

10th March 2011

Electricity Market Reform (“EMR”) Consultation Response

Executive summary

Thank you for the opportunity to comment on the Electricity Market Reform Consultation document. The need for change is clear and the overall ambition of addressing climate change is one that Tata strongly supports. Through its various operating companies Tata is very active globally in making direct contributions to mitigating and adapting to climate change.

There are important elements of the policy proposals that Tata Steel UK Ltd (“TSUK”) supports, under the right circumstances. However, there is a very real risk of the costs associated with the full proposal being very damaging to the competitiveness of UK industry. TSUK, working with the Energy Intensives Users Group, has had to commission its own assessment of potential impact that runs into the hundreds of millions of pounds. This therefore risks losing the large supply chain opportunity, its jobs, skills and tax revenues, for the UK. Also, despite the massive costs likely to be incurred, the proposals may not deliver the step change required in a cost effective way. The increased role of ‘central planning’ is an important concern.

Nevertheless, there are ways the package of policies should be adapted and placed in a broader context. Such a package could deliver the objectives of a more decarbonised electricity market in a more cost effective way. It would also have a greater chance of delivering other important benefits to the UK. In this context TSUK would therefore propose the following package of measures:

- Robust support for UK based companies to participate in the supply chain for major infrastructure investment;
- CO₂ reduction through the EU ETS;
- Long-term offtake agreements to support large scale low carbon development;
- Reduced uncertainty for other lower carbon energy project investment through the FIT with CfD;
- A major advance on demand side response combined with a targeted generation side capacity market;
- Appropriate tax-based incentives for responsible consumers (through reform of CCA arrangements for example) to make the additional energy bill burden as cost neutral as possible; and
- We see the Carbon Price Floor and EPS proposals as being largely duplicative of these measures and therefore a source of unnecessary cost and complexity.

TSUK looks forward to ongoing engagement with the Government and other stakeholders to move electricity market reform forward.

Tata Steel context

Tata Steel is one of the world’s top ten steel producers. The combined group has an aggregate crude steel capacity of more than 28 million tonnes and approximately 80,000 employees across four continents.

The European operations of Tata Steel (formerly known as Corus) comprise Europe’s second largest steel producer. With main steelmaking operations in the UK and the Netherlands, they supply steel and related services to the construction, automotive, packaging, material handling and other demanding markets worldwide.

Tata Steel's UK operations directly employ 20,000 people and indirectly support more than 100,000 jobs nationally. In many cases it is the largest local private sector employer and the development of its activities have been, and continue to be, integral to surrounding local communities.

Major reform of the UK's electricity market and its impact on infrastructure investment is of very significant importance to TSUK for a number of reasons:

- *Fighting climate change:* Social responsibility is a core value of the entire Tata group of companies worldwide and engrained in the vision our founders. For that reason Tata Steel is deeply committed to reducing its carbon footprint. Reducing carbon intensity is one of its top corporate goals. We have some of the most carbon efficient plants globally and have identified incremental and step change opportunities to significantly lower carbon emissions. But realizing these opportunities requires capital investment and the battle for capital is both fierce and global. Even without additional requirements, Tata Steel Europe will invest hundreds of millions of pounds on environmental and energy efficiency related projects in the next five years, for which we will receive no subsidy or price support mechanism.
- *Providing a vital link in the UK supply chain:* Steel is vital for a low carbon and energy secure economy. Applications include foundations for wind turbine towers, PV installations, undersea pipes, generation and transmission infrastructure, more efficient buildings, or lighter weight vehicles. Tata Steel is a global leader in these applications and we want to see the necessary capabilities, skills and jobs further developed in the UK. There are a number of factors that will support this aim, but underlying all of these is the need for the right operating and investment environment for manufacturers.
- *Being a large and responsible energy user:* Steel making and processing are energy intensive activities. The sustainability, security and relative affordability of energy are therefore critical factors for the current operations of TSUK and in decisions on future development. Further investment in the UK's energy infrastructure is desperately required, and a shift towards lower carbon intensity generation must be made. But in making the transition to a new electricity market paradigm real focus must be given to ensuring that 'value for abatement' is achieved and that risk and cost is shared fairly. Additionally, large users could and should have a significant role to play in a new paradigm. Reform should include the right incentives for making that happen.

The steel market context

Steel is a globally traded product. It is relatively easily transported internationally. The large majority of global production is based in locations subject to less onerous environmental and social regulation and taxation than Europe. In a number of cases steel producers in such locations are also co-located with readily accessible local raw materials. UK steel companies therefore face an uphill task on competing with such players. Passing through EU or UK-only cost increases to customers is extremely difficult, as recognized in the extensive work done in assessing carbon leakage for Phase III of the EU ETS. Regional and nationally specific measures further tip the playing field away from UK manufacturers on a day-to-day basis and endanger the prospects of longer-term sustainability of our UK operations.

Supporting the UK-based supply chain

The major investment program that the EMR policy proposals are aimed at motivating should be a massive opportunity for UK based firms to participate in the supply chain. The jobs, products and services demanded by large-scale energy infrastructure projects are exactly the high valued added applications that the UK needs to excel at. Competitive energy prices and cost-effective climate change policies are an essential pre-requisite if UK-based manufacturing is to benefit from the "green" investment opportunities, as opposed to international competitors.

Experience in the UK market would also be a powerful springboard for UK based companies and their employees, who will be bearing the costs of the policy proposals through their bills and taxes, to compete globally.

TSUK therefore strongly urges the Government to do more to actively and robustly support the efforts of UK-based businesses in winning supply chain opportunities, intervening where necessary to ensure that these opportunities support jobs and skills development in the UK.

Carbon Price Support

TSUK has submitted a response to the separate HM Treasury / HMRC consultation. As the CPS proposal is so inextricably linked with and, in our view, unnecessarily duplicative of other proposals set out in the EMR consultation document it is worth restating the key themes of our response:

- The EU ETS was established to deliver carbon abatement and at least cost
- As a UK specific tax the Carbon Price Floor ("CPF") clearly adversely impacts the competitiveness of UK businesses versus their peers in Europe;
- The medium term impact appears considerable – the implication of Chart 5.E in the HMT / HMRC document for TSUK in 2020 is around £20m of incremental cost above an already steeply upward trending baseline;
- These incremental costs would be additional to the already substantial increases in delivered costs driven by existing initiatives (a 43% increase on non-domestic bills by a DECC analysis, itself almost a £100m p.a. increase for TSUK);
- The 'indirect' nature of the action of the CPF, together with its structuring as a tax instrument potentially subject to the structural change each year in the Finance Bill is likely to reduce the certainty impact of the measure and therefore its effectiveness in motivating good value investment. We see the FIT with CfD mechanism as likely to be more effective in this regard;
- The record of governments and central planners making accurate long-term forecasts is not encouraging and risks driving inefficient decision making; and
- We were very disappointed to see no impact assessment for energy intensive industries, given the substantial likely effect the measure will have.

Feed-in Tariffs

4. Do you agree with the Government's preferred policy of introducing a contract for difference based feed-in tariff (FIT with CfD)?

TSUK's own experience of directly and indirectly developing energy schemes highlights to us the importance, if possible, of reducing future energy price or cost uncertainty in making investment decisions. Therefore we would support the right mechanism under the right circumstances that provides this. Such reduced uncertainty should be available to both generators and consumers.

One approach that would provide less uncertainty and operates in a number of other European countries is long-term offtake agreements linked to large-scale generation investment. It's possible that European governments have and continue to encourage these kinds of discussions. We are disappointed that this dialogue has not occurred yet in the UK. The UK Government could play an important 'convening role' in such discussions, rather than rely largely on the provision of subsidies and price support mechanisms.

In the event of a subsidy / price support mechanism being required to supplement such arrangements we would broadly support, under the right circumstances, the FIT with CfD approach. The 'Premium FIT' does not seem to provide a sufficient break with the Renewables Obligation approach that appears to have been judged as a failure.

The 'Fixed FIT' is probably more suited to the role it plays now – incentivising small-scale projects – given its relative simplicity but high cost.

Consideration needs to be given about how best value to the Government and end users can be protected in the setting of FITs with CfDs. Approaches to aid this which TSUK would support include setting a number of FIT with CfDs levels linked to different generation technologies using different levelised lifetime cost and reasonable return rates and / or tenders for volume per generation technology, as is being considered elsewhere in Europe.

The role of the Government is clearly crucial within the FIT with CfD approach. As we highlighted in our concerns over the CPF, some schools of economic theory and a number of practical examples give rise to concern over a 'central purchaser' model. TSUK would therefore welcome more detail on, for example, on the scope of any 'central purchaser' model and how the risks and costs of the Government's role would be passed on to consumers and taxpayers. Large consumers could a role either directly or indirectly in such a mechanism and TSUK would be pleased to participate in a dialogue with Government on this.

5. What do you see as the advantages and disadvantages of transferring different risks from the generator or the supplier to the Government? In particular, what are the implications of removing the (long-term) electricity price risk from generators under the CfD model?

Significantly reducing the risks for generators and their capital providers does not eliminate these risks and their associated costs – it distributes them elsewhere. In some cases the generators are massive European and global utilities focused on and resourced to manage energy markets risk. Their capital providers are also likely to be, in many cases, large global institutions with investment grade credit ratings and high levels of expertise in managing risk. Under the FIT with CfD the wholesale energy market risks are transferred to the Government and, we assume, in turn redistributed to electricity consumers, both residential and business. Although there is no doubt a sophisticated academic debate about the relative costs of capital and theoretical economic efficiency we would question whether, in reality, a high degree of this redistribution is fair and appropriate given the implications for social justice and international competitiveness.

Emissions Performance Standards

12. Do you agree with the Government's assessment of the impact of an emission performance standard on the decarbonisation of the electricity sector and on security of supply risk?

Two of the other policy proposals contained in the EMR (CPF, FIT with CfD) are aimed at tipping the generation cost playing field away from unabated fossil fuels, principally coal. It seems largely unnecessary to add a third measure, the EPS. If the two financially driven policy proposals are effective the additional benefit of the EPS should be small. If there is real concern that the CPF and FIT with CfD may not be effective then there should only be an EPS. Layering additional measures increases complexity and will most likely add further costs to end users, decreasing the 'value for abatement' of the overall package.

Interrelationships with European regulation also need to be considered as risk factors, for example:

- Any overlaps between a UK specific EPS and European regulation on emissions performance. This should be clarified; and
- Any material impact an EPS has on weakening demand within EU ETS, therefore further undermining the primary mechanism for CO₂ reduction across Europe

17. How should biomass be treated for the purposes of meeting the EPS? What additional considerations should the Government take into account?

The Government should take into account the circumstances and broader environmental and economic context of small to medium scale generation from unconventional fuels. The consultation usefully highlights biomass as an example of potential 'zero rating'. In TSUK's case, generation using waste bi-products from the early stages of steel making that would otherwise be released into the atmosphere (i.e. flared) should fall into a similar category and be treated appropriately. Additional taxes or regulation that disincentivises such recycling and reusing of waste gases would produce a worse outcome for the environment, as well as for TSUK and for the UK's energy balance.

Options for Market Efficiency and Security of Supply

20. Do you agree with the Government's preferred policy of introducing a capacity mechanism in addition to the improvements in the current market?

A future generation mix comprising greater shares of 'must run' generation technologies (such as nuclear) and intermittent and / or unpredictable technologies strongly suggests the need for new approaches to balancing the market. A long-term solution is likely to include a European super grid, although this has very significant engineering and financial challenges. Therefore, at least in the medium term a more dynamic national approach is required.

In this context TSUK was pleased to see demand-side response highlighted as a critical lever in the Capacity Market discussion. We would strongly encourage and support further work in this area, as there is undoubted potential in both the business and residential sectors. This potential is likely to be fragmented, but the advances in aggregation and smart metering / grids underway suggest a useful amount of this fragmentation is addressable.

There is potential that the emphasis on 'sharper prices' in the short-term response debate risks more harm than good. Not all demand is flexible and much demand has constraints at certain times, making it effectively inelastic and leaving the consumer with potentially unaffordable bills. Some relatively straightforward changes to today's contracting approaches could significantly improve demand side participation without requiring truly injurious price spikes. As an example TSUK could substantially increase its demand response contribution if contracting arrangements were improved and operational conditions were favourable.

Such contract changes would require National Grid to consider demand response in a different, more programmatic way. If this was possible it would allow a smaller generation side capacity market to play a more targeted and efficient role, at the same time allowing customers one of the few offsetting opportunities in the policy proposals under consideration.

TSUK does not have the knowledge to fully assess the relative merits of the different types of capacity market methodology discussed in the EMR consultation. However, we would reiterate the well-known concerns over the economic and carbon efficiency of large-scale programs using current fossil fuel based fast start technologies. Nevertheless a focused generation side scheme seems an inevitable and pragmatic approach to 'filling the gap' left by demand side response.

23. What do you think the impact of introducing a capacity mechanism would be on incentives to invest in demand-side response, storage, interconnection and energy efficiency?

As highlighted in our response to question 20, TSUK sees demand response as absolutely central to the new electricity market arrangements. However, even before the consideration of load shedding, energy efficiency and removing consumption from the market provide big opportunities. Surely it must make sense to permanently reduce system load than pay for load to be either abated or provided by high cost low carbon generation. More positive incentives should be provided for business and domestic users to use energy as efficiently as possible. For the business sector, the current review of the Climate Change Agreements regime and ongoing thinking on reform of the

corporate tax landscape provide opportunities to at least partially offset the significant costs of the EMR for responsible consumers.

Analysis of packages

26. Do you agree with the Government's preferred package of options? Why?

TSUK fully supports efforts to combat climate and is very actively engaged across a range of areas to be part of the solution. TSUK supports the overall objectives of strengthening and decarbonising the UK electricity market and looks forward to playing a crucial supply side role in the transformation. Such strengthening should be achieved in a manner that provides best value for the Government and the consumer, although increased cost is inevitable.

We support some aspects of the policy proposals contained in the EMR consultation and certainly agree that policy instruments must be viewed in combination. We believe that this principle should be extended and that the proposed policies should be seen in the broader context of a number of different regulatory and Government-led approaches to achieving energy and emissions goals whilst promoting green growth and defending affordability for UK consumers.

Therefore, TSUK's 'headlines' combination of policies and initiatives would be:

- Robust support for UK based companies to participate in the supply chain for major infrastructure investment
- CO2 reduction through the EU ETS
- Long-term offtake agreements to support large scale low carbon development
- Reduced uncertainty for other lower carbon energy project investment through the FIT with CfD
- A major advance on demand side response combined with a targeted generation side capacity market
- Offsetting tax breaks for responsible consumers (through reform of CCA arrangements for example) to make the additional energy bill burden as cost neutral as possible.