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Dear Maxine

SMART GRIDS AND UNCERTAINTY

In my letter of 25 September I suggested a possible uncertainty mechanism as a way forward with respect to the treatment of smart grid savings. In this letter I shall set out the key features of such a mechanism.

I should begin by saying that we accept that if smart grid savings can be expected in the RIIO-ED1 period and a reasonable estimate of these savings has not been included in the business plans submitted by the companies, there is a case for making an adjustment to the results of the cost assessment to reflect these savings.

To date Ofgem has not explained *why* it thinks that the benchmarking of forecast costs and savings in other areas of the business can be relied upon to set allowed revenue, but that the smart grid savings fall into a special category that merits a different treatment.

Since the incentives acting on companies with respect to forecasts of costs and savings for smart grids are the same as the incentives acting on companies with respect to other components of its business plan, we assume that Ofgem supposes that the problem is not one of incentives but one of information. In short, smart grid savings will arise from activities that are not presently embedded in the activities of the DNOs and no one knows what the take-up and clustering of low-carbon technologies is going to be and yet this is going to be a significant influence on the opportunities for smart savings.

We see no reason in principle why Ofgem should not make an *ex ante* assumption about the likely savings from the reinforcement category of network investment, provided this is done sensibly. This requires Ofgem to make some simple and logical adjustments.

Firstly, and most obviously, any schemes that are already under construction must be removed from the assessment in their entirety. It would not be efficient for DNOs to abandon a near completed scheme and replace it with a smart solution, so no smart savings can be expected from schemes that are already underway.

Secondly, Ofgem must make an appropriate assessment of EHV benefits. In so doing, the assessment must have regard to the limitations that arise from the nature and scope of the Transform model. The reinforcement of the EHV network and fault level reinforcement will yield smart benefits, but EATL (who developed the model) has made it clear that the Transform model cannot be used to address these elements. Moreover at this voltage level we are talking

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about a small number of high value schemes and the potential for smart solutions will vary significantly between schemes. Therefore, these components must be removed from the reinforcement budget from which the savings implied by the Transform model are being sought and assessed separately on their individual merits. Ofgem has already requested and received the information which would allow this to be done.

Having established an appropriate basis for expected savings at a national level, the nationally available savings must then be allocated proportionately with each DNO's ability to realise the savings. It follows that those with lower reinforcement forecasts would be allocated proportionately less of the expected savings.

These steps would give you a reasonable view that could form the basis of an *ex ante* assumption of the savings available from the reinforcement category for each DNO. We are taking as read in this letter that Ofgem would then proceed to correctly identify all of the smart savings that a company has included in its business plan. (As an aside, Ofgem has failed to do this in Northern Powergrid's case and we have written separately to you to highlight those oversights).

The uncertainty mechanism that we envisage would act on the smart savings that are not in the reinforcement category (i.e. the 'other' and 'smart meter related' categories in your assessment). These categories are especially uncertain. We do not yet know when the smart meters will be installed and which suppliers and which parts of the country will be at the front- and back-end of the roll out process. Indeed, this area is subject to change if a new government reaches a different view of the timetable, or indeed the merits, of the smart metering programme. A moment's reflection suggests that the uncertainty attaching to the benefits of smart meters is far greater than the uncertainty attaching to numerous areas of cost with respect to which Ofgem has previously been satisfied that an uncertainty mechanism is appropriate. There are several of these, ranging from pension deficits to variations in load-related expenditure, but vegetation management and traffic management are examples of uncertainties where Ofgem applied a mechanism to cover uncertainties that were less pronounced than the uncertainty presently attaching to smart grids.

When Phil met Dermot, Dermot asked whether an uncertainty mechanism for smart savings might not be corrosive of incentives. I would agree that such a mechanism is unattractive where the licensee is best placed to manage the risk or where the risk is not material enough to warrant a special treatment. However, the 'other' and 'smart meter related' categories of smart grid savings depend upon outcomes over which we have little or no control and are material in your calculations. I think they therefore satisfy your usual criteria for deciding that an uncertainty mechanism is apt.

Although we have very little knowledge of the scale of the available savings in the 'other' and 'smart meter related' categories today, we should know more at the mid-point in the ED1 period, so we suggest that, at that point, Ofgem should conduct a mid-period review that draws on the evidence of the first four years (where incentives to reveal will have been in play) and uses this to set an *ex ante* assumption for the savings in the 'other' and 'smart meter related' categories that can reasonably be expected in the last four years of the period.

Obviously, the scope of such a mid-period review would need to be set out quite carefully at the outset so that incentives for revelation would indeed be preserved and so that the danger of leakage across boundaries would be minimised.

We could start to develop some thinking around the definition of the scope of such a review if you thought this would be helpful. Indeed, we think that it should be possible to frame this as a licence condition if that would give confidence to all parties.

Please let me know if you would like us to explore this further.

Yours sincerely

A handwritten signature in black ink that reads "John France". The signature is written in a cursive style, with the first name "John" and the last name "France" clearly legible.

John France
Regulation Director