

18 February 2013

Mr. Warwick Anderson
General Manager – Network Regulation Branch
Australian Energy Regulator
GPO Box 3131
Canberra ACT 2601

Dear Mr. Anderson,

NSW DNSP Submission on the Rate of Return Guideline – Issues Paper

The NSW Distribution Network Service Providers, Ausgrid, Endeavour Energy and Essential Energy (the NSW DNSPs) recognise the pivotal role that the guideline development processes currently being undertaken by the Australian Energy Regulator (AER) will have in shaping the outcomes of the National Electricity Rule (Rule) change process recently completed by the Australian Energy Market Commission (AEMC).

The NSW DNSPs are encouraged that the AER has embarked on a highly consultative process for the range of guidelines that are to be developed over the course of 2013. In particular, the NSW DNSPs note that in relation to the rate of return guidelines the AER is seeking to establish a range of subject specific working groups drawn from all interested stakeholders. The NSW DNSPs support inclusive, ongoing consultation with all stakeholders, noting that an effective process provides the best opportunity to deliver appropriate and balanced outcomes.

The NSW DNSPs expect that the outcome of the ongoing development processes will be to deliver a set of guidelines which facilitate credible, sustainable and predictable outcomes that recognise the impact of the costs determined by the AER on consumers and network service providers and their investors. In developing the attached submission to the AER, the NSW DNSPs have ensured that their recommendations will contribute to a regulatory framework that can deliver on these key reform outcomes.

High level response to the Rate of Return Guideline

The NSW DNSPs support the key themes of the Energy Networks Association's (ENA's) submission to the AER. Broadly speaking, the AER's issues paper and the ENA submission cover four broad areas of interest being:

- Principles based approach to establishing and implementing the rate of return guidelines;
- Key concepts such as the benchmark efficient firm;
- Return on equity; and
- Return on debt.

The NSW DNSPs support considering rate of return issues at a high level at this stage of guideline development process, noting that considerations and outcomes of the key

conceptual issues will determine the relevant detailed considerations to be addressed at later stages of the review.

Key elements of the ENA submission

The NSW DNSPs support the key policy proposals contained in the ENA submission. Some of the key positions that the NSW DNSPs would like to emphasise are set out below in relation to the four topic areas set out above.

In addition to the points raised in the ENA submission, the NSW DNSPs wish to explore the positive consumer benefits that a trailing average approach to calculating the return on debt could provide. Two key benefits for consumers that attract the NSW DNSPs to the trailing average are hedgeability (the matching of the regulated allowance for the return on debt to the market costs for debt at the time businesses raise the debt) and substantial reductions in the volatility of price movements between regulatory resets.

The NSW DNSPs believe that these two positive outcomes for consumers will go some way to addressing issues of credibility of the allowed rate of return and concerns regarding the sustainability of pricing and regulatory outcomes over time.

Principles

The NSW DNSPs support the concept of adopting a principles based process for developing the Rate of Return Guideline. Further, the NSW DNSPs support the concept of the AER including guidance on how it will approach any exercise of judgement arising from the finalised Rate of Return Guideline.

However, the NSW DNSPs wish to provide some specific recommendations for enhancing the principles based process to the AER for consideration as it progresses the development of the Rate of Return Guideline:

- The NSW DNSPs support the ENA position that rather than using the term “principles”, greater clarity of the role of the principles set out by the AER and their relationship to the governing legislative framework would be achieved by referring to them as “considerations”;
- The NSW DNSPs also agree that where considerations restate existing obligations within the legislative framework they should be removed to avoid duplication and unintended interpretation of their outcome or function. Furthermore, where considerations simply state good practice rather than addressing areas of judgement, they should be removed to enhance clarity of their function;
- When deciding whether a consideration is appropriate for inclusion in the guideline or guideline development process, the proponent should provide a direct correlation as to precisely how the stated consideration will enable the AER to satisfy the legislative obligations and principles, preferably with practical examples;
- All of the considerations should be developed in an iterative manner to reflect the fact that the consultative process for developing the guideline itself may reveal key considerations when addressing implementation issues; and

- The considerations should not be used in a mechanistic manner that could result in relevant information being excluded when determining the return on equity or the cost of debt. Rather, considerations should provide guidance as to how the AER would seek to include relevant information in arriving at its ultimate decisions.

Key Concepts

The NSW DNSPs support the ENA submission on key questions raised by the AER in relation to the benchmark efficient entity. The NSW DNSPs submit that critical to achieving sustainable regulatory outcomes, a robust conceptual framework must be established, supported by a clear vision of the regulatory imperatives.

Specifically, the NSW DNSPs submit that the benchmark efficient entity should not consider an ownership structure beyond a “stand alone” assumption as part of the definition of the “benchmark efficient entity”. This is a critical point and addresses questions relating to both government ownership and whether it should be assumed that standard control services are being provided by an entity within a group structure.

On this issue, it is essential to maintain a focus on what is being regulated; that being the costs of providing standard control services including all inherent and regulatory risks. If this becomes confused with the organisational structure adopted by individual NSPs or groups of firms, the assessment of the efficient costs and risks of providing standard control services will become less transparent and harder to measure.

The potential loss of transparency is primarily due to the fact that within a group or strong parent structure the observed costs will mask the cost of the inherent risks (and therefore costs) that have been transferred to the parent or group. This effect is accentuated where the firm providing standard control services undertakes other services across which it is required to allocate fixed structural costs.

Relevantly, it is the NSW DNSPs understanding that policy makers and the AER are seeking to foster a set of regulatory arrangements that increase transparency of the underlying costs of providing a range of services, which is a driver of the expanding use of the alternative control services classification. Within this context, it would appear inconsistent to adopt an efficient entity benchmark that obscures the underlying costs and risks of providing standard control services rather than revealing them.

Return on Equity

The NSW DNSPs support the underlying policy of the ENA submission that in determining the return on equity the AER should take account of more, rather than less, information. The NSW DNSPs note that this outcome was a clear policy intent of the AEMC in framing the revised Rules for establishing the return on equity.

To this end, the NSW DNSPs would like to explore in greater detail over the course of the guideline development process two options contained in the ENA paper for establishing the

return on equity: the “single best model with cross checks”¹ and the “point estimate football field approach”.

The NSW DNSPs consider that appropriately scoped models for both options may have the potential to enhance the assessment of the return on equity compared to the practice followed prior to the AEMC’s recent Rule change decision.

However, the NSW DNSPs consider that there are two critical elements that each approach must satisfy before being used to establish the return on equity. The first element is that the approach must take explicit account of a variety of cost of equity models, market data, estimation methods and other evidence. Indeed this is a specific requirement when seeking to achieve the rate of return objective as set out in the Rules. Secondly, the approach must specify the manner in which the range of information will be assessed to derive a balanced return on equity estimate.

Specifically in relation to the “single best model with cross checks” approach, the NSW DNSPs are seeking clarity on:

- How the primary model could be found inconsistent with (“fail”) the application of cross checks;
- How those cross checks would be used to adjust the outcomes of the primary model; and
- Whether the specification of the cross checks would expand the information being considered to include cross checks against alternative cost of equity methods and non-model information.

Return on Debt

The NSW DNSPs are cognisant that a key focus of the AEMC Rule change process, public forums and the ultimate decision was that there is more than one “efficient” approach to debt management. Specifically, the AEMC noted that:

“A number of different approaches to estimating the return on debt may meet the overall rate of return objective”²

The AEMC further commented that:

“the Commission therefore proposed to make it unambiguous that the regulator can consider a range of approaches to estimating the return on debt to meet the overall rate of return objective. This would include a range of different approaches that involved using a “spot rate” methodology that used market data to reflect prevailing conditions in the market for funds or

¹ Although the AER Rate of Return Guideline - Issues Paper and the ENA response use the term “single best estimate”, a replacement term such as “preferred estimate” may be more closely aligned to taking account of alternative data sources and models in the manner envisaged by the NSW DNSPs.

² AEMC, Economic Regulation of Network Service Providers, and Price and Revenue Regulation of Gas Services, page iv

averaging estimates of the return on debt over historical periods, or some combination thereof.”³

For reasons such as those expressed by the AEMC in its Final Determination, the NSW DNSPs support the submission lodged by the ENA seeking to maintain a range of approaches to establishing the benchmark cost of debt.

Approach to estimating the Cost of Debt for the NSW DNSPs

The NSW DNSPs submit that Network Service Providers (NSPs) should have the opportunity to propose an approach to estimating the return on debt that is appropriate in light of their specific circumstances. For example, the size of the regulatory asset base (RAB) for the NSP, and therefore the size of its debt portfolio, may mean that an NSP is either unable to access certain markets, or conversely is sufficiently small that the transaction costs of certain approaches may be less efficient than other approaches.

The approach to the return on debt is of critical significance to the NSW DNSPs noting that the regulatory proposals for each network will need to be largely complete by the end of the current calendar year. Attachment 1 provides an expert report by CEG that examines the efficiency of a “staggered” approach to debt issuances, as adopted in NSW. The CEG report concludes that:

“The root of many of the problems with the previous NER benchmark, as identified in the previous section, can be traced to the benchmark strategy of raising 100% of all debt in a relatively short window immediately prior to the beginning of the regulatory period.

In reality, almost all businesses, including regulated infrastructure businesses, raise debt in a staggered fashion over time. Moreover, for infrastructure businesses with very long lived assets, the average maturity of this debt at the time of issue tends to be long term (10 years or more). It is very likely that this is a response to a desire to minimise transaction costs, in particular insolvency/bankruptcy costs, that are heightened if too much debt must be refinanced in a short period of time. Consequently, a business’s cost of debt at any given time will reflect the costs incurred when issuing debt over the last decade (i.e., not just over the last 20 days).”⁴

Considering that collectively the NSW electricity networks currently have around \$19 billion in debt⁵ the previous NER benchmark was based on a debt management strategy that is implausible in the NSW context for two main reasons. Firstly, there is a question of whether the market is sufficiently liquid in such a short window of time to allow the networks to arrange the debt. Secondly, even if the networks were able to secure the necessary volumes of debt from the market the premium paid by the networks in this period would be substantial.⁶

³ AEMC, Economic Regulation of Network Service Providers, and Price and Revenue Regulation of Gas Services, page 76

⁴ CEG Report titled “Efficiency of staggered debt issuance”, February 2013, Page 28.

⁵ This figure includes all electricity distribution and transmission networks as they are subject to the same regulatory review cycle and therefore all of those networks would need to raise funds at the same time under the previous NER arrangements.

⁶ Based on advice received by the NSW DNSPs the volume of swaps that would be required to hedge (as assumed by the previous NER benchmark) would be in the order of three times the value of debt.

The following section (and Attachment 1) sets out the NSW DNSPs' views on the appropriate regulatory approach to estimating the return on debt in the forthcoming NSW Distribution network determination process.

The case for a hedgeable benchmark

At the heart of the criticism of the existing approach is the divergence between allowed and the observed market debt costs, and its impact on consumers:

- When the allowed cost of debt is *higher* than the observed market cost of debt, **consumers are over-compensating** network providers for their debt costs; and
- When the allowed cost of debt is *lower* than the observed market cost of debt, under-compensated utilities will tend to **restrict necessary investment**, again **to the detriment of consumers**.

The key to delivering fair outcomes to consumers lies in *maintaining an approximate parity between the allowed cost of debt and the observed market cost of debt within the regulatory period*.

A common argument in support of the “on the day rate” approach is that debt allowances and debt costs will converge *over the long run*. However, from the perspective of consumers, *time variation matters*. That is, when debt allowances and the observed market costs deviate, consumers are either paying too much or are not getting access to necessary investment. The task of removing time variation is the reason why hedging takes place (if possible). Removing time variation aligns debt allowances and the observed debt costs *in all market conditions*. Providing the opportunity to hedge ensures consumers do not over-compensate utilities, nor are they starved of necessary, prudent and efficient investment.

The current “on the day” approach seeks to provide debt allowances that will exactly cover estimated future debt costs, but only on an *ex ante* basis. Some academics call this approach the “Net Present Value (NPV)=0 test”. The shortcoming of the NPV=0 test is that it disregards *risk*, and focuses solely on *ex ante* debt costs. If NSP debt managers are unable to hedge financial risks from the regulatory benchmark, debt allowances and observed market debt costs will always be different *on an ex post* basis. That is, as soon as financial markets move significantly in any direction, debt allowances and observed debt costs will diverge.

The current approach fails to appreciate the need to align debt allowances and observed market debt costs on an *ex post* basis, not simply an *ex ante* basis. The NSW DNSPs propose a second test that would ensure utilities are able to *hedge* to the regulatory debt allowance benchmark. This second test has been called by some practitioners the “Basis Point Sensitivity (BPS)=0 test” (or hedgeability test).

The term hedge in this context should not be presumed to refer to the use of swaps or other instruments. Rather the term hedge simply refers to the process of aligning or matching the timing and magnitude of revenues and costs to manage risk. This point is addressed by CEG when it states that:

"A benchmark debt management strategy adopted by the AER is said to be implementable/hedgeable if a business could arrange its own debt management strategy to align its costs with those associated with the benchmark. The use of the phrase 'hedgeable' in this context should not be confused with a suggestion that business need enter into derivative contracts to align to the benchmark – if there are no derivative contracts built into the benchmark debt management strategy then businesses will be able to 'hedge' to that benchmark simply by implementing it (i.e., without entering into derivative contracts)."⁷

On-the-day approach shortcomings

There are significant shortcomings of the current "on the day" (OTD) approach that have been identified when applied to the NSW DNSPs:

1. Divergences emerge between debt allowances and observed market debt costs because the OTD benchmark is unhedgeable for the NSW DNSPs⁸. Where significant divergences exist, they will always be to the detriment of consumers – consumers are either paying too much or underinvestment is taking place.
2. Consumers' energy costs will always be more volatile under the OTD approach. Consumer groups have repeatedly highlighted concerns with volatile energy prices.
3. The OTD approach embeds swap derivatives into the debt benchmark. Swap derivatives markets provide limited liquidity for large borrowers. If large borrowers (such as the NSW DNSPs) hedge to the OTD debt benchmark, there is a risk that the reaction of swap market yields would push consumer prices higher.⁹
4. Swap derivative markets have been, and still are, undergoing significant regulatory changes such as those contained in the Basel Accords. The practical cost outcomes of those changes are still uncertain and therefore will be difficult to estimate the precise impacts on the debt benchmark. The AER would also need to be certain that liquidity will not reduce further as a result of derivative market regulatory changes.

The shortcomings of the current OTD approach are discussed in further detail in Attachment 1.

The trailing average approach

The trailing average approach addresses all of the shortcomings of the OTD approach. The trailing average approach:

⁷ CEG Report titled "Efficiency of staggered debt issuance", February 2013. Page 14

⁸ There are some NSPs that may have sufficiently small debt requirements which would allow them to refinance and secure all future lines of debt at the rates prevailing during an ex ante averaging period.

⁹ Based on advice received by the NSW DNSPs the volume of swaps that would be required to hedge (as assumed by the previous NER benchmark) would be in the order of three times the value of debt or approaching \$60 billion. Transactions of this size within a small trading window increase the risk of generating a supply price response in line with general economic theory.

1. is hedgeable, meaning that consumers would only be paying the efficient cost of debt;
2. is stable, so consumer price volatility would be largely removed, and debt allowances would remain efficient;
3. does not rely on swap derivatives. That is, swap market illiquidity would not impact on consumer prices;
4. does not require regulators to benchmark the rising compliance (such as Basel III¹⁰) regulatory costs and capital costs of swap derivative contracts. The precise outcomes of the current reform processes are unknown and consequently attempting to estimate the financial market impacts ex ante will be inherently subject to error; and
5. is consistent with common practices adopted by non-regulated infrastructure providers.

In short, the trailing average approach continues to meet the requirement of the NPV=0 test as well as the hedgeability test required to protect consumers. Importantly, the trailing approach is a practical solution to current regulatory challenges and is based upon a debt management strategy that can actually be adopted by NSPs.

How the trailing average approach works

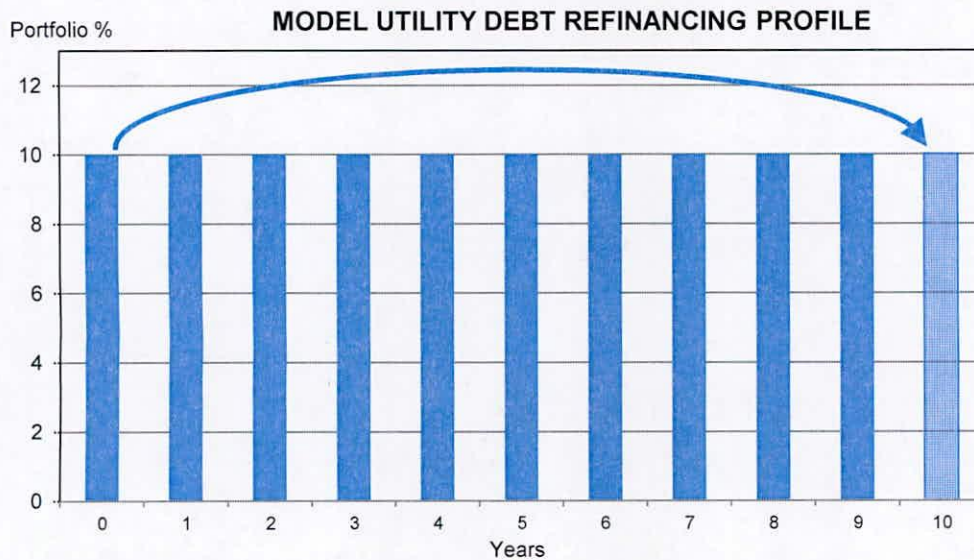
The trailing average is based on prudent, proven and efficient debt management practices.

The approach is based on a BBB+ rated benchmark NSP that can achieve debt funding out to 10 years. The prudent benchmark NSP will manage debts so that there is a smooth profile of debt over the forward decade, and 10% of the portfolio needs to be refinanced each year (refer to Figure 1 below). Each year, the 10% of the portfolio that matures is entirely refinanced to the 10-year tenor, thereby maintaining the smooth financing profile.

Because the benchmark NSP is always funding all its debts to 10 years, the cost of the debt portfolio will be the 10-year (historical) average of the 10-year BBB+ cost of debt. Finally, although all debts are initially raised as 10-year debt, the *average residual life of debt will be five years*.

¹⁰ Basel III (or the Third Basel Accord) is a global regulatory standard on bank capital adequacy, stress testing and market liquidity risk agreed upon by the members of the Basel Committee on Banking Supervision in 2010–11, and scheduled to be introduced from 2013 until 2018. The third instalment of the Basel Accords was developed in response to the deficiencies in financial regulation revealed by the late-2000s financial crisis. Basel III strengthens bank capital requirements and introduces new regulatory requirements on bank liquidity and bank leverage.

Figure 1: Model network service provider debt maturity profile



In setting the debt cost allowance using this approach, the AER would simply take the 10-year historical average of the 10-year tenor BBB+ debt cost. It also requires the AER to annually update the 10-year historical average to ensure that revenues and market costs remain aligned within the regulatory period.¹¹ However, because the averages are over such long periods, the year-to-year updates might change the debt allowance by at most 0.25%, even in volatile market conditions.

Figure 1 illustrates an obviously stylised debt refinancing profile for use in regulatory decision making. Relevant questions include whether infrastructure firms that are not subject to economic regulation would in fact adopt a staggered debt portfolio, and do these firms typically secure long dated debt?

In Attachment 1 CEG consider both of these questions. The debt profiles and terms to maturity for Sydney Airports and Transurban were reviewed on the basis that the data was publically available, they are large infrastructure firms, they operate in Australia and they are not subject to any direct price/revenue control regulation. Due to these characteristics the examples considered provide some guidance on the type of debt profile that regulated infrastructure firms might be expected to mimic in the absence of regulation.

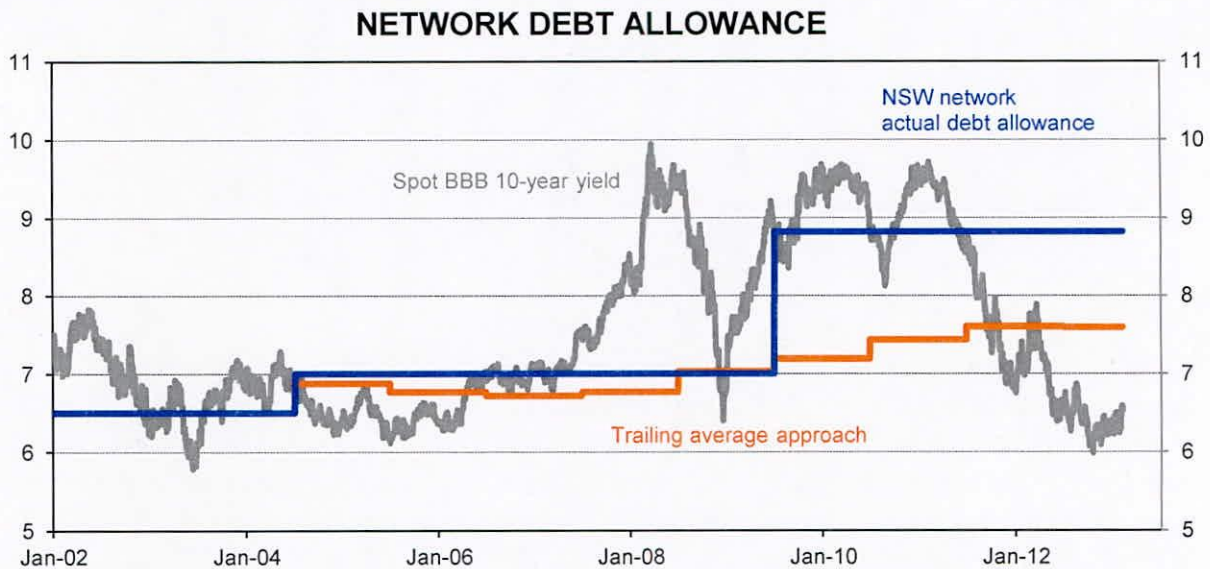
Although the profiles of these firms do not precisely accord to the stylised example provided in Figure 1 they do possess the salient features of a staggered debt profile combined with long dated terms to maturity at issue of 10 years or longer. Therefore, a trailing average approach with a stylised 10 year debt profile would be expected to produce outcomes broadly consistent with that of the broader trend in the unregulated market.

Figure 2 models the effect that the trailing average approach would have had on year-to-year debt cost allowances over the past decade compared to the actual debt cost

¹¹ The hedgeability (BPS=0) test being proposed here requires a *trailing* average approach where the AER annually updates the debt allowance. The alternative *historical* average approach, where the AER sets the debt allowance only once at the beginning of the determination period from long-term historical averages, *would not achieve BPS=0*.

allowances and market trends. Had a trailing average been in place over this volatile period the year-to-year debt allowances would have been substantially less volatile than the approved debt cost allowances and would have smoothed out over time the substantial market volatility over the same period.

Figure 2: Trailing average approach modelled debt allowance compared to the actual NSW network debt allowances.



Source: NSW TCorp analysis.

In addition to the data provided as examples of debt management practices of unregulated infrastructure, it is notable that the AER considered the issue of term to maturity as part of its Weighted Average Cost of Capital review in 2009. Following submissions lodged with the AER regarding the term over which regulated infrastructure refinance and manage their debt portfolios, the AER found that:

“the AER has verified that the weighted average maturity of debt portfolios at the time of issuance for these businesses is 10.14 years as presented above in table 6.1. That is, the further information confirms that these businesses refinance on average every 10 years.”¹²

After the GFC, there is wide acceptance that interest rate and inflation risks can be painful, but they are unlikely to cause the NSP to become abruptly insolvent. Debt managers are significantly more likely to accept interest rate risk and cost consequences than funding risk consequences.

On efficiency grounds, the trailing average approach to setting debt cost allowances would significantly reduce the volatility faced by NSPs and consumers. Debt allowances and actual debt costs would move in sync, avoiding both over-compensation and under-investment for consumers. NSPs would have significantly more certainty around regulatory allowances ahead of a future determination.

¹² AER, May 2009, Final Decision, Electricity transmission and distribution network service providers. Review of the weighted average cost of capital (WACC) parameters, p. 159

Implementation of the trailing average approach

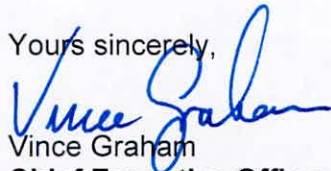
In the interests of protecting consumers from adverse outcomes, NSW DNSPs submit that the AER should expand the return on debt objective from NPV=0 to also include hedgeability (BPS=0). The expanded debt cost objective would provide NSPs with the opportunity and incentive to hedge, resulting in an alignment between debt allowances and debt costs throughout the regulatory period, regardless of financial conditions. Importantly, the enhanced return on debt tests *would need to apply in the transition period, not just over the long term.*

Any implementation of the trailing average approach for the NSW DNSPs is expected to be relatively simple as the current debt management practices are consistent with the 10 year trailing average benchmark. Further, due to the large size of the debt portfolios and the potential impact that swap hedges would have on consumer prices swaps and other instruments are not a material component of the overall debt management approach.

In recognition of the high level nature of the initial issues paper and the expected Rate of Return Guideline working groups to be established by the AER to specifically consider the issue of the trailing average approach, the NSW DNSPs consider that the working group would provide a more appropriate forum to discuss matters of detail. However, the NSW DNSPs are available to discuss this issue further if requested by the AER outside of the working group process.

If you would like to discuss this matter further, please contact Mr Mike Martinson, Group Manager Regulation at Networks NSW on (02) 9853-4375 or via email at michael.martinson@endeavourenergy.com.au.

Yours sincerely,



Vince Graham
Chief Executive Officer

Attachments:

1. CEG February 2013 Report titled "Efficiency of staggered debt issuance"