APPENDIX 3:

SONI WACC RESPONSE PAPER
Introduction and Purpose

The opportunity cost of capital, and in particular the overall financeability of the licensed activity, is of particular importance in the overall determination of the price control. This note examines firstly the WACC proposals and suggests some necessary adjustments but concludes that the WACC can only address so much in the SONI context and that this must be supported by broader measures which support financeability across the model.

SONI welcomes the opportunity to respond to the Utility Regulator’s proposed WACC as outlined in the consultation paper. This response is made on behalf of both SONI’s Transmission System Operator (TSO) and Market Operator (MO) businesses. SONI submitted for a real pre tax WACC of 6.7%. This submission was supported by an independent report from Cambridge Economic Policy Associates (CEPA).

The Utility Regulator’s proposal for a WACC of 5.45% is not an appropriate regulatory determination of the cost of capital for SONI over the forthcoming price control period. Indeed it is below that for a traditional asset based utility, below recent regulatory precedent and does not adequately incorporate a number of key SONI characteristics which mean that SONI faces a higher cost of this position in this paper.

It is important that the WACC outcome, along with other elements of the price control, provide SONI with an efficient level of revenue in order for it to be a financially sustainable business. The cost of this is very low in the short term – a 1% point increase in the allowable WACC would be likely to increase allowable revenues by the order of £100k per annum. However, to neglect this and therefore to put at risk both value adding, and often critical investment, through the absence of a provision of an adequate return to the investor will give rise to much more significant longer term negative cost for consumers.

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1 It was stated in SEM/10/082 that the WACC rate determined as part of SONI’s SO price control would apply to SONI’s MO licence.
2 In the consultation paper reference is made to a report by First Economics. However, this report has not been made public or available to SONI. Therefore, SONI’s response is made in the absence of the details of this report and is solely based on the information and references provided by the Utility Regulator in their consultation paper.
3 Absence of scale, associated absence of access to bond markets, high operational gearing, significant fees as a proportion of finance raised
Arriving at a WACC estimate

The WACC outcome must not only reflect an assessment of the market conditions for each of the building blocks but more importantly it requires regulatory judgement of whether it underpins and supports the financeability of the overall price control. The appropriateness of the overall outcome needs to be examined in addition to the reasonableness of each of the building blocks in isolation. A pure market assessment for the individual estimates of each component may appear, and may well be, appropriate and reasonable in and of themselves but in aggregate lead to a suboptimal regulatory solution.

This is not to say that regulatory judgement leads to deviations from the market data. Rather it involves the flexibility of utilising the full range of market data available. For instance, when the Competition Commission (CC) ruled on the Bristol Water case (August 2010) they selected the highest point of 7% from their Market Return range of 6% - 7%. Again, regarding the Equity Beta they selected the highest point from their 0.62 – 0.92 range. This reflects the difference in the judgement set when making a regulatory determination from a pure market assessment.

When making a regulatory evaluation of the WACC outcome a step back from the market data is required with due consideration given to the overall role and purpose of the regulatory model and the WACC's place within it. Essentially the regulatory model is one of risk sharing between electricity consumers and the company charged with overseeing the transmission system operator licence. The electricity customer pays an insurance premium, with the WACC return forming part of this premium, to the company in order for it to manage the risk inherent in the licensed activity i.e. operational and investment risk. This means that the company faces the costs when things go wrong rather than the customer. However, the company's ability to manage and survive such costs is limited by the extent of the insurance premium. A low premium can jeopardise the delivery of customer NPV positive investments and activities. In other words, the company will not have a sufficient financial buffer to overcome any difficulties. Therefore, regulators provide some flexibility, either in the WACC itself or the price control more generally, to ensure that a catastrophic event of a utility company failing does not materialise. The 'cost' of aiming somewhat high in the WACC protects the customer from the full upfront cost of such an occurrence.

Arguably it is even more important now than ever to provide headroom within the WACC estimate. The recent market volatility and uncertainty evident in the last few years illustrates that the risks faced by companies in managing their activities is not just a passive or a theoretical risk. To the extent the WACC proposed is not linked to underlying movements in the capital markets then that
risk is effectively passed from consumers to the utility businesses themselves. Regulated companies have faced real costs which were not explicitly provided for in their respective price controls and had to manage such costs from their own resources. Consumers did not have to face these costs as the model shares the risk between both parties. This is the nature of the regulatory model. However, the risk managed by the company must be sufficiently compensated; otherwise the model will break down.

The final determination by the Utility Regulator requires a much fuller consideration, and exploration of these issues. The Utility Regulator has deviated from regulatory precedent which tends to recognise these risks, and indeed that the appropriate choice of point estimate is not necessarily normally distributed within the range, to a choice of estimates which represent midpoint or lower bounds of those advised to it by its consultant. Such an approach is not justified, nor has the Utility Regulator elaborated on why it believes it to be so, in its consultation.

**WACC components**

SONI are particularly concerned regarding a number of the individual components chosen by the Utility Regulator which lead to a suboptimal WACC outcome. As mentioned above the concern is centred on the insufficient recognition of the SONI’s characteristics and divergence from regulatory precedent. The following components are of particular concern;

- Debt Premium
- Market Return
- Equity Beta

**Debt Premium**

In the previous SONI price control a small company premium was added to the WACC by the Utility Regulator recognising the requirements for the provision of a higher cost of capital for a small company such as SONI. The rationale behind the small company premium is largely that due to the small size the costs involved with raising debt or issuing equity are a much greater percentage of the overall costs than for a larger counterpart, as these costs are indivisible. Therefore, it was argued, they must be directly incorporated in the WACC – at the time of the last price control this represented standard regulatory practice.

However, regulatory debate has continued since regarding the appropriateness of applying a small company premium. This debate has led regulators to remove an explicit small company premium on
the cost of equity and rather to incorporate a company's characteristics, and any associated implications for systematic risk, in the cost of equity e.g. equity beta, rather than the direct costs surrounding the raising of equity. This is effectively the approach proposed by First Economics in recognising the importance of operational gearing in a SONI context – see more below.

However, regulators have continued to make provision for a small company premium remains on the cost of debt side, albeit the term no longer tends to be specifically utilised. Smaller companies only have limited access to the bond market and subsequently have a much greater reliance on more expensive bank debt. The CC states that the cost of debt is higher for the Water Only Companies (WoCs) than for Water and Sewage Companies (WaSCs) due to their small size\(^4\). The CC provided 30 bps to Bristol Water in order to cater for fees related to raising debt. This is consistent with Ofwat stance in PR09 where they added 40 bps to WoCs cost of debt to reflect their higher costs. SONI has a much smaller balance sheet than either Bristol Water, or indeed any of the other WOCs.

SONI's submission sought to reflect such consideration regarding company characteristics. In many respects SONI is less characteristic of a utility and more characteristic of a service company working within the utility sector. The small packages and short term nature of the debt SONI raises means arrangement and financing fees are much greater and frequent than in the case of utilities raising

be reflected in SONI's cost of debt. Indeed it is even more imperative and appropriate to do so given that its RAB is considerably smaller than that of the smallest WoC.

It is for these reasons that SONI submitted for a debt premium of 2.05%, and therefore a total cost of debt of 4.05%; A position consistent with CC's decision to provide a debt premium of 2% for Bristol Water's forward looking debt\(^5\). The debt premium proposal by the Utility Regulator of 1.5%, which appears to be solely based on bond market evidence for a traditional asset based utility, is out of line with regulatory precedent. Moreover SONI is surprised that solely a single point estimate was presented rather than a range from which a point estimate could be chosen.

The Utility Regulator should therefore adjust the cost of debt to line up with other regulatory precedent and to reflect SONI's characteristics either as a separate line item or as part of the cost of

\(^4\) Competition Commission, Final Determination, Bristol Water, September 2010.

\(^5\) This level is inclusive of the provision of 30bps for Bristol Water's specific debt raising characteristics.
debt. SONI believes the 4.05% it originally submitted to represent a reasonable estimate and the 3.95% provided by the CC in the case of Bristol Water to represent a lower bound.

**Market Return**

In the Utility Regulator's consultation paper it is suggested that a Market Return of 7.25% is not appropriate for a regulated company like SONI in the current economic climate - "this is not considered to be a reasonable expectation for a regulated company in the current economic climate". SONI would like to clarify that Market Return is not a company specific component as implied in the consultation paper. Rather it is a 'economy-wide' component and therefore the consideration of SONI's regulated status is not of relevance. However, consideration of the current economic climate is an important factor when selecting the Market Return. Current macroeconomic circumstances, and financial market turbulence have, in fact, only increased the level of Market Return, or in particular Market premium over and above the risk free rate, required.

There is therefore a need to assess and make a judgement on the extent of the impact and ramifications of the crisis during the forthcoming price control period. This view can then either influence the selected range for the Market Return or the point estimate chosen within this range.

Recent work by Europe Economics for CAA 
outlines the view that an Equity Risk Premium of 6% (implied market return of 8%) applies for a crisis period and an Equity Risk Premium of 5% (implied market return of 7%) is more suitable for a non-crisis period. SONI in its submission selected an estimate from the upper end of its range of 6.5% - 7.5% in order to account for the impact of the crisis, providing a Market Return estimate of 7.25% even while recognising the crisis is likely to dissipate to some extent in the forthcoming period, although not to return to pre-crisis levels.

The estimate chosen by the Utility Regulator of 6.75% is an outlier, with it being lower as compared to other recent regulatory precedent. For example, the CC provided a market return of 7% to Bristol Water; the NATS determination was 7% and Ofwat was 7.4%.

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1 A blend of the CC assessment of backward looking cost of debt on the one hand and 4.0% for forward looking on the other.
2 Cost of Capital for NATS (En Route) plc for CP3, Europe Economics, May 2010.
3 Using a Risk Free Rate of 2%.
4 Consistent with the regulatory precedent where the Equity Risk Premium is typically 4.5% - 5.5% (implied Market Return of 6.5% - 7.5%).
5 10 Competition Commission, Final Determination, Bristol Water, September 2010.
A Market Return of 7.25% therefore in our view remains appropriate and efficient level reflecting the return an investor demands today and over the forthcoming period with the 7.0% from the recent CC decision on Bristol Water representing a lower bound.

*Equity Beta*

The asset beta, and subsequent equity beta, estimate chosen by the Utility Regulator does not reflect the systematic risk faced by SONI. First Economics outline a framework for considering an appropriate asset beta which recognises the operational gearing of the SONI business and its importance in the asset beta calculation. SONI largely subscribes to this framework, although is not certain First Economics have fully appreciated the SONI business characteristics. Given this framework, and the characteristics, it is difficult to ascertain the rationale of the chosen low point estimate, including the largely unsubstantiated assertion by the Utility Regulator that SONI is somehow less exposed to systematic risk than airports.

In examining comparators against which an appropriate asset beta for SONI can be assessed it is important to consider two key variables: Exposure to Volume Risk via Price Control and Operational Gearing. The following table outlines the risks faced by various regulated sectors and regulatory precedent regarding the chosen asset beta.
**Table 1: Asset Beta Sector Comparison**

<table>
<thead>
<tr>
<th>Sector</th>
<th>Exposure to Volume Risk via Price Control</th>
<th>Operational Gearing (RAB:Revenue/Operational Cost)</th>
<th>Regulatory Precedent*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity/gas transmission (owners)</td>
<td>Low (revenue cap)</td>
<td>Very Low – 5.8</td>
<td>0.27 – 0.36</td>
</tr>
<tr>
<td>Airports</td>
<td>Some volumetric exposure</td>
<td>Very low – 4.5</td>
<td>0.47 – 0.61</td>
</tr>
<tr>
<td>NATS</td>
<td>Moderate (hybrid price and revenue cap)</td>
<td>High – 1.9</td>
<td>0.60</td>
</tr>
<tr>
<td>SONI</td>
<td><strong>Long Run: low (revenue cap)</strong></td>
<td>Very High – approximately 1</td>
<td>TBD</td>
</tr>
<tr>
<td></td>
<td><strong>Short Run: Very high (1% shortfall in volume</strong></td>
<td></td>
<td>The Utility Regulator proposal – 0.4</td>
</tr>
<tr>
<td></td>
<td><strong>equity return</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*The regulatory precedent presented incorporates a non zero debt beta.

It can be seen from examining the two key variables that SONI is not necessarily a low risk business as compared to other regulated sectors. Of significant concern is the high operational gearing (RAB: Revenue) of the order of 1. This high level of operational gearing creates a significant risk as even a small unanticipated change in the operating cost base can have very significant implications for the level of return achievable. This is combined with long run revenue surety in the revenue cap but extremely high volatility in returns, and therefore cashflow and financial ratios, in the short run due to the highly levered exposure to volumetric risk. These are both important determinants in the Asset Beta.

Compare this to the situation in other sectors. Airports, for example, do face some exposure to volumetric risk; however, they also have an operational gearing much more akin to traditional electricity/gas asset backed utility. This reduces systematic risk. Recent Regulatory determinations have provided for asset betas for airports of 0.47-0.61. NATS, however, have more moderate
volumetric risk but have much higher operational gearing. In their case an asset beta of 0.6 is presented. The Utility Regulator's proposal for SONI is for an asset beta of 0.4. Given the characteristics outlined: the highest operational gearing of all comparators, and, significant intra year volatility in equity return as a result of exposure to volumetric risk, we do not see how this is justified or can be the case.

SONI derived its estimate of an Asset Beta of 0.45 to support the necessary equity return assuming a debt beta of zero; to apply a debt beta of 0.1, while still providing for an appropriate return on equity would result in a correspondingly higher estimate (of the order of 0.505). This would not be out of line with the analysis presented by First Economics, or indeed that provided for to the comparators listed. SONI therefore believes an asset beta of 0.45 premised on a debt beta of zero, or 0.505 premised upon a debt beta of 0.1 should be employed. If a positive debt beta is chosen then a corresponding adjustment should be made to the assumed cost of debt.

**Conclusion**

The appropriateness of the WACC outcome needs to be assessed in terms of the overall price control package. The WACC proposed in the SONI consultation paper is insufficient to support the cost of capital that will be faced by SONI over the forthcoming period. A number of components that derive this WACC outcome are of particular concern; these have been highlighted. The WACC proposal fails to recognise and reflect SONI's characteristics. In addition, it is inconsistent with regulatory precedent leading the Utility Regulator's proposal to be an outlier amongst its regulatory peers.

A key focus on the choice of appropriate WACC for the SONI price control is the accommodation of small company characteristics and operational gearing/ risk. While the WACC should be adjusted for these it may not be sufficient in and of itself to provide for them. Therefore, full consideration must be given to how the incentive measures and revenue allowances interact alongside the WACC outcome (e.g. to what degree does the revenue cap itself need to provide for "an insurance premium"?; what is the appropriate expected value from the package of output or performance incentives?)

The journey in regulatory thinking has moved from a situation of examining the building blocks in isolation to looking at the package as a whole. The package should be designed to protect electricity consumers by providing an adequate and sustainable insurance premium in exchange for the licensee managing the operational and investment risk – indeed the need to remunerate operational risk through instruments other than a single blunt WACC rate is something highlighted in the recent
First Economics paper on Alternative Financing Models commissioned by the Utility Regulator. There must therefore be flexibility to adjust particular aspects of the price control, e.g. increase the revenue cap to counteract a low WACC figure, to ensure sustainability and to incentivise efficient, and consumer enhancing, behaviour from the licensed business. SONI does not want to impose additional costs on Northern Irish consumers, however, nor does it wish to see those same consumers ultimately lose out. Necessary investments, which are to the ultimate benefit of consumers must be capable of being supported through the provision of adequate return to remunerate both debt and equity holders. The adjustments set out in this response will achieve this; the proposal as in the consultation paper will not.