



Association for the
Conservation of
Energy

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DECC: *Consultation on Electricity Market Reform*

ACE response – March 2011

Introduction to the views of ACE

The Association for the Conservation of Energy is a lobbying, campaigning and policy research organisation, and has worked in the field of energy efficiency since 1981. Our lobbying and campaigning work represents the interests of our membership: major manufacturers and distributors of energy saving equipment in the United Kingdom. Our policy research is funded independently, and is focused on three key themes: policies and programmes to encourage increased energy efficiency; the environmental, social and economic benefits of increased energy efficiency; and organisational roles in the process of implementing energy efficiency policy.

We welcome the opportunity to respond to this consultation.

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Summary

1. The Government's vision for meeting the 2050 carbon reduction target requires that emissions from our homes and businesses fall to around zero, largely through a transition to heating systems that are electrified and supplied by zero carbon electricity. This gradual electrification of heating intrinsically ties the energy efficiency of our buildings to the amount of low carbon electricity required by the UK: the more inefficient our buildings, the greater pressure on electricity supply in future years.
2. As part of the ongoing Pathways Analysis, DECC have produced 16 scenarios that all achieve an 80% reduction in carbon emissions¹. The scenarios highlight that the carbon target can be met with very small levels of increased electricity demand [in one scenario, electricity demand may even reduce] if demand reduction is given a high priority². Reform of the UK's electricity market therefore presents a unique opportunity to integrate the marketplace for electricity generation with long-term demand reduction.
3. Despite this, and the consultation acknowledging that it is vital for energy efficiency to be "recognised, financed and delivered on the basis that it is a power system resource", the proposals within this document fail to deliver this integration. Whilst several mechanisms are being introduced to support returns for investors in electricity generation, there are neither safeguards to ensure that this electricity is needed, nor components that reward those seeking to reduce the overall level of electricity demand. The optimal solution for the UK would be for an investor with £5bn to spend to use it to reduce the need for additional generating plant, helping homes and businesses save money in the process. The proposals within the consultation instead ensure that the investor finds a better return in developing additional generation capacity, at a higher net cost per tonne of carbon saved. Demand reduction is the resource that can best meet the three policy objectives outlined (security of supply, decarbonisation, and affordability). Yet the opportunity for it to play a key role is being missed.
4. Specifically, the Electricity Market Reforms must include two elements:
 - a. **Reward for permanent electricity demand reduction**

Whilst the proposals may be sufficient to promote demand response measures, they will not encourage permanent demand reduction solutions. In the same way that generators shall be rewarded for bringing generation online, they must be

¹ HM Government (2011) 2050 Pathways Analysis – Response to Call for Evidence Part 1

<http://www.decc.gov.uk/assets/decc/Consultations/2050/1343-2050-pathways-analysis-response-pt1.pdf>

² Scenarios 2, 3, 12 and 15 all result in electricity demand increase by less than 20%.

rewarded for taking demand off-line. A FIT must be paid to any energy service company that reduces electricity demand, in turn reducing the need for additional supply. This will help the UK meet its Obligations under the Energy Services Directive to remove “those incentives in transmission and distribution tariffs that unnecessarily increase the volume of distributed or transmitted energy”, and ensure that no more electricity generation is developed than is needed.

b. Reward for permanent non-electricity demand reduction

Given the likely electrification of heating in our buildings, reforms should reward suppliers of energy saving services for reducing future electricity demand. Such long-term demand projections will be taken into account when setting capacity margins, and so it is only right for demand reductions in non-electric fuels to be rewarded for negating future capacity increases.

Without this inclusion, the proposals have the perverse result that reducing the heating demand of a property will only be rewarded once that heat demand has been connected to the electricity grid: immediately necessitating this additional capacity. This is entirely backward thinking: requiring additional capacity to meet a demand that could have been reduced to negate the capacity requirement.

5. As with other policies that have emanated from DECC (including FIT and the RHI), the proposals smack of a lack of integration between supply and demand, failing to deliver the very thing that they purport to achieve: the creation of a policy suite that ensures the low carbon electricity supplies that we *need* in the most affordable way.

Answers to Specific Questions

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

6. Whilst the risks identified by Government exist to some extent, no attention has been given to the role that demand reduction can play in reducing the requirement for additional generating capacity and mitigating these risks. This is a serious oversight that must be rectified. The most recent iteration of the Pathways work published by DECC³ illustrates that the carbon reduction targets can be met securely where electricity demand reduces rather than increases.

Q19. Do you agree with Government’s preference for the design of a capacity mechanism:

³ HM Government (2011) 2050 Pathways Analysis – Response to Call for Evidence Part 1
<http://www.decc.gov.uk/assets/decc/Consultations/2050/1343-2050-pathways-analysis-response-pt1.pdf>

- a central body holding the responsibility;
- volume based, not price based; and
- a targeted mechanism, rather than market-wide

7. No. Firstly, the plans as set out do not reward the reduction in electricity demand that may negate the requirement for additional supply. Whilst demand-side response may be able to compete, the permanent reduction in electricity demand will not materialise. Through the suite of policies, additional generation will be rewarded – permanent demand reduction will not be. This must be addressed, either through the use of the capacity mechanism or, ideally, a FIT provided to energy service companies that reduce electricity demand.
8. Secondly, the Government's preference does not reward investment in demand reduction in sectors currently not supplied by electricity, but which will likely be electrified in the coming years. Government will likely set the level of capacity on the basis that household energy consumption will be largely electrified in the coming years. Suppliers of energy saving services that reduce this level of demand should be able to bid in to the system and be rewarded in the same way as generators.

Q23. 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? Will the preferred package of options allow these technologies to play more of a role?

9. A properly designed capacity mechanism that allowed the suppliers of energy saving services to be rewarded for reducing long-term electricity demand would have a significant impact upon energy efficiency, fully integrating the markets for energy supply and demand reduction.
10. In contrast, the proposals presented will have limited effect on energy efficiency. Perversely, reducing the heating demand of a property will only be rewarded once that heat demand has been connected to the electricity grid, already necessitating this additional capacity. This is entirely backward thinking: requiring additional capacity to meet a demand that could have been reduced to a point that made the capacity redundant.

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