## **NHS** Purchasing and Supply Agency

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For the attention of: Ian Marlee / Kersti Berge

20<sup>th</sup> November 2009

Dear Ian/Kersti,

## Ref: Project Discovery – Energy Market Scenarios Consultation

I am writing to you jointly on behalf of the NHS Purchasing and Supply Agency and the Pan Government Energy Project, headed by the Office of Government Commerce.

The public sector bodies represented by the Pan Government Energy Project have a joint annual consumption of 18TWh of electricity and 29TWh of gas. With a total public sector spend of approximately £3 billion per year, the findings and conclusions reached by the project are of utmost importance.

Following the publication of the "Project Discovery" consultation, please find attached our 'response to the questions posed.

Whilst we welcome the initial findings of Project Discovery, we are aware that this is the first stage in what will be a substantial body of work. We look forward to supporting the project as it moves forward.

Please do not hesitate to contact either myself or Charles Redshaw, Head of Commercial Delivery at the OGC (<u>charles.redshaw@ogc.gsi.gov.uk</u>) if you should have questions or wish to follow up on any of the points we have raised.

Kind regards

Claire Gibney Category Specialist - Energy <u>claire.gibney@opasa.nhs.uk</u>. 01189 808 778



An executive agency of the Department of Health

## Project Discovery Energy Market Consultation

Response On behalf of: NHS Purchasing and Supply Agency/OGC

	Approach and Assumptions:
Question 1:	Please provide comments on our approach of using scenarios and stress tests to explore future uncertainty, and as a basis for evaluating policy responses.
Response:	Good approach – allows for different events to be considered in terms of impact on GB
Question 2:	Are there other techniques for analysing uncertainly that we should consider?
Response:	An addition to this approach could be to look at probabilities of outcome/event.
Question 3:	Do you agree with how we measure the impacts of our scenarios and stress tests?
Response:	<ul> <li>Yes, to the measurement of the scenario, however we believe that the full impact of outcome may need further investigation. Examples of areas which we believe which could provide further analysis include</li> <li>Hard cost/value</li> <li>Business confidence</li> <li>Market volatility (not averaging)</li> <li>The impact on GB PLC</li> </ul>
Question 4:	Do you agree with our key scenario drivers and choice of scenarios?
Response:	Yes – however a little simplistic, although we recognise the complexities when producing models. For example is it likely that all global economise will lift out of recession at the same time?
Question 5:	Do you believe our scenarios sufficiently cover the range of uncertainty facing the market and hence cover the areas where future policy responses maybe required?
Response:	The scenarios which have been presented do not cover the extremes of either an under or oversupply position. For example the expectation of oil at \$130 rather than \$200 or \$50.
Question 6:	Do you have any specific comments on scenario assumptions and their internal consistency?

Response:	Yes, however the assumption is that the global /European markets always operate rationally to investment signals. The scenarios ignore the possibilities of nationalist protective behaviours.
Question 7:	Do you agree with our methodology for modelling gas and electricity supply/demand balances?
Response:	The modelling does not appear to reflect the seasonality/ daily flow rates. The models would therefore benefit from further development which would move away from the more simplistic annual averaging which in itself will not provide the stress points within the scenario models and thus potentially miss key findings
Question 8:	Do you agree that LNG is the likely medium – long term source of "swing gas" for the European market?
Response:	Yes – however the position of seasonal storage and price sensitivity should also be considered

	Scenario Analysis:
Question 1:	Do you have any observations or comments on the scenario results?
Response:	Do the results take into account daily volatility in market pricing? High levels of daily volatility will have a effect on investment decisions and have a significant adverse impact on commercial energy users which would not be apparent from averaged data.
	Example – high generation capacity with low or zero marginal cost. This would probably have a greater effect under the two green scenarios - consideration of generating at zero or negative marginal cost for periods of time– how would this influence an investment decision and balancing charges for consumers?
Question 2:	Do you agree with our assessment of what the key messages of the scenario analysis are?
Response:	We agree with the outputs of the scenarios. However although the scenarios look at specific events they are less clear on the impact on GB PLC - the key and seminal point appear to be "at what cost" and within this document this outcome is not made clear. At this stage it is unclear of the impact and implications for GB consumers be it domestic and commercial
Question 3:	Are there other issues relating to security and sustainable energy

	supplies that our scenarios are not showing?
Response -	Planning controls and building consent and the impact of other sustainable generating methods such as Bio and wave technology
Question 4:	To what extent do you believe that innovations on the demand side could increase the scope for voluntary demand side response in the future?
Response:	Innovations such as smart metering can help incorporate additional players into demand side response auction however at what price. Compensation and ability to responds both need to be taken into consideration. Having looked at the results from the interruptible auctions the appetite to offer demand side response is limited – An extremely robust, fair and transparent mechanism would need to be in place to manage the process and compensation for response.

	Stress Tests:
Question 1:	Do you agree that our stress tests are representative of the types of risk facing the GB energy sector over the next decade?
Response:	Yes – however the volume/description would be wider. We would suggest that consideration be given to the replacement of the Title of the specific test to an effect of a certain outcome. For example instead of the title of a Bacton Outage it would be the effect of gas curtailment of % of mcm. This may give greater transparency over volume effect and allow for all or nothing modelling.
	The period /duration of stress test may also be an area which we feel may require greater considerations in order to be more reflective.
	For example there is relatively little of no wind in a period of high pressure -however the impact of this would be more likely to be 3 to 4 days, than the one day period shown
Question 2:	Are there future stress tests that you think should be considered?
Response:	Possible scenarios of competition based on time scales of countries coming out of global recession anti competitive practises etc
	Multiple outages due to common faults, in particular the Nuclear plant fleet

Question 3:	Do you agree with the assumptions behind our stress tests?
Response:	We may need greater granularity of detail to be able to understand what volume is arrived at from interruptible contracts and what form enforced firm load shedding.
Question 4:	Do you have any views on the probabilities of theses stress tests occurring?
Response:	The one true probability is that something will always happen. However by removing the Title of the individual stress test and replacing them with an event which is more generic it would then be possible track historic data to provide probabilities.
Question 5:	Do you agree with how we have modelled demand curtailment in response to constrained supply?
Response:	The concern on the model is the amount of interruptible I & C which has been used especially in the gas scenarios – is this based on current or post October 2011 figures.
	Demand side response – on what basis are these figures derived – there is some capacity in I & C which would not come off the system at any cost voluntarily
Question 6:	Do you have any other comments on our stress tests?
Response:	The stress tests have examined the supply / demand effects of these situations, however it would also be useful to examine the impact of these in terms of costs for consumers (domestic and commercial) as while the immediate impact of some of these could be short lived they might have much longer lasting effects on the market and thus energy consumers