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Malcolm Arthur
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16th December 2009

Dear Malcolm,

National Grid Electricity Transmission System Operator Incentives – Initial Proposals Consultation & Development of Constraints Forecast for 2011/12

A response to the questions raised in the Initial Proposals Consultation is provided in an appendix to this letter. Appendix 2 provides a response to the addendum published on a constraint forecast for 2011/12. These comments are provided on behalf of all of the International Power/ Mitsui assets in the UK.

Below are our principal thoughts on the Initial Proposals and the 2011/12 Constraint Forecast.

We appreciate the level of detail provided in the consultations and consider the changes to the process to be an improvement on previous years. We note that the initial recommendation was for a one-year unbundled 'constraints' scheme and a two-year bundled 'non-constraints' scheme. Generally, we would prefer a single-year fully bundled scheme due to the forecasting uncertainty over the cost drivers and the interaction between costs. We agree with the position in the Initial Proposal that overall constraint costs cannot be reliably forecast two years ahead as the information on outage patterns is not fully available and consider this reason enough not to develop a two-year scheme. There is nothing in the addendum consultation on the 2011/12 Constraint Forecast to lead to a change in this opinion. However, if a multi-year scheme is adopted we consider that the format of two single year schemes with reward/penalty realised each year to be the most appropriate method.

The constraint cost forecast of £477m for 2010/11 is a concern given the change this represents on the forecast out-turn for 2009/10 and the large effect this will have on BSUoS. It seems that the assumptions underlying this forecast are subject to a large degree of uncertainty (including upside risk) and it may be appropriate to develop adjustments to prevent windfall gains.

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On a wider note, the modelling undertaken for the Incentive Scheme clearly demonstrates the wide range of potential cost outcomes (and therefore BSUoS charges). There is substantial uncertainty over BSUoS charges and we would encourage NG to publish more frequent updates to its BSUoS forecasts. The quarterly updates at the Operational Forum are welcome but a monthly forecast of BSUoS would represent an improvement and particularly assist small suppliers (who may lack sufficient analytic resource to develop their own internal forecast).

If you have any questions on our response then please do not hesitate to contact me.

Yours sincerely,

Andy Rimmer
Trading Analyst

Appendix 1

1 Have all cost drivers for Energy, Reactive Power, Black Start and Transmission Losses been captured and correctly identified as being within or outside National Grid control?

The cost drivers have been clearly identified.

2 Have all the cost drivers for Constraints been captured and correctly identified as being within or outside National Grid control?

The cost drivers for constraints have been correctly identified.

3 Is historic market length a suitable proxy for future market length?

There are difficulties extrapolating from historic market length to determine future market length for two reasons. Firstly, the volatility seen in recent years means that it is difficult to establish what is the 'correct' figure; secondly, the structure of the market is changing (identified in the proposals through the analysis of wind) which is likely to affect NIV. However, a return to pre-recession levels for NIV is a reasonable assumption.

4 Do you agree with the conclusions we have reached with respect to the observed changes in NIV since BETTA go-live? If not, why not?

The comments on the changes in NIV are correct and the assumption that NIV will return to the average level of 200MW long seems reasonable.

5 What do you believe is the impact of wind on market length at this time; how do you see this varying as wind penetration increases and what do you believe are the key drivers? What additional analysis could be carried out to determine the current and / or future impacts?

It seems likely that, given the characteristics of wind, a certain volume will always be spilled. However, over time forecasting techniques should improve which may limit the impact of the increase in wind capacity. A key driver is likely to be the extent to which wind farms form part of a large portfolio (the effects of any internal policy will be magnified). In order to assess the future impacts NG could canvass opinion from some of the larger vertically integrated organizations in order to determine their likely behaviour.

6 Do you agree with our base case scenario for NIV? If not, which scenario should be used and why?

We agree with the base case for scenario for NIV.

7 Are there any other factors or scenarios that you believe should be considered in deriving a NIV forecast?

It seems reasonable.

8 Do you believe that installed wind capacity will increase as indicated? If not, please indicate how you believe the rate will change and why.

The assumptions for 2010/11 of 100MW increase per month are reasonable.

9 Do you believe that nuclear generation will maintain its current level of availability?

The current availability of the nuclear fleet is high in the context of an ageing fleet. The recent past has seen much lower nuclear availability and perhaps this factor should be considered (such as weighting differences between years, e.g. giving greater weight to the improved performance in 2009).

10 Do you agree with the assumptions made in producing a frequency response volume forecast? If not, please indicate why not.

The use of the 12 month rolling average seems reasonable, particularly given the volatility that the data indicates for 2009.

11 Do you agree with the assumptions made in producing a fast reserve volume forecast? If not, please indicate why not.

The assumptions are reasonable and an increasing trend is to be expected given the increase in wind penetration.

12 Do you agree with the assumptions made in producing a reactive volume forecast? If not, please indicate why.

The assumptions are reasonable.

13 Do you agree with the assumptions made in producing a demand forecast? If not, please indicate why not.

The assumptions are reasonable.

14 Do you agree that the relationship between the volume of margin actions and market length is an appropriate input to the model?

Yes, although given the wide range in the margin actions (in MWs) for any given level in NIV it is not clear that this will necessarily increase the accuracy of the model.

15 Do you believe that wind generation will displace conventional generation behind key boundaries? Do you believe that conventional generation behind constraint boundaries will stop running?

Whilst wind will displace conventional generation to a certain extent it is not necessarily the case that this displaced generation will be behind key boundaries as the self-dispatch of conventional generation depends on the relative fuel prices across the country. It may be necessary for NG to re-dispatch plant via the BM in order to reduce conventional generation behind key boundaries.

Economics will determine whether plant behind a key boundary will stop running if it is displaced (e.g. the start-up costs). Should power prices be pushed low enough the plant will stop running.

16 Do you have any comments on the assumptions made in producing a margin volume forecast? Are there any other considerations that should be included in the margin volume assumption?

Whilst the assumptions used are reasonable they do indicate the wide range of error to which any forecast will be subject and ultimately the substantial effect this can have on NG achieving the incentive scheme targets.

17 Do you agree that the Argus forward price values are an appropriate measure of wholesale prices over the forecast period? If not, please indicate why not.

Yes.

18 Do you agree that Bloomberg is a suitable source for Carbon prices and the Euro to Sterling conversion rates used within the forecast? If not please indicate why not.

Yes.

19 Do you agree with the assumptions made in producing a BM energy price forecast? If not, please indicate why not.

Yes.

20 Do you agree with the assumptions made in producing a BM Response price forecast? If not, please indicate why not.

The assumptions seem reasonable but again there will be a wide range of error in any actual out-turn (as indicated by figure 39).

21 Do you agree that a 12 month average of the prices for Footroom is a reasonable assumption? If not, please indicate why not.

It is not clear that this is satisfactory given NG's recent contracting strategy for FFR overnight during summer 2010¹. This will affect the volume that must be sourced from the market and therefore the price that will be paid. This should be further investigated for the development of the final proposals.

22 Do you agree with the assumptions made in producing a Fast Reserve price forecast? If not, please indicate why not.

The assumptions are reasonable.

In figure 42, concerning the bid prices, it is not clear why data from 2009 is excluded (although this would have minimal impact).

23 Do you agree with the assumptions made in producing a Margin price forecast? If not, please indicate why not.

Yes.

24 Do you agree with the assumptions made in producing a Balancing Services price forecast? If not, please indicate why not.

Yes.

25 Do you have a view on the future trend of STOR contract prices?

Given the increasing requirement for STOR volumes and the need to attract new providers, it seems likely that STOR contract prices will rise.

26 Do you have any further comments regarding this forecast or the assumptions made in its development?

The modeling process has used a series of reasonable assumptions; however, the range of outcomes is so large that it demonstrates the difficulty in producing a reliable forecast.

27 Do you have any comments on the background and assumptions made in constructing the constraints volume forecast?

It is clear that there is a significant degree of work on the transmission network in 2010/11. The assumptions used in the model do not seem to reflect the experience of constraint costs in 2009 to date; it should be noted that the forecast for 2009 included very high constraints yet costs have not out-turned near the forecast. This uncertainty should be factored into the background assumptions.

In particular, the Thames Estuary constraint cost seems to rely heavily on the Fr-UK interconnector exporting to France. Whilst it is difficult to use anything other than current curve prices to indicate the direction of the flow a change in the relative prices would have a substantial effect on NG achieving its target without any activity on its part. Perhaps some consideration should be given to potential adjustments that could limit windfall gains/losses, e.g. a periodic correction allowing for the direction of flow indicated by short-term prices.

28 Do you have any comments to make regarding the assumptions made in constructing the constraints price forecast?

¹ http://www.nationalgrid.com/NR/rdonlyres/934732B4-F146-4280-AD7F-EC8488AE2B5F/38467/FFR_Post_Assessment_TenderReport_Dec09_Update.pdf

The price assumptions are reasonable but once more there is a large degree of volume and price uncertainty regarding constraints.

29 Do you agree with the methodology used to forecast the second year of a two year scheme for all components except constraints?

It seems that there is little additional information that would require changing the assumptions used in forecasting 2010/11.

30 Do you have any suggestions for other factors that should be taken in to consideration for the second year?

No.

31 Do you agree with the benefits outlined for the unbundling of constraints costs and the remaining balancing cost components into separate incentive schemes? What additional issues need to be considered?

The benefit seems to be based principally on the lack of control over constraint costs- section 497 states that there could be a large windfall gain within a bundled scheme and implies that a 10% variation in constraint costs (~£48m) could arise through no action by NG. However, if we apply this logic to the unbundled scheme for constraints it would still produce a windfall gain of £5.2m rather than the £12m windfall gain for a bundled scheme (all other things being equal). Whilst, obviously, this is a potential improvement it does prompt the question of how to limit windfalls in an unbundled scheme for constraints.

32 Do you agree that there is a misalignment in internal and external SO incentives caused by different scheme durations?

Whilst there is a difference in the alignment it is not clear why this is necessarily a problem.

33 What option could or should National Grid use to develop a 2 year constraint forecast?

A two year constraint forecast is a difficult task to perform accurately.

34 Do you agree with the benefits outlined for the implementation of a two year incentive? What do you believe the additional benefits and / or drawbacks are of a multi-year scheme?

A two-year is only to be preferred if it leads NG to invest in order to reduce costs; a stronger argument would be made for a two year scheme if specific proposals were made about projects NG would implement in order to drive down costs.

Multi-year schemes (particularly partially unbundled) introduce a degree of administrative complexity and do not necessarily lead to a sharper incentive. The uncertainty of the forecasts is identified at several points in the consultation paper (and in this response), and market developments could make the target for the second year easy/difficult to achieve. There is a trade-off between this risk and the potential benefits (which are not quantified in the consultation).

35 Do you agree with the introduction of a Reactive Index Adjustment based on actual default reactive power prices? Do you agree with the form of this adjustment as presented here?

Yes.

36 Do you feel at this stage that there is a case for any additional adjustment terms to be introduced at this stage?

No.

37 Do you believe that National Grid should include an allowance for fault outage costs within the constraint forecast? Do you agree with the level set?

It seems appropriate that an allowance is made for fault outages when this is, by definition, uncontrolled by the SO. Using the average of the cost of fault outages since BETTA go-live is a reasonable approach; although perhaps more information is required on whether these costs are skewed towards any one year.

38 Do you agree that Transmission Losses should remain bundled with the other components of BSIS, excluding constraints?

Yes, although ideally it should remain bundled in a scheme including constraints.

39 Do you agree that the Transmission Losses Reference Price should remain a fixed value for the duration of the scheme?

In a multi-year scheme it may be necessary to change the reference price should there be a sizeable change in the market price.

40 Do you agree with the criteria used to develop the incentive scheme design? If not, what additional points should be considered?

Yes.

41 For the unbundled constraints scheme, do you agree with the parameters used? If not, what parameters should be implemented? Please explain your rationale for any changes.

The range of parameters is reasonable.

42 Do you agree with the implementation of two single year incentive schemes for all balancing costs except constraints? Do you agree with the parameters used? If not, what parameters should be implemented? Please explain your rationale for any changes.

We prefer a single-year bundled scheme given the difficulty in accurately forecasting costs.

The parameters employed are reasonable.

43 Do you agree with the parameters used for the one year fully bundled scheme? If not, what parameters should be implemented? Please explain your rationale for any changes.

Yes.

44 Do you agree with the development of a two year fully bundled incentive? How should the constraint cost forecast for year two be included in the incentive target e.g. agreed post scheme or some form of constraint forecast developed pre-implementation?

We do not agree with a two year fully bundled scheme because we do not consider that constraint costs, or indeed non-constraint costs, can be accurately forecast so far ahead. If a forecast is inaccurate then the incentive scheme will not deliver its primary function which is to minimize costs. If constraints costs are to be included then, given the forecasting difficulty, the most reasonable approach would be to develop a constraint forecast for the second year post-scheme. Of course, if the scheme relies on a post-scheme forecast then it is not clear how this differs in substance from a one year unbundled scheme.

45 Do you agree with the scheme options presented here for implementation from April 2010 and what is your preferred option? If not, please provide an explanation as to why and any alternatives that you would like to see developed.

We would prefer a fully bundled single year scheme because the uncertainty surrounding costs is so great that it is not clear that a multi-year scheme would be accurate enough to deliver reduced costs.

46 What impacts will a change in incentive scheme structure and consequential changes to the BSUoS data have on your IS systems?

The manner in which we process the BSUoS data will have to change requiring time and resources. It is important that if changes are to be made that a sufficient lead time is provided and the specification of the data files is indicated at an early stage.

As indicated in the consultation, there is a proposal to introduce Locational BSUoS which will also require changes to our IS systems. Where possible it is important to minimize the changes to the BSUoS data and so unnecessarily increase costs incurred to address the changes.

47 Question 47: If your systems will be impacted by a change to scheme structure what information will you require and in what timescales in order to accommodate the change?

We require a clear specification of the new files and once indicated this specification should not change. The three month timeframe indicated in the consultation should be sufficient to alter our systems.

48 Do you have any comments regarding the information provided within this consultation?

The level of detail provided is welcome.

49 Do you have any comments regarding this consultation process? What improvements would you like to see in future years?

The process has been well run and is a good template for the process in future years.

Appendix 2

Question A: Do you agree with the:

- development of a two year incentive that includes constraint costs?
- the proposed constraint adjusters be developed?
- the development of a fully bundled incentive scheme?

Whilst we agree with a fully bundled scheme we do not consider that a sufficiently accurate forecast of constraint costs can be produced for 2011/12 given that, as carefully detailed in the addendum paper, only an incomplete data set is available and a high degree of speculation is required to produce any forecast. We would prefer a one-year fully bundled scheme.

The development of adjustments is necessary given the wide range of uncertainty. However, the recommendation on price adjustments is, effectively, a re-forecast of constraint costs and so it seems no real improvement on a one year forecast. The suggestions for volume-based adjustments or outage-based adjustments are insufficiently developed to allow an opinion to be formulated.