## Domestic Revenue Requirement



## Rate of return based on National Grid Gas RIIO-GD1 proposal

	RIIO GD1		Converted t	Converted to pre tax	
	NG Proposal	Ofgem	NG Proposal	Ofgem	
Cost of equity (post tax real)	7.2%	6.7%	9.47%	8.82%	
Cost of debt (pre-tax real)	3.20%	3.03%	3.20%	3.03%	
Notional Gearing	59%	65%	59%	65%	
Vanilla WACC	4.8%	4.3%	5.77%	5.06%	
Meterig risk Premium			0.75%	0.75%	
Pre tax, real rate of return			6.5%	5.8%	

Ofgem's suggested RAV allocation methodology	National Grid Comments
1. An allocation that preserves the current relationship between tariffs for domestic and I&C metering services	We do not support the use of this methodology as it is inconsistent with the domestic revenue equation set out in Ofgem's July Decision document. We have assumed that I&C assets will remain in service beyond 2019 as they are less affected by the smart meter mandate. The calculation under this methodology would either fail to allow for the depreciation of the domestic RAV by 2020 in line with Ofgem's analysis of domestic metering or would imply that tariffs in I&C metering should be set unsustainably high to accommodate an artificially rapid (and unrealistic) depreciation.
2. A pro rata allocation of the 2012 metering RAV based on the current depreciated replacement cost values of the domestic and I&C meters	A fundamental analysis against this method would require a detailed assessment of the current replacement costs for all types of meter assets. There is a risk that this analysis would need to be subjective since it is difficult to get accurate data for the replacement costs for some of the more complex I&C sites where replacement of the installation is undertaken on an infrequent basis with procurement prices specifically provided only at the time of purchase and design and labour costs in accordance with technical standards then prevailing. As an alternative, the replacement cost might be estimated from historic values where these are available along with discrete new quotations where historic data is inappropriate for this purpose. There may be difficulties in obtaining independent validation of the RAV calculation given the number of assumptions and cost predictions implicit in this method.
3. A pro rata allocation of the 2002 metering RAV based on the depreciated replacement cost values of the domestic and I&C assets in 2002, and rolled forward separately using the same depreciation and capitalisation policies adopted for the metering RAV as a whole	This allocation was used as the RAV split when formula (business) rates were removed from the metering price control. It has therefore been subject to some scrutiny by Ofgem in the past. Although this represents a precedent for the use of methodology, the choice of methodology for that purpose was not informed by the broader policy issues relevant to separating the two parts of the business for price control purposes. Furthermore, the date of 2002 would have been practically contemporaneous at the time of carrying out the analysis for that decision, whereas it is not contemporaneous for the present purpose. This methodology is readily available and we have therefore used it in this document to illustrate the effects and sensitivity of the calculations to variances in other factors.
4. An I&C RAV consistent with the depreciated replacement cost value of I&C meters, taking into account realistic depreciation lives, leaving the residual RAV with domestic	At its heart this method requires the same assessment as methodology 2 and is thus similarly subjective. The difference with this method is the replacement costs for domestic meters would not need to specifically determined because the domestic RAV would be calculated by subtracting the I&C RAV from the total metering RAV.
5. An allocation consistent with tariffs for I&C metering services being at a competitive level, neither too high to compete nor so low that competitors will be unable to compete, leaving the residual RAV with domestic metering.	Ofgem's proposal focuses on the future net revenues that might be available from the I&C business. However, a full analysis of all future revenues would require considerable speculation regarding the potential growth of National Grid's I&C business, the costs for such investments and the associated costs for its operations. A simplifying alternative to evaluate the value of the current RAV takes only existing assets with I&C rental rates set at a level to mitigate premature removal of those assets. Whilst many assets do serve for their full expected life (based on an average of 20 years in service) we are seeing increasing competitive displacement in this sector so the assumptions may slightly overstate the remaining asset lives. Despite this we believe it is a 'fair value' approach to valuing those already existing I&C assets, it avoids the need to speculate on future investments and we believe provides a fair assessment and less subjective view of the current I&C metering RAV.