



**TUC response: Electricity Market
Reform
Consultation**

10 March 2011

Electricity Market Reform Consultation: TUC response

The TUC welcomes the opportunity to respond to the DECC Consultation on Electricity Market Reform. This response follows consultation with the main unions representing workers in energy and industrial sectors, taking into account the views expressed by unions generally on the wider issues of fuel poverty and energy policy.

The TUC is the voice of Britain at work. With 58 affiliated unions representing more than six million working people from all industries and occupations, we campaign for a fair deal at work and for social justice at home and abroad. We negotiate in Europe, and at home build links with political parties, business, local communities and wider society.

New figures on the rapid growth in wind energy employment, up 91% to over 10,000 employees between 2007 and 2009¹, demonstrate the real economic potential of an integrated energy and jobs strategy.

The two concurrent consultations – Electricity Market Reform (EMR) and a CO2 tax – pose some 68 questions, many on quite detailed, technical aspects of policy. This TUC response concentrates on the interface between energy market reforms, jobs and energy prices. Our response refers to TUC agreed policy, for example, in support of a carbon price floor, and evidence from our own research, including:

- Advice from members through the TUSDAC working group, which considered the energy, industrial and distributional impacts of the reforms for both industrial and domestic consumers.
- TUC's Clean Coal Task Group, concerning investment and jobs in carbon capture & storage and coalmining. The CCTG will also submit a response to the consultation guided by the EC's advice in this paper.
- The TUC-Energy Intensive Users' Group work on the effects of climate change and energy policy on energy costs for our heavy energy industries.

Key concerns for the TUC: summary

Overall, the combined effects of the two consultations give rise to a range of concerns for the TUC, as to the pace and

scale of investment, jobs growth, and addressing skills issues.

- Government should urgently develop an Energy Investment Plan for the £110bn energy investment the government acknowledges to be required by 2020, including a clear role for the Green Investment Bank.
- As we argued in our response to the consultation on a CO2 Price, the competitiveness of the UK's energy intensive industries is at risk. "Carbon leakage" could result (the loss of jobs and investment to economies with weaker or no CO2 price). In consultation with industry and trade unions, the Government should undertake an impact assessment of the overall effects of the EMR and CO2 tax proposals on the energy intensive sectors.
- We recognise that, set at the right level, a CO2 floor price should provide a long-term carbon price trajectory to 2030. This will help sustain investments in high capital, low carbon technologies (renewables and new nuclear).
- However, we are also concerned that a CO2 tax is likely to deter investment in clean coal technology with carbon capture & storage.
- Electricity market should operate first and foremost in the national interest. As the TUC has argued in response to previous energy consultations, this can best be served through an independent Energy Agency.
- The current review makes no reference to the UK's coal reserves. Indigenous coal production should be recognised as having the potential to meet a significant amount of future energy demand.
- Under current reforms, increases in domestic energy prices will increase fuel poverty.
- The EMR offers no assessment of the skills and training investment needed to match its ambitions; nor how a workforce strategy for new energy infrastructure would fit within the much wider infrastructure challenge the UK faces in the next decade, variously assessed at some \$450bn. Decisions elsewhere in Government to reduce skills funding and increase university tuition fees may well have an adverse impact.

- As Project Discovery noted (para 3.50), the UK is "gearing up for an unprecedented deployment of new technologies within a very short space of time. Additional barriers to rapid deployment of low carbon technologies are availability of skills and the establishment of supply chains."

TUC RESPONSE TO EMR CONSULTATION QUESTIONS

Current Market Arrangements

Q1. Do you agree with the Government's assessment of the ability of the current market to support the investment in low-carbon generation needed to meet environmental targets?

Yes.

From our experience the current market is not delivering the investment required. New sources of investment and new generators are needed. It's not at all clear where this money will come from, or how it will be allocated across the new energy portfolio.

The consultation calls for at least £110bn in new generation and transmission assets in electricity - over double the rate of the last decade. But the scale of the investment challenge supports the case for a government-led, coordinated and large scale initiative to 2020, underpinned both the resources of a well funded Green Investment Bank, and by other Government instruments, such as funding for four CCS projects. As a matter of high priority, details of the GIB should be published in Budget 2011.

Apparently, the Big 6 utilities "may struggle to invest in low-carbon generation at the scale and pace required to meet the UK's targets. " But about a third of the new investment is needed for offshore wind, with developments expected from companies outside the "Big 6", like DONG Energy, Vattenfall and Statoil. Meanwhile, CCS projects are held up for want of certainty and effective decisions on public funding and a CCS levy.

Q2. Do you agree with the Government's assessment of the future risks to the UK's security of electricity supplies?

The current market will not deliver on the Government's objectives for security of supply and affordability for consumers.

UK coal reserves - vital for energy security

The current review makes no reference to the UK's coal reserves. There is a passing comment that, "having coal in the mix also contributes to the geographical diversity of our energy supplies²". Otherwise, it is as if our domestic coal reserves do not exist. Given the abundance of proven UK coal reserves and its relative low costs and flexibility to meet fluctuations in demand for power, there is a long-term future for coal in the UK's energy mix.

Last year, the Wicks review³ argued that, "given the importance of supply diversity to our security, it would be foolish to abandon coal ... it must be part of the solution, not as now part of the problem." With major investment in both deep and surface mines, UK coal production "could be sustained at current levels of around 20 million tonnes a year to at least 2025." This finding represents a remarkable shift in energy policy since the 2003 Energy White Paper.

Indigenous coal production should be recognised as having the potential to meet a significant amount of this coal demand. UK coal production has stopped falling at 18-19mtpa; the industry believes the reserve base is capable of maintaining an output of 20mtpa at internationally competitive costs; employment has risen to some 6,000 employees. It is important that generators bidding into the funding mechanism for CCS should be able to demonstrate that their proposals will be technically suitable to burn indigenous UK coal. Coal fired generation with CCS is an essential part of the low - carbon generation mix.

Lack of an energy skills strategy

As Project Discovery noted (para 3.50), the UK is "gearing up for an unprecedented deployment of new technologies within a very short space of time. Additional barriers to rapid deployment of low carbon technologies are availability of skills and the establishment of supply chains."

The EMR makes no assessment of the skills and training investment needed to match its ambitions; nor how a workforce strategy for new energy infrastructure would fit within the much wider infrastructure challenge the UK faces in the next decade, variously assessed at some \$450bn. Decisions elsewhere in Government to reduce skills funding and increase university tuition fees may well have an adverse impact.

Options for Decarbonisation

Feed-in Tariffs

Q3. Do you agree with the Government's assessment of the pros and cons of each of the models of feed-in tariff (FIT)?

Wholesale electricity prices generally follow the price of gas fired generation plus carbon allowances, so there is little fuel price risk facing the gas fired generator. The FIT must be designed to provide a benefit compared with the alternative of an unabated gas plant, which is maintained if either gas or coal prices increase.

Options for Decarbonisation: Emissions Performance Standard

Q12. Do you agree with the Government's assessment of the impact of an emission performance standard (EPS) on the decarbonisation of the electricity sector and on security of supply risk?

No. These proposals do not incentivise the construction of new plant with CCS; they merely disincentivise the construction of new coal fired plant. This will reduce, not increase security of supply.

The TUC has previously opposed the introduction of an EPS due to concerns that a single EPS, not fuel specific, would always weigh more heavily on coal more than gas. We do however recognize that an EPS may be necessary in order to define what is meant by "low carbon generation" in the context of Feed-in Tariffs or Carbon Price Support exemption.

Potential investors in coal fired power plant with CCS need clarity on how the proposed rules will apply to coal plant

and also to gas plant; and the funding rules for CCS demonstration plants.

Q13. Which option do you consider most appropriate for the level of the EPS? What considerations should the Government take into account in designing derogations for projects forming part of the UK or EU demonstration programme?

Current proposals discriminate against investment in CCS for coal plant to a greater extent than justified by the relative unabated emissions. The review needs to provide for a more even playing field, requiring CCS or capture readiness for new gas fired power stations.

An EPS should not encourage gas plant to be built unabated as to CO₂, whilst effectively imposing CCS on coal generation. The consequences include:

- little incentive to invest in coal generation – operators would simply invest in gas with no carbon abatement;
- locking in carbon emissions over the next several decades;
- further weakening of our diversity and security of supply by turning away from our indigenous coal supplies – locking in imported gas dependency; and
- exposing UK consumers to future moves in international oil and gas prices, and possible supply interruptions.

Q16. Do you agree with the proposed review of the EPS, incorporated into the progress reports required under the Energy Act 2010?

Yes.

We anticipate that new coal fired plant commissioned after this review would have to meet a new emissions standard in the light of experience from the first CCS demonstration projects. But to encourage early implementation of CCS, we would urge a relaxation of the EPS standard, to say 150gCO₂/Kwh for new or retrofit plants consented before 2020.

Options for Market Efficiency and Security of Supply

Q19. Do you agree with our assessment of the pros and cons of introducing a capacity mechanism?

Capacity payments are one way to ensure there is sufficient spare power generation capacity to cover downtimes during intermittent renewable supply. We understand the government's concern that there will be insufficient investment in new generation capacity to replace the plants that are due to close. In particular, it is technically feasible for coal with CCS to provide flexible, low carbon spare capacity, but there would need to be capacity payments to compensate for the high capital costs and modest load factors.

Q31. Do you have views on the role that auctions or tenders can play in setting the price for a feed-in tariff, compared to administratively determined support levels: Should auctions, tenders or the administrative approach to setting levels be technology neutral or technology specific?

The TUC commented in its response to Ofgem's Project Discovery⁴ that, "The TUC supports the development of a balanced low carbon energy supply, involving nuclear new build, renewables (both small and large-scale) and both coal and gas with CCS." We would therefore prefer to see the government setting broad limits to prevent any one technology dominating. We suggest that limits consistent with the TUC's preference for a balanced energy policy would involve a spread targeting, say, 30% nuclear, 30% CCS and 30% renewables in the first 20 GW of new power generation capacity.

Q32. What changes do you think would be necessary to the institutional arrangements in the electricity sector to support these market reforms?

We agree that, "the Government needs to ensure a coordinated approach in our decarbonisation policies and institutional reform programme." A greater diversity of institutional investors and generators needs to be drawn into the energy supply, as the EMR⁵ acknowledges. Yet it is unclear which body will manage the complex new funding and market regulations, and manage the "significant risk of either over-paying or of not obtaining the desired level of capacity".

Between now and the White Paper, the Government will define these changes and seek a future institutional framework

which will ensure continued functioning of the electricity markets.

Our response is based on the principle that electricity market should operate first and foremost in the national interest. The TUC approach argues for an independent Energy Agency with the following remit:

- A diverse, low carbon, secure energy supply (clean coal and gas with CCS, renewables and nuclear), with balancing action in the workplace to cut energy demand; supported by
- Market interventions to achieve specific targets, including CO2 emissions, to bring forward investment in new, low carbon/carbon free energy supplies, and to drive innovation and energy efficiency in industry, transport and the domestic sectors.
- A "just transition" model of economic and social change. The drive towards a low carbon economy will bring both opportunities and risks for jobs and skills. Delivering a low carbon shift therefore calls involving consultation at all levels and investment in green jobs, low carbon energy and skills for a resource efficient economy.

Various commentators, among them Dieter Helm⁶, have questioned whether the current energy market is the most effective way to achieve secure, affordable and low carbon energy. Helm argued that: "In order to translate a set of piecemeal changes into a coherent new energy policy framework, the institutions need to be recast. An Energy Agency should be created and given the task of meeting security of supply and climate change objectives set by DECC."

Responsibility for various aspects of energy policy is cross-departmental (eg the Treasury lead on CO2 pricing, DECC lead on the EMR). Skills issues span various departments and agencies. Consultative bodies and bespoke Offices deal with renewables, coal, nuclear, CCS. Agencies provide advice and investment support such as the Carbon Trust and Energy Saving Trust. Each is the focus of lobbying groups and policy strands.

An obvious solution to this array of sometimes overlapping bodies and instruments is to bring them together in a single delivery body - an Energy Agency. The General

Council supported an independent energy delivery body in its initial response to the Government's Energy Review 2006. We argued that the UK's liberalised energy market lack the foundations on which to deliver the massive new investment required in low carbon and carbon-free energies. The multi-decade time frames for new carbon capture or nuclear build are well beyond the perspective of the present energy market.

A new institutional arrangement is required, such as an Energy Agency, tasked with directing and coordinating energy policy. Its remit would be to secure energy supplies within the agreed national carbon budgets.

The current electricity market therefore requires a new delivery model, operating a regulated energy market in the national interest, defined as providing secure, affordable and low carbon energy supply for the long term.

¹ RenewableUK and EU Skills, the Sector Skills Council for the Power Sector, February 2011.

² EMR, page 69.

³ *Energy Security: a national challenge in a changing world*, Malcolm Wicks MP for DECC, 2010, (para. 6.24).

⁴ TUC response, Project Discovery: Options for delivering secure and sustainable energy supplies, TUC, 2009.

⁵ EMR page 38.

⁶ *Credible energy policy Meeting the challenges of security of supply and climate change*,

Professor Dieter Helm, Policy Exchange, 2010.