David Hunt
Senior Manager – Electricity Transmission Policy
Office of Gas and Electricity Markets
9 Millbank
London
SW1P 3GE

25 June 2007

Dear David,

Separation of TIRG expenditure for B5 Boundary works on Scottish Power Transmission Ltd's network.

EDF Energy welcomes Ofgem's decision to publish an open letter on the B5 Boundary works. It is important that information on investment plans and subsequent decisions are transparent to the industry.

EDF Energy's view can be summarised as:

- As far as is practical, the Scottish transmission system should be made SQSS compliant.
- The B5 works (and others) should be expedited to ensure compliance with the SQSS.
- Making the Scottish network compliant is more important than connecting new generation.
- The valuation of constraints proves that investment in the network is vital to reduce overall costs to consumers.
- Local Scottish constraints are an unreasonable burden on BSUoS payers and bad for competition.
- We welcome the lower than expected cost of the works.

The attachment to this letter provides further explanation of our views.

We hope you find our comments helpful. If you have any queries relating to our response, please do not hesitate to contact my colleague David Scott on 0207 752 2524 or myself.

Yours sincerely

Denis Linford
Director of Regulation

EDF Energy
40 Grosvenor Place
Victoria London SW1X 7EN

Tel +44 (0) 20 7 752 2200
Fax +44 (0) 20 7752 2128

edfenergy.com

Separation of TIRG expenditure for B5 Boundary works on Scottish Power Transmission Ltd's network.

This attachment provides further explanation of our views.

As far as is practical, the Scottish transmission system should be made SQSS compliant

The GBQSS governs the investment in transmission infrastructure to: (i) connect generation and demand to the system; and (ii) ensure there is enough boundary capacity such that any deficit or surplus of generation can be matched with generation across that boundary.

Following (but not as a result of) the implementation of BETTA, Scottish boundaries are not compliant with the SQSS. Consequentially there are constraints resulting from excesses of contracted generation above the value of transmission boundary capacity.

The valuation of constraints proves that investment in the network is vital to reduce overall costs to consumers

NGET and SPTL have presented differencing analyses on the cost of constraints, focusing respectively on the wider and local constraint costs. NGET states the cost as £18m p.a. and SPTL at £1.6m p.a. We believe that both of these estimates are conservative. The GBSO's Income Adjusting Event (IAE) for 2005-06, where constraints were valued at £30.18m for internal Scottish and Cheviot constraints, is proof that the cost of managing a non-compliant Scottish system is unacceptably high. It would be unacceptable to wait for Beauly-Denny before completing the B5 Boundary works.

The B5 works (and others) should be expedited to ensure compliance with the SQSS

SPTL states the B5 works will "alleviate the constraints presently being incurred to ensure compliance on Boundary B5 and provide headroom to accommodate and increase in renewable generation". We believe that It is essential that the continuing costs are mitigated and the system be made compliant for the forthcoming connection of renewable generation, especially as the cost of constraining such generation will include the environmental subsidies that will have been forfeited.

Making the Scottish network compliant is more important than connecting new generation

The decision at the time of BETTA to offer connections to generators on the basis of making elements of the Scottish system "no-less" compliant implies that Ofgem believed it is more important that new generation connects rather than ensure compliance for the transmission system.

We disagree with this premise, as the transmission system should be considered a key facilitating element towards:

(i) minimising the cost of wholesale electricity.

**Large Coal units: T_DRAXX-3 ; T_WBUPS-1 ; T_FERR-3; T_COTPS-4.*

(ii) fostering effective competition in the generation market.

By making the connection of new generation more important than SQSS compliance, Ofgem is increasing the overall cost to consumers and distorting the generation market.

It must be remembered that, if there is any likelihood that renewable generation will be constrained off for a significant proportion of time, that the increased constraint cost will offset the value of the reduction in emissions produced when it is generating.

Local Scottish constraints are an unreasonable burden on BSUoS payers and bad for competition

Balancing Services Use of System (BSUoS) charges are levied on both demand and generation Users on a £/MWh basis. They are non-locational, so any local costs in balancing an area are spread across all GB Users. A large proportion of BSUoS is the GBSO's Cost of System Operation in the Balancing Mechanism (CSOBM) – the net value of all bids and offers accepted in the Balancing Mechanism.

Any constraint costs will be included in BSUoS, and so, for a constraint on the B5 boundary, the net cost of an action to reduce generation on a Longannet unit (LOAN) and a corresponding action to increase generation on another unit (should it be necessary) will be added to BSUoS and charged to all Users. The spread between the two actions is the net cost of constraint and a burden to all BSUoS payers.

We have completed an analysis looking at accepted bids on LOAN units during 1st April 2006 to 19th November 2006 (the period considered by NGET). The analysis is presented in table 1 and figure 1.

NGET stated there were 389GWh of constraints during the period with the total cost being £0.35m per week or £18.2m p.a. During the same period, 300GWh of bid volume (Column 2, Table 1) was accepted by NGET on the LOAN1-4 units. 300GWh will have been for constraints and energy balancing – we can assume that the bid volume in months April, July and November were not under constrained conditions as LOAN's bid prices are comparable to the bid prices of a group of large coal units* (LOCAL).

The LOAN units paid £4.5m to NGET (Column 1) at an average accepted bid price of £15.1/MWh. The lowest monthly average bid price was in May 2006 at £8.1/MWh.

By comparison, LCOAL units paid NGET £7.1m, at an average accepted bid price of £23/MWh, with the lowest monthly average bid price being £20/MWh.

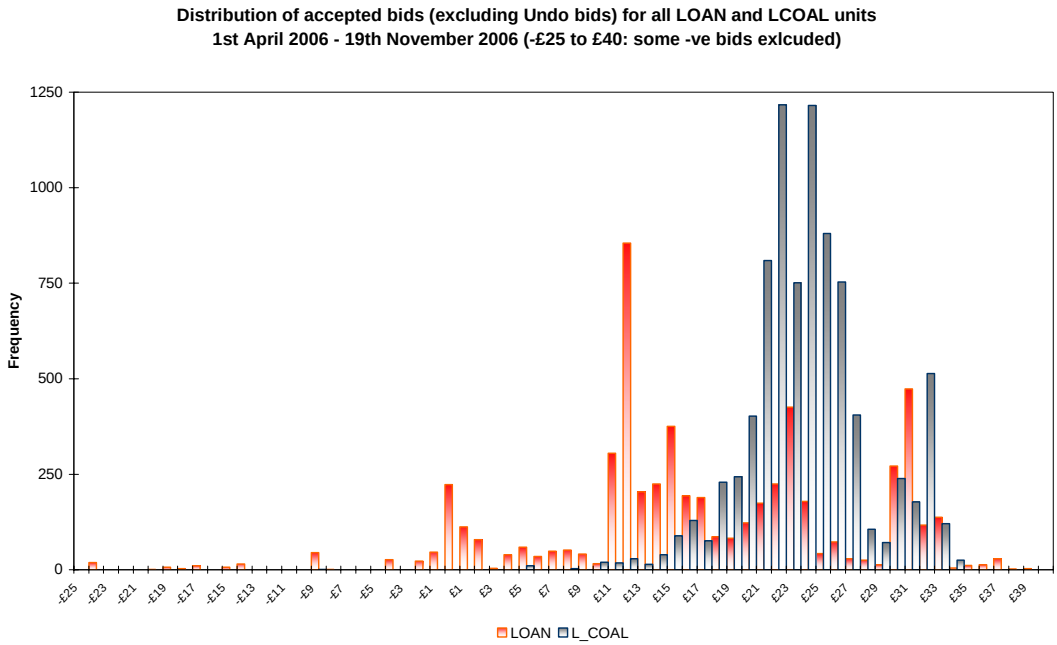
The greatest difference between the monthly average bid price of these two sets of generators was during August at £14.8/MWh. The difference in the distribution of accepted bids is shown in the figure below.

**Large Coal units: T_DRAXX-3 ; T_WBUPS-1 ; T_FERR-3; T_COTPS-4.*

Table 1: Comparison of Bid and Offer cashflows and prices: 1st April to 19th Nov 2006

Month	1. Bid cashflows	2. Bid volume	3. Weighted avg bid price		4. Difference between LOAN CASHFLOWs using LCOAL instead of LOAN bid price	5. Offer cashflows	6. Cost of LOAN constraint
	LOAN units (-ve is payment to NGET from LOAN)	LOAN units	LOAN	LCOAL		Avg LCOAL offer price * Bid volume on LOAN	Offer - Bid cashflows
Apr	-£1,406,466	-46,442	£30	£31	£13,095		
5	-£463,222	-57,032	£8	£21	£734,547	£3,236,549	£2,773,327
6	-£620,938	-36,946	£17	£22	£190,727	£2,387,970	£1,767,032
7	-£218,898	-9,425	£23	£25	£13,406		
8	-£97,756	-11,445	£9	£23	£169,219	£1,077,528	£979,772
9	-£681,850	-49,883	£14	£23	£484,213	£3,477,140	£2,795,289
10	-£983,103	-86,110	£11	£20	£741,069	£5,928,913	£4,945,810
11	-£60,622	-3,303	£18	£20	£4,792		
All	-£4,532,857	-300,585	£15	£23	£2,508,838	£16,108,100	£13,261,229

Figure 1: Distribution of accepted bids on LOAN and LCOAL units: 1st April to 19th Nov 2006



It is evident that the accepted bids for the LOAN units are far lower than those for the selected LCOAL units, providing the LOAN units with far greater margin between the bid payments to NGET and assumed contracted energy payments.

By using the difference between the monthly average bid price of the selected LCOAL generators and those submitted by LOAN, multiplied by the bid volume for each month,

**Large Coal units: T_DRAXX-3 ; T_WBUPS-1 ; T_FERR-3; T_COTPS-4.*

we can assume the additional value LOAN has extracted from lower bid prices to those submitted by the LCOAL units, would totalling £2.5m. This is presented in Column 4.

By excluding the months where the LOAN bid prices are similar to the LCOAL prices, we assume that the LOAN bid volumes are not for energy balancing. The lower bid price indicates that NGET was forced to constrain the plant, by accepting an out-of-merit bid.

The Offer cashflows relating to opposing action in the constraint can be assumed to be at least the average LCOAL offer price multiplied by the LOAN bid volume. For simplicity's sake we have decided to use the prices from the sample of LCOAL units, even though it would be more representative of the total cost to use a more marginal offer price. This is presented in column 5 and indicates that the total offer cashflows would be £16.1m. By subtracting payments from LOAN units from the Offer cashflows (Column 1 and Column 5), the cost of the B5 constraint can be estimated to be £13.3mm.

In summary, the constraint has affected competition in the market, as there is:

1. Increased BSUoS, a burden for all Users, of £13.3m,

2. Decreased Bid cashflow value for the constrained generator, benefiting it by £2.5m

3. Increased Offer cashflow value for other generators by £16.2m

We welcome the lower than expected cost of the works

SPTL has estimated the works to cost only £11.2m rather than the original £22.2m allowed under the TIRG proposals.

EDF Energy

26.06.07

**Large Coal units: T_DRAXX-3 ; T_WBUPS-1 ; T_FERR-3; T_COTPS-4.*