actions by NGET, or at least a very close substitute, with the corollary that addressing the price of relevant intertrips may help address concerns about market failure in respect of locational balancing. In the context of locational balancing we have previously expressed concerns that individual or small numbers of generators may have significant market power vis-a-vis NGET in its role as system operator when acting behind a constraint.

We discussed our concerns about effective competition in our impact assessment, and the scope for market power issues to influence the price NGET pays for intertrip. We consider that the market power concerns identified in the context of our Competition Act investigation into the Scottish market, and discussed further in our consultation on addressing these concerns, are a strong indication that the existing market arrangements are not effective. Further, competition lawyers have pointed out that there is a "gap" in the abuse of dominance case law which arises, in particular, where there is a non-collusive oligopoly (or duopoly). In such instances, despite Ofgem's preference to rely on the Competition Act 1998 if possible, it will not always be sufficient or appropriate to do so. We remain concerned that a failure to address the market failure identified will result in disproportionate costs falling to consumers.

We consider it appropriate to set out in more detail and consult on evidence and analysis which we consider demonstrates a market-based solution is currently unlikely to deliver the

¹³ Based on latest information NGET has provided to Ofgem.

most efficient outcome in relation to the provision of intertrip services behind the existing Cheviot boundary. This will provide interested and potentially materially affected parties with a further opportunity to set out their views on this issue. This analysis is provided as an appendix to this open letter.

Remuneration

We noted in our impact assessment that the level of remuneration proposed to apply to Category 5 intertrip schemes is the same as applies to certain existing categories of operational intertrip. The existing level of remuneration was introduced by a previous CUSC amendment proposal, CAP076. We set out that, based on the information available to us, we had not identified a material difference between new Category 5 intertrip schemes and existing operational intertrips that receive an administered payment. We specifically sought respondents' views on this point and noted that to the extent that there is no material difference, then it would appear to be appropriate to apply the same price to the new category of intertrip as that which applies to existing operational intertrip categories.

We have given further thought to this issue in light of respondents concerns including concerns that the existing price is not cost reflective, does not adequately remunerate generators for the provision of Category 5 intertrip and does not take account of consequential losses arising from the use of an intertrip.

Whilst we recognise the difficulties associated with establishing a cost reflective price to cover specific characteristics associated with all individual plant, we consider that the administered price introduced by CAP076 is intended to be broadly cost reflective and that it was developed by the CAP076 working group, taking into account a range of costs that might be expected to arise with the provision of intertrip.

We recognise that there may be a case for a different price to apply to CAP170 to that which applies to CAP076. We recognise that under the existing administered price arrangements, the generator providing a particular category of intertrip tends to enjoy the full benefit associated with having the scheme in place. In addition, in respect of certain of the categories introduced by CAP076, a generator can choose whether to install the intertrip or delay connecting until appropriate network investment has been undertaken. Under CAP170, we recognise that the benefits associated with the provision of intertrip applies to a wider group of system users (those behind a derogated boundary). We also recognise that the generator selected to provide the service may not have the same option as other categories of operational intertrip to delay the timing of its connection, given that CAP170 is proposed to apply to both existing and future generators.

Therefore, whilst we consider that the price proposed under CAP170 is likely to be broadly appropriate - and could be considered to be more appropriate than the existing arrangements that appear to impose significant costs on NGET in securing the provision of intertrip services - we also recognise that it may be appropriate for a more cost reflective price to apply to the category of intertrip that would be introduced by CAP170. We note that any party could raise a new proposal to address this issue if they consider it to be appropriate. Any proposal will be considered by Ofgem in accordance with the existing governance process. At this stage we do not expect that the raising of such a proposal would have an impact on the timing of our decision on CAP170.

Next steps

We would welcome views on the issues discussed above, and the analysis set out in appendix 1 to this letter, by 23 February 2010.

Responses should be sent by email to lesley.nugent@ofgem.gov.uk or to the following address:

Ofgem
Third floor
Cornerstone
107 West Regent Street
Glasgow
G2 2BA

We will publish all non-confidential responses on our website, and take all responses into account when making our decision on CAP170.

If you wish to discuss any of the matters set out in this letter, please contact Lesley Nugent (at the email address above or by telephone on 0141 331 6007).

Yours sincerely

A handwritten signature in black ink, appearing to read 'Stuart Cook', is written over a solid black horizontal line.

Stuart Cook
Senior Partner, Transmission and Governance

Appendix 1: Competition analysis

- 1.1 This appendix sets out analysis on the extent to which generators in Scotland, including generators who own the flexible plant in Scotland, are subject to competitive pressure in the provision of balancing services (including intertrip), and the extent to which the prices observed may be the result of market power.
- 1.2 We consider it appropriate to set out and consult on this analysis in more detail to provide interested and potentially materially affected parties with a further opportunity to set out their views on this issue.
- 1.3 We would welcome respondents' views on this analysis by 23 February 2010. We will take responses to this consultation, as well as responses to our May 2009 impact assessment and July 2009 consultation on CAP170, into account when we make our decision on the proposal.

NGET's options to manage constraints

- 1.4 NGET potentially has a number of options available to manage transmission constraints in Scotland, it can:
 - take Bid-Offer Acceptances in the balancing mechanism (BM) in order to increase the level of generation on one side of local constraint and reduce it on the other;
 - import/export from/to Northern Ireland via the Moyle interconnector;
 - use intertrips to increase transmission capacity into Scotland; and
 - purchase balancing services via a range of bilateral contracts.

Below we discuss the extent to which these options are substitutes for each other in managing constraints in Scotland.

- 1.5 The BM is a voluntary system where market participants make offers to increase generation and make bids to reduce generation to NGET. Unlike the forward markets, these bids and offers are location-specific and frequently used by NGET to manage transmission constraints.
- 1.6 The BM allows for demand side as well as supply-side bidding. Large customers are able to make bids to NGET to reduce their consumption in exchange for payment. However, the history of the BM has shown that demand side bidding has been low. In addition, large industrial customers who engage in demand-side bidding will typically only offer to reduce consumption for a short period of time, i.e. for an hour or so, and are not willing to reduce their consumption for days and weeks. This means that in practice NGET rarely uses demand-side bidding in the BM to manage constraints.
- 1.7 The Scottish grid is connected to Northern Ireland via the Moyle interconnector, which currently has a capacity of 500MW for export from Scotland and 80MW for imports. NGET is able to trade direct with the Northern Ireland system operator (SONI) to manage constraints within Scotland or on the Cheviot boundary. However, the extent to which NGET can utilise the interconnector to manage constraints depends on the position of the Northern Ireland market and the prevailing utilisation of the interconnector. For example, it is frequently not a viable option to export additional power because either the interconnector is already flowing at full export, or the NI system is not in a position to take more MWs.

- 1.8 Over the period April 2006 to June 2008, NGET took over 10,000 half-hourly actions to resolve constraints in Scotland. Over this period, there were only around 70 periods (out of 10,000) where NGET used the Moyle interconnector to resolve constraints. This demonstrates that NGET rarely utilises the interconnector for constraint management.
- 1.9 NGET can contract directly with generators through a range of different types of bilateral contracts. NGET is able to agree bilateral contracts for energy with generators for balancing purposes from a year or more to an hour or less.
- 1.10 Intertrips allow power to continue to flow over the wires from export constrained regions, unlike BM bids/offers and other bilateral contracts which limit output in export constrained areas and/or increase it in import-constrained areas. NGET can use intertrips to increase the capacity of the interconnector and can activate intertrips at a few moments notice. While in theory NGET could also use intertrips to resolve an import constraint, intertrip contracts (along with the necessary equipment) are currently only in place with generators on the Scotland side of the boundary and can therefore only be used to resolve export constraints.
- 1.11 In summary, NGET can substitute trades in the BM with intertrips as ways of managing constraints. There is limited scope for NGET to use the Moyle interconnector and demand-side bidding to manage constraints, and hence these options are not regarded by NGET as credible substitutes for BM and intertrip measures.
- 1.12 While a detailed market definition exercise has not been carried out for the purposes of CAP170, Ofgem considers that a separate product market can be defined for "balancing power" – the provision of increments and decrements of electricity at short notice by flexible generation plant. We consider that this product is sufficiently distinct from "vanilla" wholesale electricity that a hypothetical monopolist in the provision of balancing power would be able to maintain prices above competitive levels. Analysis of decisions made by other competition authorities (e.g., the EC in the context of merger decisions) indicates that it is common in other jurisdictions to distinguish a separate product market for balancing power and/or ancillary services.
- 1.13 We consider that the product market for "balancing power" extends to cover bids and offers in the BM as well as bilateral balancing contracts between NGET and relevant generators, including commercial intertrip contracts. This is on the basis that these different services are at least demand-side substitutes, and NGET can use any or all of them to manage constraints and imbalances on the GB transmission system.
- 1.14 Ofgem has not conducted in depth analysis to conclude whether one or more of the balancing services provided by generators – and in particular intertrip services – might constitute a distinct product market of its own. However, based on the analysis set out below, it appears that provision of intertrip services may be, to some extent, independent of competitive pressure from other balancing services. We consider it is plausible that a "hypothetical monopolist" in the provision of intertrips in Scotland might be able to profitably raise prices above competitive levels without leading to any significant substitution away from intertrips to alternative balancing products. This is because:
- intertrips allow power to continue to flow over the wires from export constrained regions, unlike BM bids/offers and other bilateral contracts which limit output in export constrained areas and/or increase it in import-constrained areas;
 - because of this, intertrips avoid the need for NGET to incur the "spread" between BM bid and offer prices, which can be high, particularly in cases where expensive

replacement energy needs to be purchased on the import side of the constraint;
and

- the cost of intertrip services is therefore typically much cheaper than resolving constraints in the BM – to the extent that it is not clear whether the price of BM actions, at least at current levels, provides an effective constraint on prices for intertrips (and vice versa).

1.15 This view appears to be supported by current market outcomes. Prices for commercial intertrips in Scotland appear significantly higher than the prices for intertrips in England & Wales, but nevertheless demand for intertrip services by NGET in Scotland remains at a high level.

Concentration of balancing power in Scotland

1.16 For the purposes of this competition assessment, we have undertaken an assessment of concentration of balancing power in Scotland.¹⁴ This includes analysis of market shares and concentration levels (based on the Hirschman-Herfindahl Index or HHI).¹⁵

1.17 The main results from this assessment are set out in the table below for both ScottishPower (SP) and Scottish & Southern Energy (SSE). Overall, we consider that this analysis provides evidence to support the existence of significant market power in balancing power in Scotland, at least during periods when constraints are active.

Table 1: Average market shares and HHIs for balancing power in Scotland – April 05-May 08

	<i>Actual capacity*</i>	<i>Nameplate capacity*</i>
SP	40%	44%
SSE	39%	37%
HHI	3,227	3,320

*Hydro power included as a source of flexible generation

Source: LECG estimates based on NGET data

1.18 SP and SSE provide over 75% of balancing services in Scotland, and an HHI of over 3,000 also demonstrates very high concentration from these providers. This suggests that NGET has few alternative options to SP and SSE for the provision of balancing services.

¹⁴ The existence of the transmission constraint means that generation units either side of the transmission constraint do not compete for balancing services, this suggests that each area will form a distinct relevant market. Our economic analysis also leads us to conclude that a separate geographic market – namely Scotland – could be defined for the provision of balancing power. This conclusion is based primarily on “pivotality analysis” using the Pivotal Supplier Index (PSI), which suggests that a hypothetical monopolist in the provision of balancing power in Scotland would be pivotal in over 50% of periods since the introduction of BETTA, and hence would be able to maintain prices above competitive levels. Whilst the intermittency and unpredictability of transmission constraints makes the geographic definition less straightforward for competition law purposes, there are clearly a significant number of periods when balancing power in Scotland cannot be substituted for balancing power elsewhere.

¹⁵ The HHI is the sum of the square of the market shares of each firm in the market. If an industry is composed of 100 firms, each with a 1% market share then the HHI will be 100. Conversely, a monopoly has an HHI of 10,000. The European Commission’s Merger Regulations, give the following thresholds for signs of market concentration:

- HHI below 1000 – not concentrated;
- HHI between 1000 and 1800 - moderately concentrated; and
- HHI above 1800 - highly concentrated.

Evidence of competition problems

Pricing of Intertrips and other Balancing Services

- 1.19 For the purposes of CAP170, it is the assessment of intertrip prices in Scotland that is most relevant to determining whether there may be competition problems that would justify imposing an administered price. However, pricing for other balancing services (i.e. BM actions and short-term contracts) may also be relevant, to the extent that these different “products” are substitutes for each other and all can be used to resolve constraints in Scotland.
- 1.20 The tables below summarise the analysis that has been undertaken by Ofgem of the relative price of resolving constraints in England & Wales versus Scotland, via the BM, intertrips, and contracts. Two points are evident from this table: firstly, that intertrip actions are notably cheaper than BM actions for resolving transmission constraints in both England & Wales and Scotland, but more importantly that prices for all three types of actions are considerably higher in Scotland than in England & Wales. Similarly, the cost of resolving constraints via BM actions and contracts is considerably more expensive in Scotland than it is in England & Wales.

Table 2: Average prices (£/MWh) for constraint actions for 2006/07 - 2009/10

	2006/07	2007/08	2008/09	2009/10*
E&W				
BM	29.6	34.4	61.5	55.4
Contract	NA	NA	NA	35.0
Intertrip**	0.3	3.9	19.3	0.9
Scotland				
BM	45.4	38.6	91.0	86.7
Contract	NA	NA	39.4	40.7
Intertrip**	42.9	48.0	36.3	22.7

* Latest forecast

** Average price for commercial intertrips (excludes tripping costs).

Source: NGET

- 1.21 The price differential between Scotland and E&W for similar actions lends weight to the argument that they are geographically separate markets. We consider that this is may also be indicative of the existence of market power in the provision of balancing services (including intertrips) in Scotland.
- 1.22 We note that the provision of balancing power is concentrated amongst a few generators. In addition, in relation to the Cheviot boundary, until recently there was only one provider of intertrip services, and while there are now two providers of inter-trip services, one (due to the location of its plant) remains the key player.
- 1.23 In a market with strong competition even at times of constraint, one would expect the fees for commercial intertrip services, as well as other types of balancing services, to be priced at or near avoidable cost (strictly speaking, the avoidable cost of the marginal generator). However, the analysis we have undertaken suggests that this is not the case in the current market - fees for commercial intertrips in Scotland are many times higher than the fees of equivalent plant in England & Wales. A difference in fees between Scotland and in England & Wales could be justified if there were differences in the costs of providing these services in each

location. However, we are not aware of any difference in the costs of the provision of these services in the two locations¹⁶.

- 1.24 While we have not specifically undertaken an analysis of the economic costs of intertrip provision, it should be noted that the actual resource cost associated with "arming" an intertrip device is minimal, since it is principally a matter of making the device "active" so that the generation unit can be remotely tripped by NGET in the event of a fault. In the rare event of a fault actually occurring, generators are compensated via the tripping fee.
- 1.25 There may be an argument that generators are also entitled to recover any opportunity cost associated with intertrip arming via the arming fee, which might reasonably include any revenue that may be foregone by a generator in the BM due to use of the intertrip by NGET (this could include both revenue from BM bids in the export-constrained region, as well as BM offers from plant owned by the same generator on the other side of the constraint that would otherwise have been called on to provide replacement energy). However, Ofgem has conducted analysis which suggests that this is not a significant factor in explaining the price differential between Scotland and England and Wales.
- 1.26 Analysis of the cost of provision of other balancing services we have undertaken indicates that both SP and SSE's prices in the BM were significantly above short-run marginal cost (SRMC) at times of constraint. This is presented in the section below.

Evidence of pricing differentials

- 1.27 Two examples of the analysis compiled for our Competition Act investigation into SP and SSE are presented below. The examples cover import and export constraint situations in turn. The first chart compares the weekly average volume-weighted accepted offer prices for coal plant in England/Wales and Scotland for 2007. These prices are based on public domain information on bid-offer acceptances. Ofgem has also obtained "tagged" data from NG on constraint-related actions, both in the BM and outside the BM (i.e., PGBTs¹⁷, OTC trades¹⁸ and intertrip arming). Periods in which NGET data indicates an import constraint are also shown¹⁹.
- 1.28 The chart illustrates a large differential in accepted BM offer prices during the Sep/Oct 2007 import constraint period as compared with other periods.

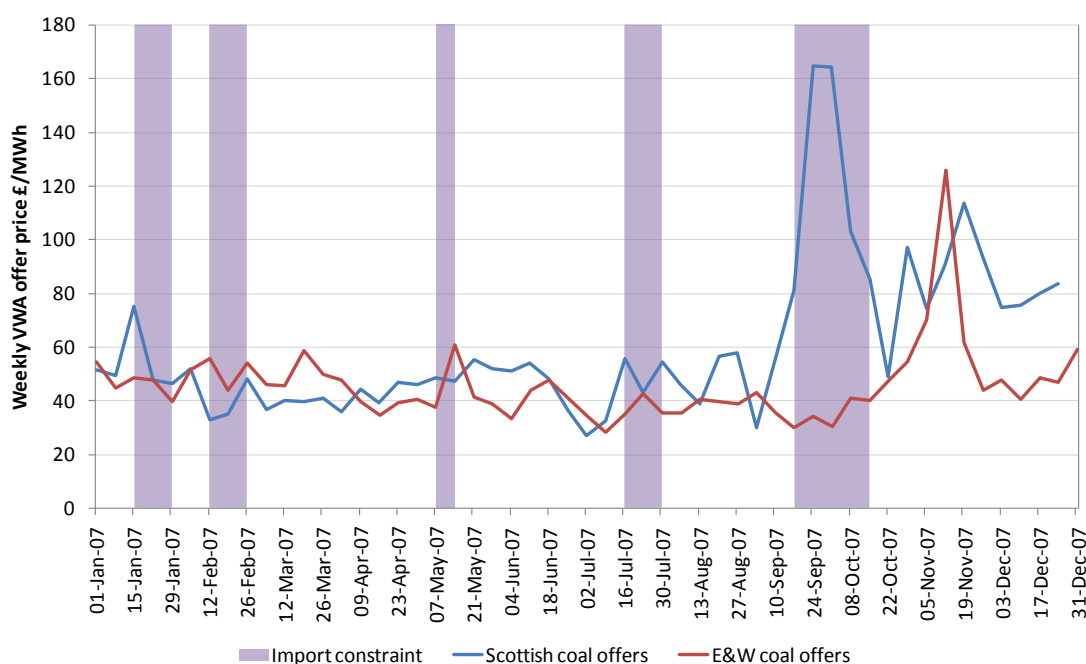
¹⁶ While intertrip prices in Scotland have reduced in 2009/10, they are still far above England & Wales levels. In addition, NGET considers that the reduction is primarily due to the regulatory attention that has been focused on the constraint costs issue and that the prices achieved this year are unlikely to be sustained without regulatory intervention.

¹⁷ Pre-gate closure transactions (PGBTs) are fixed price contracts which are negotiated directly between the parties concerned.

¹⁸ Over the counter (OTC) trades are trading contracts which are negotiated directly between the parties concerned.

¹⁹ On the chart, an import constraint is indicated if a constraint related action (BOA, PGBT, OTC) has been taken on any Scottish unit (not just coal) in any settlement period during the week to resolve an internal or cross-border Scottish import constraint.

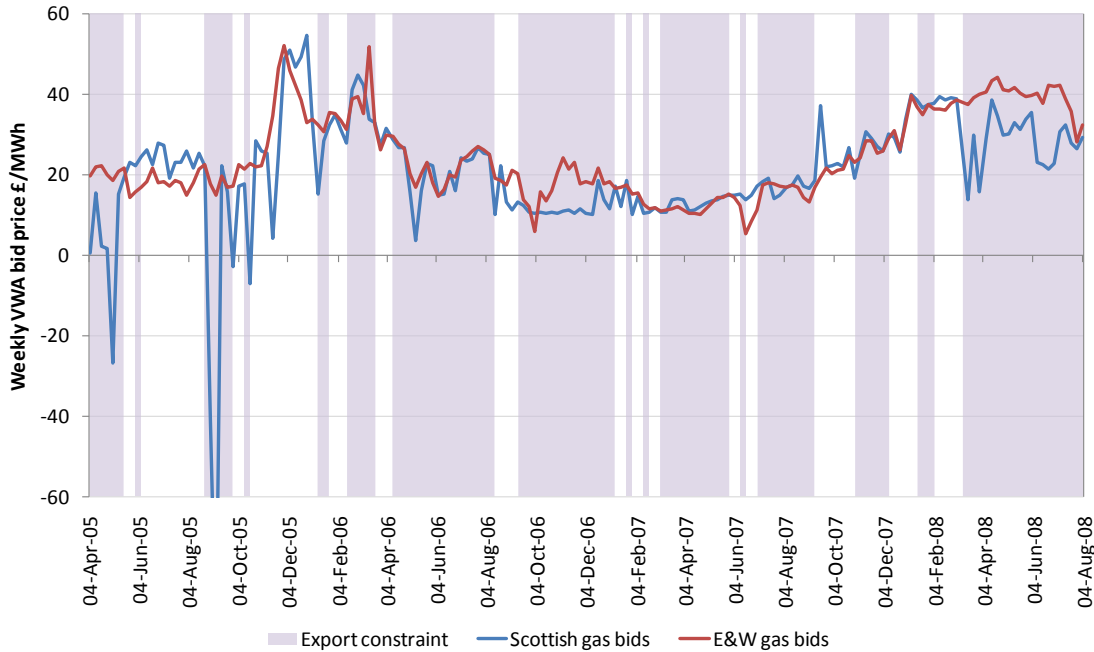
Figure 1: Accepted BM offers in constrained and non-constrained periods – Scottish coal plant versus E&W coal plant Jan-Dec 2007



1.29 The second example considers the case of export constraints. Figure 2 below compares the weekly average volume-weighted accepted bid prices for gas plant in England and Wales and Scotland from the start of BETTA in April 2005 until August 2008. Periods in which NG tagged data indicates an export constraint are shown²⁰.

²⁰ On the chart, an export constraint is indicated if a constraint related action (BOA, PGBT, OTC, intertrip arming) has been taken on any Scottish unit (not just gas) in any settlement period during the week to resolve an internal or cross-border Scottish export constraint.

Figure 2: Accepted BM Bids in constrained and non-constrained periods, Scottish gas plant versus E&W gas plant April 2005-August 2008



Note: There were a number of accepted gas bids on 5th/6th Sept 2005 around -100£/MWh.

- 1.30 The above chart illustrates that export constraints from England/Wales and Scotland are present to some degree in most weeks. Large BM bid price differentials may be observed in a number of export constraint periods including September 2005 and summer 2008.
- 1.31 The table below shows that during export constraint periods, accepted coal bid prices in Scotland are 11 £/MWh lower on average than in other periods and are also 14 £/MWh lower than England and Wales coal prices at these times. In unconstrained periods, Scottish coal bid prices are 2 £/MWh lower. Similarly, during export constraint periods spreads in Scotland are 9 £/MWh higher on average than in periods and are also almost 10 £/MW higher than spreads in England and Wales at these times.

Table 3: Volume-weighted average spreads and accepted bid prices (£/MWh), Coal, April 2005 to June 2008

		<i>Scotland</i>	<i>E&W</i>	<i>Diff</i>
Bids				
Export-constraint	Yes	11.8	25.6	-13.8
	No	22.6	24.6	-2.1
	Diff	-10.8		
Spreads*				
Export-constraint	Yes	12.8	3.0	9.7
	No	3.4	2.9	0.5
	Diff	9.4		

* Calculated assuming a generic coal efficiency of 36%.

Conclusion

- 1.32 We consider that there is strong evidence from our Competition Act investigation that Scottish generators can price their balancing services in Scotland independently of their rivals in periods when there is a constraint on the Anglo-Scotland boundary. While we have not concluded that there is a separate market for intertrip services,

the evidence suggests that the two main providers of intertrip services in Scotland hold substantial market power in a large number of periods, which may allow them to price those services several times above both SRMC and the prices of providers of comparable services in England and Wales.

- 1.33 We consider that the magnitude of the problem may justify a requirement for intertrip prices to be administered.