

Lesley Nugent  
Senior Manager – Transmission  
Ofgem  
70 West Regent Street  
Glasgow  
G2 2QZ



2 July 2009

Dear Lesley

**Regulatory Impact Assessment for CAP170: Category 5 System-to-Generator Operational Intertripping Scheme**

Thank you for this opportunity to respond to the Impact Assessment you have conducted for CUSC Amendment Proposal (CAP) 170 Category 5 System-to-Generator Operational Intertripping Scheme.

**Executive Summary**

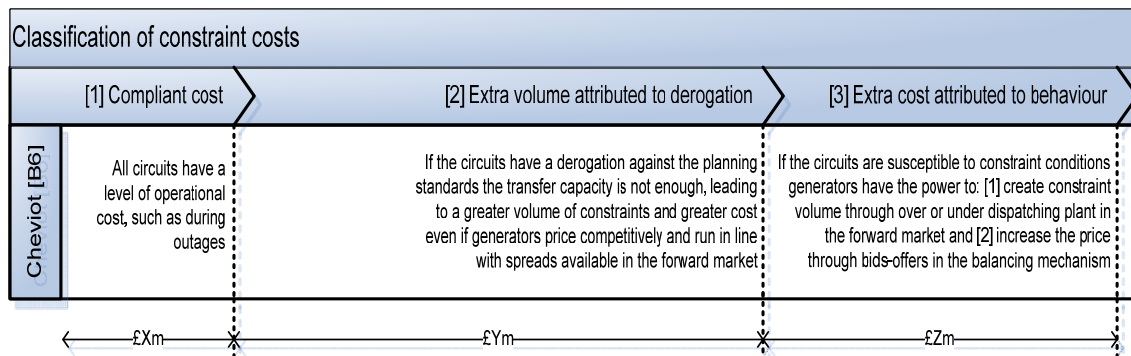
- **EDF Energy considers that the cost benefit analysis presented in this impact assessment is incomplete for the following reasons:**
  - There is a discrepancy between the 2008/9 constraint costs related to intertrips and the forecast benefit of CAP170 in future years
  - There is no assessment of environmental impact through constraining of low-carbon generation and replacement by high carbon sources
  - The impact of additional derogated boundaries should be quantified, including the effect new intertrip services would have on individual plant integrity and viability
- There are outstanding defects both with CAP170 itself and the necessary revisions to the Balancing Principles Statement (BPS) and the Procurement Guidelines (PG)
- The proposed solution
  - will have negative impacts on consumers, competition and security of supply
  - is inconsistent with Government environmental objectives
  - is unduly discriminatory
- CAP170 should not be approved in its current form
  - A Mandatory Cost-Reflective Intertrip Scheme may be an appropriate way to reduce constraint costs

We recognise that the cost of managing constraints on the Scotland-England B6 boundary, known as the Cheviot Boundary, is high. National Grid has forecast total constraint management costs for 2009/10 of £262m, with a forecast of £142m for the Cheviot boundary<sup>1</sup>. We would note that the only enduring solution to reduce these costs is to allow National Grid to proceed with the necessary optimal reinforcement work to ensure that the

<sup>1</sup> [http://www.nationalgrid.com/NR/rdonlyres/CEA6ABC1-F331-471B-8F10-9109B3651C18/35052/160609\\_Constraints\\_and\\_CommercialFramework.pdf](http://www.nationalgrid.com/NR/rdonlyres/CEA6ABC1-F331-471B-8F10-9109B3651C18/35052/160609_Constraints_and_CommercialFramework.pdf)

boundary is compliant with the Great Britain Security and Quality of Supply Standard, GB SQSS.

EDF Energy considers that any solution to reduce the cost of constraint management should be on an interim basis until the wider reinforcement works can be completed. Such an interim solution also needs to fully recognise the underlying causes of the constraint costs. These costs consist of three elements:



1. £Xm is the cost that would naturally be incurred even if the circuits were compliant;
2. £Ym is the extra costs of constraints (difference in marginal cost of the plant taken off, and that brought on including any cost of additional reserve, etc);
3. £Zm is the additional profits some generators in the constrained area have been able to achieve through bidding behaviour.

In this Impact Assessment, Ofgem have estimated the cost Z to potentially be as much as £125m. EDF Energy would agree that this cost is too high and would sympathise with Ofgem that they were unable to utilise the provisions of the Competition Act to address these concerns. However, we would propose that any solutions implemented should seek to eliminate cost Z and provide an appropriate incentive on National Grid and Transmission Owners to minimise cost Y. Failure to reduce constraint costs to reasonable levels and resolve any potential market abuse will create unacceptable competitive distortions. We are not of the view that CAP170 meets this requirement.

**EDF Energy considers that the cost benefit analysis presented in this impact assessment is incomplete for the following reasons:**

**There is a discrepancy between the 2008/9 constraint costs related to intertrips and the forecast benefit of CAP170.**

This impact assessment indicates that the cost of commercial intertrips on the Cheviot Boundary for 2008/9 was £100-110m<sup>2</sup>. EDF Energy are, therefore, surprised that the estimated benefit of this proposal is £40m per annum. This figure seems to have been derived by averaging the cost of commercial intertrips in relation to the Cheviot Boundary over a number of years<sup>3</sup>. This is not appropriate as pre 2006 National Grid utilised Balancing Mechanism activity to manage these constraints, rather than commercial

<sup>2</sup> Fig 3b P24

<sup>3</sup> Fig 2 P23 & Fig 3a P24

intertrips. In addition the escalation in these costs has only become apparent during extensive outage works on this boundary. It can therefore be expected that there will be a high cost saving, to National Grid, by this proposal of the order of £100m, but that this will be of short duration, while outage works are ongoing on this boundary. EDF Energy suggests that the CBA should include a reliable forecast of any enduring benefit.

**There is no assessment of environmental impact through constraining of low-carbon generation and replacement by high carbon sources.**

The CBA also assumes that there are no environmental impacts of this proposal. EDF energy does not consider this to be an accurate assessment. As noted in this impact assessment, there are interactions between this proposal and the recent decision made by the Authority in relation to Interim Connect & Manage arrangements, the 8<sup>th</sup> May decision<sup>4</sup>. This decision already indicates an advancement of 450MW of new generation in Scotland which can be expected to increase the constraint issues experienced on the Cheviot Boundary. Subsequent to this decision, National Grid announced that a further 2GW of new generation in Scotland and 10GW in England & Wales had requested advancement of their connection dates<sup>5</sup>. It can therefore be reasonably expected that not only will this result in an extension of the derogation in relation to the Cheviot Boundary, but also that National Grid will be obliged to seek derogations for additional boundaries in Great Britain, to which the arrangements provided by this proposal would apply.

EDF Energy, therefore, consider that the indication from National Grid, included in this impact assessment, that they would not be asking for new intertrip providers, to be overly optimistic. This creates a risk that low carbon generation may be constrained off the system and replaced by higher carbon sources, as National Grid take additional action to balance the system. It is our view that this risk should be quantified, which currently it has not been, and the subsequent carbon impact calculated.

**The impact of additional derogated boundaries should be quantified, including the effect new intertrip services would have on individual plant integrity and viability**

A full CBA of the impacts of additional derogated boundaries should be conducted. In addition to the environmental impacts noted above this should quantify the impacts of new intertrip schemes. This analysis should not only consider National Grid's costs of such an arrangement, but should also pay regard to the costs incurred by different units including an assessment of the risk of trip and any subsequent disproportional impact on plant integrity and life. As this is considered to vary on a case by case basis, EDF energy would suggest that additional consideration should be given to any unforeseen Health and Safety impacts.

**There are outstanding defects both with CAP170 itself and the necessary revisions to the Balancing Principles Statement (BPS) and the Procurement Guidelines (PG)**

Ofgem request respondents views on the impacts of the process for developing and consulting on CAP170 and the consequential changes. EDF Energy would note that the current CBA data provided does not provide justification for the use of urgency for this proposal. Further, the discrepancies identified above and unforeseen interactions with

---

<sup>4</sup><http://www.ofgem.gov.uk/Networks/Trans/ElecTransPolicy/tar/Documents1/20090508%20derogations%20interim.pdf>

<sup>5</sup> <http://www.nationalgrid.com/NR/rdonlyres/09E0C602-7CCE-4922-BEA7-9DED88080021/34402/OpenLetterImplementationofInterimConnectandManage.pdf>

other decisions could have been explored by a working group and a more robust solution developed.

EDF Energy consider the consequential changes proposed to the Procurement Guidelines (PG) and the Balancing Principles Statement (BPS) to be defective as they are not sufficiently detailed with regard to what if any impact the choice of provider may have on carbon. Realistic Minimum Zero Times should also be determined for different types of plant and should not be determined by IT constraints.

CAP170 is also defective as there is no indication of the mechanism to be followed once an intertrip has been activated. This proposal will require National Grid to notify the user as soon as the Restricted MW Export Level can be increased or no longer applies. As constrained periods are transient in nature a single flexible generator could be subject to multiple trips over a sustained period that are of 30 minutes duration. On each occasion the generator should receive a notification that the Restricted MW Export Level no longer applies. National Grid would then pay the generator for each trip. Alternatively National Grid could choose to select an inflexible Generator for the initial trip incurring one utilisation payment. The generator in this example would be unable to respond to the notification that the Restricted MW Export Level no longer applied. Clarity is therefore required on the mechanism to be followed.

#### **The proposed solution**

- **will have negative impacts on consumers, competition and security of supply**
- **is inconsistent with Government environmental objectives**

We note from this impact assessment that Ofgem consider that CAP170 may have a positive impact on competition by reducing the risk or unpredictability of costs associated with a derogated boundary, which may otherwise act as a barrier to entry to generation and supply. EDF Energy would contend that the increased regulatory risk that this proposal presents and the risk of Generator cost under-recovery would act as stronger deterrents to new entry. Currently all costs are borne equally across all Suppliers, therefore, EDF Energy consider this proposal to be neutral with regard to competition in Supply.

With regard to competition in Ancillary Services, we note that Ofgem has genuine concerns that the GB market is vulnerable to the undue exploitation of market power and that, in relation to constraints, this could amount to £125m per annum. EDF Energy consider that it is appropriate for solutions to be proposed to address these concerns but note that they should be proportionate and targeted to address the specific issues. In its current form CAP170 is a disproportionate response to these concerns,

The current payment mechanism proposed for CAP170 is to make use of figures developed for CAP076 Treatment of System to Generator Intertripping Schemes. The trip payment calculated at this time as a one-size-fits-all payment is inappropriate for use under the CAP170 arrangements. This payment is an arbitrary figure, determined by the working group at the time, which does not take account of the energy price exposure on all plant types. As such the cost impact to different plant types could be varied and has not been considered as part of this impact assessment. As this could have a significant detrimental impact on the viability of some plant type, there is a risk of significant impact on Security of Supply. EDF Energy also considers that this is not consistent with the envisaged system requirements under the 2020 Gone Green Scenario and therefore has an impact on Sustainable Development that has not been assessed.

- **is unduly discriminatory**

In this impact assessment Ofgem provide arguments that CAP170 is duly discriminatory despite:

- only applying to generation behind a derogated boundary
- not applying to all generation behind a derogated boundary

With regard to the first point, Ofgem indicate that Generators behind a derogated boundary have benefited from being able to access the system prior to reinforcement and that such benefit should be balanced by contributing to limit the costs incurred. EDF Energy would note that the GB Market and consumers in particular could be considered to have benefited from the increased security of supply such an arrangement permits and the competitive effects of increased generation.

With regard to the second point, Ofgem note that National Grid will use the proposed non-transparent criteria to determine which Generators will be selected for this scheme. However, these criteria are defective as noted above and also apply only to transmission connected generation and not Distribution connected plants. As such there is unequal treatment of generation behind the derogated boundary.

In addition the proposed solution is potentially discriminatory in application. Two different generators may be required to have Category 5 intertrips. However, as per the example noted above, National Grid may choose to select which generator is utilised based on the duration of the constrained period. Under such circumstances an inflexible generator would be discriminated against in respect of a more flexible one.

**CAP170 should not be approved in its current form**

- **A Mandatory Cost-Reflective Intertrip Scheme may be an appropriate way to reduce constraint costs**

EDF Energy therefore concludes that the Authority should not approve CAP170 in its current form. However, there are genuine concerns that have been expressed in relation to the potential for Market Power and these should be resolved through appropriate, targeted solutions. One appropriate method to achieve this would be to introduce mandatory intertrip schemes behind a derogated boundary; such schemes would have no arming fee but would have cost-reflective utilisation fees tailored to individual plant types. EDF Energy would be more than willing to engage with National Grid and Ofgem to develop such a solution and regret that this could not be explored earlier in the process as a result of the use of urgency.

If you have any queries on this response, please do not hesitate to contact me direct, or my colleague James Evans on 01452 656707.

Yours sincerely

A handwritten signature in blue ink, appearing to read "Seb Evans".