



Office of Rail Regulation
1 Kemble Street
London
WC2B 4AN

For the attention of: Joe Quill

10th August 2012

Dear Mr Quill,

Periodic Review 2013 – Consultation on the variable usage charge and on a freight-specific charge

We are responding to the consultation on the structure and level of track access charges paid to Network Rail for use of the network as part of the 2013 periodic review (PR13).

Drax Power Limited ("Drax") is the operating subsidiary of Drax Group plc and the owner and operator of the 4000MW Drax Power Station in North Yorkshire. Drax is the largest coal generator in the UK, and produces around 8% of UK power, consuming around 10 million tonnes of coal a year. As a result, we are also the most significant user of coal freight in the country. We are therefore well placed to comment on your draft proposals.

In summary, we do not support the proposals and are dismayed that the ORR can consider it reasonable to consult on a proposal that would dramatically increase (by around 400%) the level of freight track access charges for ESI coal supply. Over recent years, the DfT and ORR have successfully implemented policies and a stable regulatory regime that has created established supply patterns, underpinned positive contractual structures, and hence enabled freight users to plan their business with a reasonable degree of assurance. This has resulted in a substantial rise in rail freight over a number of years, as intended by the policy and as highlighted in the consultation document. Even if only the mid-level proposals contained in this consultation document were to be implemented it would not only cause a very material 23% reduction in ESI coal freight but would also introduce a significant and additional regulatory risk that could deter future investment in all areas of rail freight.

For the reasons above, we believe that the ORR needs to completely re-consider the proposed approach and develop alternative proposals which would result in more acceptable and incremental changes to the level of charging for PR13 which more reasonably reflect the increases that may generally be expected from a regulated monopoly service provider e.g. cost inflation less efficiency saving.

Notwithstanding our overall comments above, we have reviewed the documentation and identified four key areas that raise concerns whether the consultation documentation can

properly be relied upon for evaluation and justification for such significantly increased rail charges for ESI coal. The four areas that we have identified are:

1. The overall benefit of the proposals;
2. Inconsistencies in the analysis and underpinning assumptions;
3. Discrimination against ESI coal; and
4. The potentially adverse effect of the actions of ORR on competition in the electricity market.

1. The overall benefit of the proposals

The proposed increase in charges appears to be inconsistent with the overall philosophy for regulating freight as set out in the Executive Summary. For example:

“There are wider economic and social benefits of moving freight by rail, including environmental, road decongestion and safety benefits.....Switching from HGVs to rail reduces CO₂ emissions by 70% per tonne moved, and on average 28p per HGV mile in road decongestion benefits”.

“Freight is a relatively small part of the total traffic on the railway.....It operates commercially, competes with other transport modes.....and only receives limited grant support from government to encourage modal shift from road to rail”.

The analysis by MDST Stage 2 shows that introducing a new variable track access charge (VTAC) for ESI coal reduces the railway usage by 23%. A policy that discourages the use of the rail network to transport coal to power stations will produce no overall benefit unless the associated cost is also eliminated at the same time. This creates three potential outcomes:

- The costs cannot be eliminated because access needs to be maintained for others, including Network Rail’s own engineering traffic. In this case coal freight is subsidising other users;
- The costs simply cannot be removed over the same timescale as the increased charges are imposed. In this case ESI coal freight is effectively charged for a service it no longer uses; and
- Over time, the policy will lead to a reduced overall railway capability as the freight avoidable costs cannot be borne by the other market segments, which could detrimentally impact on any future plans for expansion of other freight or passenger services.

2. Inconsistencies in the analysis and underpinning assumptions.

We are concerned that there are some significant flaws in the assumptions that ORR has provided to NERA and MDST for the analysis that underpins the consultation. Generally, all the discrepancies are in the same direction so collectively they will overestimate the amount of ESI coal freight. This will undermine the overall conclusions.

This is important if the intention of ORR is to recover a fixed amount of the freight avoidable costs from ESI coal (the consultation document is ambiguous whether it is a fixed or variable amount that is being recovered). If it is a fixed amount to be recovered then as the coal usage declines (as is predicted), the charges to the remaining ESI coal freight would continually increase. This increased charge could then exacerbate further decline in the ESI coal usage. The consultation document proposes that this decline would be capped at 10%. But it is not clear whether the proposed 10% cap is over the charging period or an annual decline. It is also unclear how ORR would regulate the impact of the charges to distinguish between declines in ESI coal freight due to the increased coal freight charge and declines from 'normal' market forces, for example due to commodity or carbon prices fluctuations.

The potential flaws in the analysis are segregated into three areas:

2.1 Analysis of ESI coal

The consultation document (Paragraph 2.32) quotes that DECC forecast that by 2020 the ESI coal will be in the range 30-40 million tonne per annum as the basis for its analysis. It is understood that this information is extracted from the DECC Updated Energy & Emission Projections 2011. But, our reading of that document is that DECC actually forecasts 27 to 44 million tonnes of total solid fuel as primary energy consumption, and clearly not all of this is ESI coal. In the same document, DECC forecasts that by 2020 the annual output from coal-fired power generation will be in the range 38 TWh to 81 TWh, which equates to approximately 16 to 35 million tonnes of ESI coal.

In addition, the recent publication of the Government Response to the RO Banding Review indicated that there should be an increased use of biomass in existing coal-fired power stations over the period to 2020 as a result of the changes proposed in that document. The Impact Assessment, which was published alongside the Government Response, indicated a potential for around 18TWh of electricity to be produced annually from biomass replacing coal through conversion and co-firing. This would result in ESI coal reducing further by around 8 million tonnes.

Combining these 2 pieces of DECC analysis indicates a more realistic range of 8-27mT of annual ESI coal use by 2020, which contrasts significantly with the 30-40mT in the consultation, which is clearly incorrect.

2.2 Analysis of ESI coal freight

The main consultation document (Paragraph 2.29 and 2.31) provides the following statistics on rail freight in 2010-11:

- Total Freight Movement = 19.2bn net tonne km
- Coal (29% of freight) = 5.6 bn net tonne km
- ESI coal = 83% of Coal

So, on this basis ESI Coal in 2010-11 would account for 4.6 bn net tonne km, which would be around 24% of total (net tonne km) freight movement.

The consultation document (Paragraph 5.14) states that ORR used these statistics to inform the options that MDST and NERA were asked to test in their analysis of market segments

and ‘... in particular, we have worked on the basis that as ESI Coal accounts for 30% of the gross tonne km on the network...’

This highlights a discrepancy between reference to net tonne km in the first instance and gross tonne km in the latter, which is assumed to be a simple drafting error. More importantly, if ESI Coal only accounts for 24% of rail freight (as opposed to 30%) then the apportionment of freight avoidable costs would reduce from £60m - £75m down to £46m - £58m.

Both NERA and MDST use the figure of 5.5 bn net tonne km for ESI Coal freight. This is clearly incorrect and raises questions around the validity of their conclusions. If their analysis is to be used to underpin significant changes to the ESI coal freight charging then it should be based on accurate data.

2.3 Analysis of Electricity Market

We are concerned that NERA used the Bloomberg and World Energy Outlook fossil fuel price projections. As this analysis is being carried out for a government department we believe it would be much more appropriate (indeed essential) to use the latest official government figures and projections which are produced by DECC. To do otherwise risks putting in place potentially conflicting policy instruments across different government departments.

The use of different fossil fuel price assumptions may explain why the projections of electricity generation from coal are significantly higher than those produced by DECC in their Updated Energy & Emission Projections 2011. For example, in 2017 the NERA analysis forecasts 110TWh of coal generation compared to a central projection of 78TWh by DECC.

Over the period from 2015 onwards the NERA analysis shows coal-fired generation consistently at or above 100TWh per annum. This would require the ageing fleet of UK coal-fired power stations to run at unrealistically high availability and load factors.

For example, the NERA base case forecasts around 20GW of coal plant capacity (following LCPD environmental retirements) with 50% of this plant opting-out of IED. If the 10GW of opted out plant operates at an annual average of the limited hour’s restriction, then it would produce around 25TWh per annum. This would mean that the remaining 10GW of opted-in plant would need to produce over 75TWh per annum, requiring an availability and load factor of 85% (assuming 100% utilisation) to produce 100TWh per annum. We believe this is simply not credible.

10GW x 8,760h x 85%	= 75 TWh
10GW x 2,500h ¹	= 25 TWh
Total	= 100 TWh

¹ Assumes 17,500hours running under IED over 7 years from 2016 to 2023

By way of comparison the actual load factors for UK coal plant over the past five years² have been:

	2007	2008	2009	2010	2011
Coal-plant load factor (%)	46.7%	45.0%	38.5%	40.2%	40.8%

3. Discrimination against ESI Coal Freight

Paragraph 4.10 of the consultation highlights that to satisfy the Access and Management Regulations 2005 the charges will *inter alia* be applied on a 'non-discriminatory' basis. We do not believe the proposals are either a non-discriminatory or reasonable response, particularly from a regulated monopoly service provider.

We would contend that by focusing the increased charge principally on ESI coal it is potentially discriminatory for the following reasons:

- The analysis by NERA indicates that the impact of the additional charge on ESI coal will result in some electricity generation switching from coal to gas. The impact is therefore discriminatory within the ESI between portfolio generators and coal-only generators. The large portfolio players (who have coal and gas generating assets), can switch between the different fuels but independent coal generators like Drax, or Eggborough who only operate a coal station do not have that option;
- The increase in wholesale electricity price, resulting from increased rail freight charges rewards nuclear, renewables and gas-fired power stations but not coal-fired generators;
- It discriminates by location as the delivered coal price to Aire Valley power stations increases but most of the other power stations incur a smaller increase and some even see a fall in price; and
- The MDST report estimates that an increase of £1.53/tonne of delivered coal would result in a 5% reduction in coal burn. So, on a pro-rata basis for Aire Valley power stations, which MDST highlight will suffer a £1.1/tonne increase in delivered coal price, the projected impact would be to reduce coal burn by 3.6%. In the case of Drax, based on historic production figures this would mean a loss of almost 1TWh of electricity generated. Based on a dark green spread (the difference between electricity price and the cost of coal and carbon) of £10/MWh this would reduce the profitability of Drax by around £10m per annum.

4. Impact of the proposals on competition in the electricity market

The justification for the selection of ESI coal freight is based upon an analysis of what each sector of the freight market can bear. We have highlighted above some concerns with the underlying analysis but would also question whether ORR has properly assessed the effect of its proposals on the electricity market and whether it has discussed the potential implications with Ofgem as the Authority responsible for regulation of the electricity market.

² Digest of UK Energy Statistics for 2012, DECC

Paragraph 4.19 of the consultation highlights ORR's section 4 duty as enabling the freight users "to plan the future of their business with a reasonable degree of assurance". A proposal to increase track access charges by c.400%, which is completely out of line with previous reviews of the charges, does not allow ESI coal generators, producers or importers to plan their businesses with such a "reasonable degree of assurance". The planning framework for investments in the ESI looks at a 10-20 year time horizon and would typically assume that costs associated with a regulated monopoly service provider may increase by inflation, less some factor for changes in efficiency.

In an attempt to control the impact of the new charges the consultation proposes that a cap is introduced and a figure of 10% is postulated as reasonable. There is no justification, either legal precedent or economic assessment to substantiate why a 10% figure is "reasonable". There is comparison with the normal range of fluctuations of ESI coal generation due to changes in fossil fuel and carbon prices. But, fluctuations in usage can move up or down whereas increasing the charge results only in a forecast decline of usage. We do not believe a valid reason has been put forward so far to justify the 10% figure.

Notwithstanding the previous comments, if a 10% reduction in market activity is deemed to be a cap on what the market can bear, it is important that this should be applied to the rail freight market and not the energy market. As rail market activity is largely measured in terms of passenger miles or freight tonne miles it is important that the 10% cap is applied to tonne miles and not tonnes, which more accurately reflects energy market activity.

As mentioned above, it is also unclear whether any cap would be an annual figure or across the charging period and how ORR would distinguish between other factors affecting ESI coal generation and the rail freight costs when they regulate the implementation of the charge to remain with the cap.

We believe that ORR should focus on increasing the efficiency of the rail network and regulating the increased charges for rail freight industry rather than attempt to second guess the impact of policy changes on other markets. The current mid-range proposal would increase ESI coal freight from £2.25 to £12.25 / thousand net tonne km (i.e. ~400% increase). If a cap was placed on the increased charges at the 10% figure, postulated as reasonable by ORR, then ESI coal freight charge would increase from £2.25 to £2.48 / thousand net tonne km, before accounting for changes to efficiency.

Other comments

In addition to the points that we have raised above challenging the basis of the consultation, we have the following comments on other areas:

Units for ESI Coal Freight Charges

The consultation raises a question on the unit for any new charge, with two options presented as: (1) tonnes lifted or (2) tonne km transported. We believe that the charge unit should be tonne km transported as this most accurately reflects the cost that it seeks to recover.

If the basis of the charge does not reflect the cost then it could create a distortion in the ESI coal market e.g. if power stations with a shorter haul distance are cross-subsiding those with longer delivery routes.

As all the underpinning analysis has been carried out on the basis of the charge being implemented on a tonne km basis we assumed this was the intended unit to be used. If a different charge unit is introduced we question whether all the underpinning analysis would need to be re-done to assess the potential impact?

The potential benefits of the tonne km unit charge are:

- It is consistent with the current basis of charging for ESI coal. With the existing complexity of rail charging versus the most direct alternative of road haulage then it would be desirable for any new charge to be levied on the same basis as existing charges.
- It would incentivise re-distribution of rail flows to use the shortest route (subject to other factors such as coal price, specification and port handling costs), which would reduce the environmental impact. Whereas a charge based upon tonnes lifted is more likely to lead to modal switch on short distance routes.
- It would enable Network Rail to focus freight investment in the most heavily used areas.
- It would release capacity on the railway for passenger use in other areas

Biomass

Biomass is a key technology to deliver the government's energy policy objectives of affordability, security and decarbonisation of electricity generation. In principle it should be excluded from any proposals to increase rail charges for ESI coal.

If biomass freight were to be included it should only incur the charge to the extent that it can recover the cost from increased government support for biomass. The Government Response to the RO Banding has now been published so there will be no further opportunity to increase the level of support to cover increased rail charges. So, any projects supported under the RO should be excluded from any new rail freight charges now and in the future. Only projects that are implemented under the proposed CfD-FiT's should be considered as

potentially eligible if new charges are introduced, but for the reasons stated above we believe that they should also be excluded.

Variable Usage Charge

We note that ORR is proposing a cap on the increase in Variable Usage Charge but are concerned that the cap will apply to the average increase in VUC and not to each vehicle type. Whilst noting there is to a more specific consultation on Variable Usage Charge, we wish to stress our concern now that without a cap (per vehicle type) ESI coal may see a significant increase in VUC *and* incur the new freight-specific charge.

If you would like to discuss any of the views expressed in this representation, please feel free to contact me.

Yours sincerely,
by e-mail



David Love

Director of Regulation and Policy
Drax Power Ltd
3rd Floor, 41 Moorgate
London EC2R 6PP

Office: 01757 612364
Mobile: 07770 731528
Email: David.love@draxpower.com