

Joe Quill
Office of Rail Regulation
One Kemble Street
London
WC2B 4AN

10 August 2012

Dear Joe,

Consultation on the variable usage charge and on a freight-specific charge

EDF Energy is one of the UK's largest energy companies with activities throughout the energy chain. Our interests include nuclear, coal and gas-fired electricity generation, renewables, and energy supply to end users. We have over five million electricity and gas customer accounts in the UK, including residential and business users.

EDF Energy owns two coal-fired power stations, West Burton and Cottam in Nottinghamshire, with a total registered capacity of 4GW. We also own and operate 15 nuclear reactors at eight sites with a combined capacity of almost 9GW.

We welcome the opportunity to respond to the Office of Rail Regulation's (ORR) consultation, and would like to highlight three areas of concern:

- We believe that levying a new freight charge on spent nuclear fuel traffic on the basis of a lack of competition from road freight and inelastic demand is flawed as it exploits the exposure of the operator to the rail network.
- The imposition of freight avoidable costs on coal freight traffic risks increasing the UK's dependence on energy imports by making it more economic for many coal plant operators in England to import coal from coastal ports, rather than from Scotland. This is likely to have a significant detrimental impact on the Scottish coal mining industry.
- New track access charges for coal freight will cause electricity prices to be higher than they would otherwise be, and this will further compound cost pressure on electricity consumers. This will be particularly acute for those who are in fuel poverty or are internationally competitive businesses.

Around the start of the next decade, the UK is facing a shortfall in its generation capacity as a result of, in particular, coal plant closures and constraints on running linked to age and environmental measures such as the Industrial Emissions Directive (IED). It is estimated that around a fifth of existing plant is set to close over the next decade, and that the UK needs to invest £110 billion in electricity generation and transmission to replace existing plants and meet our climate change targets.

EDF Energy is committed to delivering affordable, secure, and low carbon supplies based on a diverse energy mix, including nuclear and renewables. However, we believe that coal-fired generation will also play an important role in this mix as part of

the transition towards a decarbonised power sector in the 2030s, in conjunction with carbon capture and storage (CCS) technology.

Although we understand the intent of the ORR's proposals, i.e. to implement a new track access charge to recover freight avoidable costs to ensure that the charges are more cost-reflective, we are seriously concerned that they have the potential to lead to unintended consequences in the electricity sector and therefore strongly oppose them on this basis. As we will elaborate later, the changes will potentially put future electricity generation investment decisions at risk and are not consistent with the Government's wider energy policy objectives. The proposals have impacts beyond simply the rail freight market and we are concerned that the ORR may not have adequately considered these far-reaching effects.

We do not agree with the ORR's proposed approach to satisfying the Access and Management Regulations 2005 with respect to levying a new freight-specific charge. We do not believe that the charges are based on "efficient, transparent, and non-discriminatory principles". While the proposals might not discriminate between freight operating companies serving the same market segment, they do discriminate between different electricity input fuels (e.g. those that do not use rail freight operations such as gas) by indirectly changing the economics of such generation. Rail freight charges are a key cost element in the generation of electricity and we do not believe that an increase in track access charges can be considered in isolation from wider energy policy impacts. Unilateral changes have the potential to artificially distort incentives and hence the efficient operation of the electricity market. Such distortions are contrary to the stated principles adopted by the ORR when considering commodity-based market segment definitions.

If the aim of the new charge for freight operators is to contribute to recovering those freight avoidable costs not recovered from other freight charges, we do not understand the logic of exempting certain individual rail freight market segments if they in fact also contribute to the costs directly incurred. This approach will mean that those market segments that are exempt will, in effect, be cross-subsidised by other unrelated market segments.

EDF Energy also believes that levying a new freight charge on the basis of a lack of competition from road freight and inelasticity of demand is both fundamentally flawed and unfair, as it deliberately exploits the exposure of the operator to the rail network. If such an approach was ever taken by a private operator, then this would clearly be deemed as an abuse of a monopoly position by the regulatory authorities. As the MDST study and the ORR consultation document acknowledge, there are good safety, security and political reasons as to why, for example, spent nuclear fuel is transported by rail rather than road. Although the latter is theoretically possible, our "safety-first" culture and commitment to operate our nuclear fleet to the highest standard makes this alternative form of transport unlikely. EDF Energy is effectively in a position of procuring a service from a monopoly supplier, and we believe that the ORR is exploiting this situation.

EDF Energy is also committed to minimising spent fuel stored in our power stations. This will help improve safety and will minimise the final de-fueling times at the end of a plant's asset life. It is important to highlight that the final de-fueling costs will be met by the Nuclear Liabilities Fund (NLF). Any change to the charging regime will be met by the NLF and this will be managed by the Nuclear Decommissioning Authority (NDA), the non-departmental public body responsible for the decommissioning and clean-up of the UK's civil public sector nuclear sites.

We are also fundamentally opposed to the principle of levying a charge solely on the basis of the perceived ability of a market segment's ability to "bear it", and do not agree that this is an accurate interpretation of Directive 2001/14/EC. We note that the consultation document states that NERA's modelling suggests that a four-fold increase on current charges is forecast to be associated with a reduction of 5% in electricity supply industry (ESI) coal lifted, and that this is deemed proof that the demand for coal is not sensitive to changes in track access charges. Such an approach is flawed as it is based on an entirely subjective and arbitrary assessment of what is considered acceptable, and we do not believe that the ORR is best placed to decide this.

Contrary to the ORR's assessment, we believe that the new charge on specific market segments does not strike the right balance in attempting to reduce the cost burden to the Government and the ORR's additional statutory duty to promote the railways. Although we note that the ORR is proposing to levy a "freight traffic" cap on the coal charge so that the forecast fall in resulting traffic does not exceed 10%, we have doubts as to how any change in rail traffic flows can be accurately modelled and attributed to the new freight charge in practice. This is particularly pertinent given the large number of external and concurrent changes that are presently occurring in the electricity market, including the impacts of Government policy to drive the decarbonisation of the power sector (such as the forthcoming carbon price floor, due to come into effect on 1 April 2013).

We believe that the proposals to levy a charge on ESI coal traffic and spent nuclear fuel traffic are at odds with the Government's Electricity Market Reform package (as outlined in the current draft Energy Bill). This is designed to allow the UK to meet its energy and climate change objectives, namely to ensure continuing security of supply, decarbonise electricity generation and maintain affordability. We will consider each of these objectives in turn.

Security of Supply

It is our view that existing coal plant will in the future operate at lower load factors than historically has been the case, and that this is likely to lead to increased revenue uncertainty. The Government has correctly recognised that this uncertainty could lead to under-investment and lower levels of reliable capacity. We therefore welcome its proposal to introduce a capacity market, as part of its Electricity Market Reform package, to help address security of supply concerns. A well designed capacity market will deliver a higher reliability standard in a sustainable and cost effective way. It is vital

that the capacity market is designed to provide adequate capacity to ensure security of supply.

However, we believe that the ORR's proposals, by increasing the cost of coal-fired generation, could undermine this key Government policy objective by inadvertently accelerating the closure of coal plant. This is because we believe that coal fired generation has a key role in providing capacity until the early 2020s in a smooth transition to a diverse low carbon electricity generation mix. As outlined in the NERA report, the continued operation of coal plant beyond 1 January 2016 will require either major investment in Selective Catalytic Reduction (SCR) or similar technology to meet tighter IED emission limits, or the acceptance of limited life and running hours under derogation. By the end of 2013, coal plant operators must make a binding decision on their selected IED compliance route (to "opt in" or "opt out"). Any further increase in cost for coal-fired generators, such as a new track access charge, could weaken the economic incentive to continue to operate and could ultimately lead to the premature closure of such plant. This increases the likelihood of future blackouts, as well as increasing the cost for electricity consumers.

With regard to nuclear generation, EDF Energy announced to investors in February 2012 that it is expecting an average life extension of seven years across our advanced gas-cooled reactor (AGR) fleet, and that the strategic target for Sizewell B remains at an additional 20 years. However, we will only seek life extensions for our plant if it is safe and commercially viable to do so, and any increase in freight costs for spent fuel will have a bearing on our decision. We do not believe that this secondary impact has been factored into NERA's modelling, which simply acknowledges that "in the longer-term there may be effects related to nuclear decommissioning or life-extensions due to the impact of freight access charges on the overall profitability of nuclear plants".

Affordability

We are concerned that the ORR's proposals will simply see the costs transferred from one set of consumers (i.e. the taxpayer or other rail users) to another (i.e. electricity consumer) who are already facing the pressure of rising energy bills. As DECC has concluded, "energy bills are likely to continue on an upward trend over time, with or without policies, as a result of rising fossil fuel prices and [electricity] network costs". DECC forecasts that the average household energy bill will be £1249¹, if all its policies are successfully implemented. We believe that an increase in track access charges will simply compound these costs for electricity customers.

As the NERA report has correctly identified, "an increase in track access charges can increase electricity bills, because when coal plants are on the margin, power prices will reflect their increased short run marginal cost of production. This increases the price that electricity retailers pay to procure power to serve end users, which raises customer bills". While NERA predicts that a £10 per thousand net tonne km increase in track

¹ http://www.decc.gov.uk/en/content/cms/infographics/tabular_data/tabular_data.aspx

access charges will increase a typical domestic customers' annual bill by around 0.2%, we believe that this seemingly small increase has to be considered in the context of the increasing cost pressure electricity customers are already facing.

In terms of transparency of reporting costs, since 2009 energy companies are required to publish consolidated segmental statements, meaning that the profitability of generation and of different supply activities must be presented separately. More recently, as part of the Retail Market Review, Ofgem commissioned an independent accountant, BDO, to review how companies are presenting their accounts to bring even greater transparency to this process. This found that the methodologies used by companies are broadly fair and appropriate. It also showed that margins in the retail businesses of some companies are very small, and even negative in some cases. This questions the ORR's assertion that the market is able to bear further cost increases.

Decarbonisation

EDF Energy believes that large scale investment in electricity infrastructure is urgently required to replace existing fossil fuel plants and meet our climate change targets. It is essential that the right decisions are made now to secure this investment and promote the transition to a low carbon economy incorporating a diverse energy mix, including nuclear, renewables and CCS technologies that could be applied to fossil fuel generation plant such as coal (subject to successful demonstration). We believe that an increase in track access charges could undermine the development of CCS and have a detrimental impact on the UK's ability to meet its climate change obligations. To highlight the importance of CCS in the future generation mix, the Committee on Climate Change (an independent body established under the Climate Change Act to advise the Government on emissions targets) has an illustrative generation scenario in 2030 in which power sector decarbonisation could be achieved with a 40% share of renewables, 40% nuclear, 15% fossil fuel with CCS, and up to 10% from unabated gas².

In line with other low carbon technologies, it is the Government's intention to drive investment in commercial scale CCS in the 2020s and beyond through its planned long-term Contracts for Difference (CfDs) mechanism as part of the Electricity Market Reform package. CfDs stabilise returns for generators at a fixed level (the "strike price"). When the electricity market price is below the strike price, generators will receive a top-up payment from suppliers for the additional amount. Suppliers in turn will recoup this cost from electricity consumers. An increase in generation costs through an increase in track access charges will simply be reflected in the strike price for affected projects, and hence increases the amount that is likely to be needed to be recovered from electricity consumers.

EDF Energy does not agree with the ORR's proposal to defer the decision on whether or not to apply a levy to biomass freight in this periodic review. We believe that the

² Committee on Climate Change, The Renewable Energy Review, May 2011

decision should be independent of the level of support available to biomass as part of the Renewables Obligation (RO), and the perceived maturity of the market. Any subsidies for biomass should come from a single source where it can be effectively monitored and reviewed as appropriate. We do not believe that it appropriate for the ORR to determine further cross-subsidies for biomass. In any case, there is no need to wait until 2017 to revisit this decision, as the Government has recently set the support levels for different types of biomass technologies as part of its RO Banding Review³. We would also highlight the fact that, as NERA acknowledges, biomass is currently used in coal-fired plant through co-firing. As a result, electricity from biomass is largely reliant on coal remaining in the mix. As NERA go on to say, “the change in demand for biomass for use in co-firing following an increase in track access charges is therefore determined largely by the impact on demand for coal”.

DECC states in the RO Banding Review that “one of the quickest and cheapest ways to decarbonise electricity produced from coal is to co-fire with biomass” and that “both the Committee on Climate Change’s Bioenergy Review and the Government’s Bioenergy Strategy recognise the strategic importance that such decarbonisation can bring to meeting our short term climate change goals and in helping to establish sustainable feedstock supply chains”. This further highlights the importance of coal in the generation mix to help deliver enhanced co-firing as a means of meeting the UK’s legally-binding 2020 Renewables Energy target, and the need for biomass to be treated in a consistent manner as coal with respect to additional freight charges.

As stated above, EDF Energy is committed to delivering an affordable, secure, low carbon energy mix for the UK and we believe new nuclear will play a key role in delivering this objective. We plan to invest in four new nuclear plants in the UK, starting with two plants at Hinkley Point in Somerset. With our co-investor Centrica, we aim to take a final investment decision for Hinkley Point C around the end of the year. These investments will make a major contribution to delivering the secure energy supplies that our economy demands, help to secure UK competitiveness and will create thousands of skilled jobs, in engineering, construction, and manufacturing industries. We are concerned that any new arbitrary or disproportionate charge applied to the movement of nuclear fuel will introduce investor uncertainty, and may act as a deterrent to other nuclear operators investing in the UK power generation sector.

Other concerns

We have considered the NERA analysis that examines the likely impact of increased track access charges on ESI demand for coal, nuclear fuel and biofuels. While we do not dispute the use of a fundamentals model to help with this analysis, it is important to emphasise that such high-level theoretical modelling has its limitations due to the simplified assumptions it must make in order to remain parsimonious. Such modelling is not sophisticated enough to determine plant-level consequences. A number of these

³ DECC, Government response to the consultation on proposals for the levels of banded support under the Renewables Obligation for the period 2013-17 and the Renewables Obligation Order 2012, July 2012

limitations have been acknowledged by NERA itself, including a lack of detailed assumptions about current transport costs relevant to individual power stations, as well as the use of generic assumptions about the delivered cost of electricity and gas.

However, the biggest flaw in NERA's analysis is that it assumes that an increase in track access charges does not result in a change in coal sourcing and transport decisions. We do not believe that this is realistic and strongly distorts the impact of the changes on particular regions, such as Scotland. In its report, NERA expects Scottish coal producers to absorb as much of an additional increase in track access charges as possible in the short to medium term in order to sell coal to England. EDF Energy currently purchases c.0.7 million tons per annum of coal from Scottish producers. To remain competitive, Scottish coal producers already face squeezed margins to compensate for the higher rail costs from Scotland compared to shorter distance rail movements from east coast ports. Any increase in rail freight costs could make the production of coal in Scotland commercially unviable. If they decide to pass through the increased freight costs to customers then it will be more economic for EDF Energy to import its coal through east coast ports. However, in the context of low API2 prices and rising production costs, we do not believe that Scottish coal producers are currently in a strong enough financial position to absorb the extra costs. We therefore do not believe that NERA's assumption is credible.

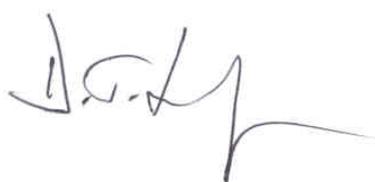
In addition, by assuming that the demand for ESI coal is largely inelastic, the analysis fails to recognise that the likely impact of increased rail charge is a switch to gas-fired generation at the expense of coal-fired generation, which means that less coal will be moved from either Scotland or ports, to the ultimate detriment of the rail freight sector.

In light of our concerns above with respect to the impact of a new charge on the electricity sector, we would urge the ORR to re-evaluate its proposals to ensure that it fully takes into account these unintended consequences, and that the changes are considered holistically with respect to Government policy.

Should you wish to discuss any of the issues raised in our response or have any queries, please contact Ravi Baga on 020 7752 2143, or myself.

I confirm that this letter may be published on the ORR's website.

Yours sincerely,

A handwritten signature in black ink, appearing to read "D. Linford".

Denis Linford
Corporate Policy and Regulation Director