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22nd December 2010

By email

Dear Ian,

**RE: National Grid's Consultation on the Electricity SO Incentives Initial Proposals for
1st April 2011**

Thank you for the opportunity to respond to this consultation on a new SO incentives scheme. This non-confidential response is on behalf of the Centrica group of companies excluding Centrica Storage. We have keenly followed the development of SO incentives, and note with particular interest the proposal this year to implement major reform of the Balancing Services Incentive Scheme (BSIS).

Our position can be summarised as follows:

- Given that the development of the proposals has yet to be completed, the timescales do not seem to allow for any material change in the current proposals for an April 2011 implementation.
- Centrica therefore supports an approach of rolling over the status quo (with updated parameters if required) for a one year period.
- This would be followed by a revised scheme for a 12 month period to gather experience and a baseline, ready for the implementation of an enduring solution aligned with the next price control.
- This approach would allow time to embed the RIIO principles and outcomes from project TransmiT and the essential incentives framework.

- We welcome the effort that has been put into improving the modelling processes but we need access to the underlying formulae of the models to be able to assess the proposals
- We remain unconvinced of many of the purported benefits from increasing the scheme length at this juncture and would like to see further evidence

The remainder of this response provides some general comments on the proposals considered so far, along with some more detailed answers to the individual questions.

Information / transparency

Centrica's 2009 SO incentives response highlighted the lack of information available to participants to enable them to arrive at an informed decision on the BSIS forecast. We note that there has been an improvement this year in the explanatory text and this will aid understanding of National Grid's modelling techniques. Nevertheless, we do not think this goes far enough and we believe a way should be found to publish all models and input data in a user friendly form which does not compromise confidentiality. Without knowing how the formulae and inputs will translate into a scheme target it is impossible to come to a judgement as to whether the proposals are fit for purpose. To address this we would recommend the development of a technical expert panel (including industry participants) to understand and develop the modelling techniques.

Furthermore, the consultation documents assert on a number of occasions that the incentive scheme, by virtue of its design, improves information transparency. It would be useful to have some specific worked examples as we are finding it difficult to see changes in the design of the scheme that improve transparency. The improvements in the current consultation appear to be more due to Ofgem's intervention and insistence on understanding National Grid's modelling capabilities, rather than changes in the scheme itself.

A two-year scheme

We would find a summary of the evidence showing the benefits of a 2 year scheme useful (e.g. some examples of purchases that it has been unable to make due to the one-year scheme, together with the impact this has had on customers).

Five-year TO incentive schemes and SO internal cost schemes do not seem to prevent entering into contracts or purchasing assets that last longer than five years. Moreover a one year scheme should make this easier because of the annually recurring opportunity to anticipate and provide for long-term costs. If the scheme is longer it could act to delay the inclusion of capital investments until the next price control – as has been seen in the TO incentive schemes.

Finally, we appreciate that the new proposed scheme will reduce administrative burden for Ofgem. We are not convinced that this will be the same for industry if it leads to, for instance, increased difficulties in forecasting BSUoS scheme outturns.

Bundled / unbundled scheme

The scheme is being promoted as a bundled scheme, but much of the commentary in the consultation reads as if it is unbundled with separate incentivisation of cost categories. We would need further insight to come to an informed view on this, and would welcome further discussion with National Grid.

Constraints

Centrica notes that National Grid, in its roles as GB SO and TO, has a very strong influence over constraint volumes. Under the new Connect and Manage rules National Grid as SO has a significant control over SQSS derogations, and can decide the connection date and the split between enabling and wider works for advanced generators.

This has both positive and negative implications. On the positive side it means that National Grid's forecasting capability should be enhanced. However it also means that once set, National Grid's incentive regime could have an undue influence over decisions made in connecting generators. There is a very significant trade-off here between SO and TO incentives which we feel requires some careful thought to ensure any interaction does not give rise to unintended consequences.

With regard to the constraints model, we believe that the categorisation of wind output and energy pricing appears to provide no incentive for National Grid to enhance its predictive capabilities in these areas. Furthermore, Centrica is uncomfortable with a hastily-developed "interim" approach, and would prefer there to be further model development such that National Grid is comfortable that the approach that is suitable.

Incentivisation

We would value some analysis of where the current one year scheme has been effective at reducing costs (as opposed to gradual information revelation and an improvement in Ofgem's ability to judge an over-inflated forecast). We would further value some explanation on how the current proposed design improves on this.

Centrica's concern is that it is not clear what exactly is being incentivised, in the context of a scheme whose costs might well increase for reasons that trade off SO costs with costs in delaying generator connections, carbon benefits of variable generation and TO investment costs. The basic assumption in designing the scheme appears to be that costs will reduce over time, when the scheme should really be looking to optimise costs of moving to a low carbon electricity system. The only output-based measure remains cost reduction against a target. We believe that this reinforces the need to consider these proposals in line with RIIO-T1 and the associated outputs.

Benchmarking

In proposing major reform to SO incentives it would be informative to explore what happens in electricity markets outside of Great Britain – for instance how do other markets approach constraint cost forecasting? In addition, in an era of Connect and Manage and potentially

substantially higher constraint costs we believe that such reviews of SO incentives should be used to develop more innovative ways of reducing constraint volumes.

Consultation questions

- (1) To what extent do you think that the proposed approach to incentivisation, with the use of ex-post data for volatile, difficult to forecast parameters, will result in more appropriate incentivisation of National Grid's system operator activities?

Centrica supports the work that has been done to date to better understand National Grid's modelling. Moving to a scheme which allows certain uncontrollable drivers to be treated in an ex-post way has the potential to reduce windfall gains and losses. However, we have a number of concerns with the current proposals which we feel merit further consideration.

We do not see a major difference between Frontier's Options 1 and 2. In Option 1, the use of ex-post adjustments for, for instance, NIA, requires an understanding of the relationship between NIA and target costs just as it does in Option 2.

In Option 2 the agreement of specific models is more explicit. The emphasis in Frontier's review appears to have been on the model structures and on whether variables should be ex-ante or ex-post, rather than on the underlying equations and statistical relationships. We note Frontier's statement that "*for many of the relationships we have not been provided with the calculation underpinning the estimations used in the model.*"

We believe that stakeholders need to elicit these calculations from National Grid in order for them to be fully reviewed and understood. Given the limited amount of time available we do not believe that there is sufficient time to implement these proposals by April 2011. We would also question whether it is desirable to fix these relationships for two years at this point, in so doing providing little incentive on National Grid to improve the accuracy or transparency of its SO costs forecasting capability in those two years.

We are also concerned that the excessive use of ex-post adjustments will blunt incentives on National Grid to innovate and to reduce BSUoS costs.

- (2) Do you agree with the criteria used by National Grid to assess the extent to which it can forecast or control BSIS drivers? Are there other criteria that you think National Grid should consider?

Centrica agrees that the control National Grid has over cost drivers should absolutely form the basis of whether there is incentivisation. For variables over which National Grid has no direct control, we feel there should still be an incentive to improve National Grid's forecast capability which would feed through positively to better BSUoS forecasts.

However we have some major concerns over the use of predictability as a factor, for the following reasons:

- We note that the scheme does not reward National Grid for accurate cost predictions. If National Grid can forecast a parameter well, the incentive is to get this wrong with a prediction that exceeds out-turn costs. This could be a stronger incentive than that to actually reduce costs.

- Some factors are included for incentivisation solely on the basis of predictability, even if National Grid has little control over them. We accept that National Grid should be broadly neutral on scheme inclusion or not here, but believe that in this case it would be most logical to include this explicitly as a pass-through cost.
- In the same vein Frontier / Ofgem appear to state in places that unpredictable costs are more suitable for incentivisation. For instance where contracts are agreed for over a year's duration, there is an assumption that this currently blunts incentives on National Grid to reduce those costs in the next year (it reduces the incentive to reduce costs in the next contract round). However in essence not entering into the contract makes them unpredictable and they could equally be higher in the next round, and in fact long-term contracts are more likely to secure lower costs in return for certainty.

(3-7) Questions 3-7 concern the categorisation of cost drivers as ex-ante or ex-post.

Our comments are as follows:

- Renewable generation running

Centrica disagrees that this should be an ex-post variable. National Grid states that it has “difficulty in forecasting wind speed accurately as lead-time increases”. This is too vague a statement. Actually wind speed (or wind output) predictability can increase for long lead-times where it is an average over a year for instance. Predictability degrades for days ahead of real-time and improves again at very short periods ahead of real-time.

For the constraints model therefore wind arguably has an advantage over other generators' predictability. National Grid's work on the SQSS and intermittent generation charges suggested that predicting a profile for wind over a year was easier than for thermal stations.

For the margin model we understand that it is the coincidence of wind with peak demand that is important. We accept that this is difficult to predict but we do not accept that predictability cannot be improved.

The fact that renewable generation is difficult to forecast if anything means that a strong incentive should be applied to this area. Centrica believes there is significant room for improvement in National Grid's wind forecasting capability, and hence that this should be a prime candidate for incentivisation. If National Grid does not wish to undertake the forecasting itself it could source this from a third-party and even enter into an agreement which would financially incentivise the third party provider on accuracy

- Largest generation loss

We agree that this is predictable because it is enshrined in the SQSS. We disagree that National Grid has little control over it because National Grid, with the Scottish TOs, is responsible for the SQSS. The influence that National Grid has over the contents of the SQSS is extremely strong – as shown by its very strong conservatism in the fundamental SQSS review. Under current governance arrangements industry simply cannot effect changes without National Grid's support.

We do not think it would be efficient to fix, through the price control, the absolute value of the largest loss, as this would mean National Grid would resist upwards change for that two year period.

- BM pricing / wholesale power price mark-ups

National Grid seems to be willing to be incentivised on BM prices as a cost driver but later in the constraints section seems unwilling. Centrica has interpreted this as a willingness to be incentivised on wholesale price mark-ups to resolve energy imbalances but not on BM pricing behaviour to manage constraints

If there were to be a separation of ex post and ex ante incentivisation on BM pricing, there would obviously be a need to reliably separate out congestion from energy. Despite recent developments on this, the acceptance of BM bids and offers is not always transparent. Would the categorisation for the SO incentive scheme be transparent to industry? Will there be scope for gaming this for the incentive scheme?

(8-13) Questions 8-13 concern the energy models.

Our comments are as follows:

Centrica has detailed its concerns on the treatment of wind generation in some of the models above. In the time available we have not been able to examine the relationships in detail. Our major high-level observations are that:

- relationships – where modelled – appear to be based solely on a regression of historical trends. Given that the transmission system is undergoing significant change we believe that more forward-looking drivers should be used.
- As noted we feel National Grid could do much to improve its wind forecasting, and that its reticence in treating it as an ex-ante estimate is in large part due to National Grid's reliance on its own experience and historical trends in its own in-house datasets – rather than, for instance, buying in wind forecasting experience.
- Similarly for wholesale energy prices, there are providers that will forecast this. We believe that National Grid should explore whether these providers would be prepared to enter in an agreement in which they are incentivised on the basis of accuracy

(14) To what extent do you consider that there exists the potential for windfall profit or loss under the scheme if a single snapshot of the generation outage plan were to be taken prior to scheme start (and used in the models for the duration of the scheme)?

(15) To what extent do you consider that a rolling ex-ante approach to modelling planned generation outages, as notified via Grid Code OC2 processes, is an appropriate mechanism to ensure the modelled outage plan remains representative (and suitable for incentivisation)? What other mechanisms could be considered?

The consultation refers repeatedly to the degradation of OC2 with time ahead of real-time, but provides no data to allow us to assess the materiality of the problem. Therefore it is impossible to make an informed comment on this.

(16) To what extent do you consider that there exists the potential for windfall profit or loss under the scheme if unplanned generator availability is not considered when calculating target costs for constraint management incentivisation?

(17) Do you agree that treating generation faults as an ex-input to [constraint] models is an appropriate mechanism to ensure the modelled target cost remains representative (and suitable for incentivisation)?

We accept that unplanned outages are difficult to predict, especially the timing. However there could be some attempt to model realistic contingencies. Whilst we feel there could be room for improvement, we agree it is a good candidate for ex-post data.

(18) To what extent do you consider that there exists the potential for windfall profit or loss under the scheme if a single snapshot of the transmission outage plan were to be taken prior to scheme start (and used in the models for the duration of the scheme)?

Again, the consultation provides no data on the reliability of transmission outage plan a year ahead for us to make an informed comment.

(19) To what extent do you think that BM price submissions can reasonably be forecast?

(20) What are your views on the use of submitted BM prices Ex-Post as a means of determining target costs for constraint management?

(21) What are your views on the use of a 'pseudo BM price' to apply to contracted BM Units when calculating target constraint costs? To what extent do you agree that the options outlined in paragraph 355 might be suitable?

Again, the consultation does not explain clearly what relationships were examined (what is meant by "the underlying costs/ savings associated by Balancing Mechanism activities"?) and so we cannot provide an informed comment.

(22) Do you agree that National Grid should be incentivised to beat historic constraint contracting performance?

(23) If yes, what in your view is the most appropriate way to achieve this in practice?

We believe that a bundled scheme should incentivise National Grid to reduce costs in the majority of areas. Whether a parameter is ex-ante or ex-post may not be the key determinant – it depends what that parameter is and the real underlying control National Grid has. We agree that contracting is an important tool for beating BM prices. We also agree that it will sometimes – but not always – be difficult to map how future contracts beat previous contract deals.

We would not wish the scheme to be overly restrictive here.

(24) To what extent do you agree with National Grid's views on the need for a cost 'dead-band' under the proposed approach to incentivisation?

(25) To what extent do you agree with National Grid's views on the magnitude of the profit cap and loss floor under the proposed approach to incentivisation?

(26) To what extent do you agree with National Grid's views on the magnitude of sharing factors under the proposed approach to incentivisation? What do you consider to be an appropriate level of sharing factor?

Centrica believes that the profit cap needs to provide incentivisation across the two-year period. We agree that a lower risk scheme should have a reduced deadband. We do not agree that a lower risk scheme should have a higher profit cap.

The rationale appears to be that this increases incentives on National Grid to reduce costs, but we cannot see how there is increased scope to reduce costs if the target is explicitly designed to be closer to the out-turn. Furthermore in the TO incentive scheme the assumption is that low risk should equal lower returns and higher risk higher returns.

It is also not clear to us where the trade-off is between higher sharing factors or higher profit and loss caps? Where is the balance and what is the rationale for increasing each one rather than for instance eliminating sharing but reducing the caps?

The consultation variously mentions 25% and 50% sharing factors and it is not clear which National Grid is proposing for this first scheme. This aside, the numbers appear somewhat abstract with no objective rationale behind the selection of say 50% instead of 40%.

(27) Do you agree that National Grid should be concerned about the potential for parties to influence its performance under the incentive scheme by using information that it makes available to the wider industry?

. BSUoS is a socialised cost and there would be no competitive advantage to attempting to influence the small percentage of costs that go towards incremental adjustments to National Grid's incentive payments. If this really is a serious concern National Grid should set out some analysis to show the possibility, likelihood and materiality of the issue.

(28) Do you agree that the creation of an open, transparent statement describing National Grid's methodology for determining whether model inputs should be treated on an Ex-Ante or Ex-Post basis is appropriate?

Yes but we are much more concerned that the ex-ante and ex-post values, as well as the models themselves, will be non-transparent. As noted above we believe National Grid's concerns around transparency are unfounded.

Furthermore we believe this will make SO Incentive targets unforecastable by anyone but National Grid. This is a serious drawback of the scheme and specifically of its non-transparency. We note that Frontier suggested making some modelling available to industry, as happens for instance with TNUoS.

(29) What are your expectations of National Grid when it comes to the production of an Incentivised Balancing Cost/BSUoS charge forecast?

(30) What are your views on the timing of such forecasts? For example, do you have processes that will be impacted by the timing of publication of an IBC/BSUoS forecast?

We agree that publication of forecasts will be important.

- (31) Do you agree with the concept of (and need for) a Scheme Adjusting Event? If so, what sort of events do you consider it appropriate to adjust for?
- (32) To what extent do you consider that the scheme needs to be able to cope with the 'known unknowns' listed in section 4.4.2? How might the impact of these events be managed?

Centrica agrees with the need to be able to adjust for material mistakes (although we have reservations about whether any party other than National Grid will be able to detect mistakes given the non-transparency proposed). Aside from this we believe that the need and scope for IAEs should be very limited given that the crux of these proposals is that the unforecastable / uncontrollable elements of BSUoS are passed through to the scheme target.

- (33) Do you consider that your systems will be impacted by the proposed change to scheme structure outlined in these Initial Proposals? If so, what information will you require (and in what timescales) in order to accommodate the change?

We do not believe that the currently proposed changes to the incentives scheme would have a negative impact on our systems.

If you want to discuss any element of this response, please do not hesitate to contact me on 07789 579169 or at Ricky.Hill@centrica.com.

Yours sincerely,

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