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Guidelines, models and schemes for electricity DNSP service target performance incentive scheme for electricity DNSP

Submission Prepared for:

Australian Energy Regulator

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1 Introduction

Alinta AE's (AAE) distribution network area covers approximately 950 square kilometres of the north western area of greater Melbourne. The area includes the city's international airport, major transport routes and areas of residential and industrial growth. With approximately 300,000 customers, it is the smallest of the five electricity distribution businesses in Victoria.

AAE welcomes the commencement of amended national legislation from 1 January 2008 opening a new era for national regulation of electricity distribution networks. AAE also appreciates the AER's decision to undertake early consultation on the guidelines, models and schemes required by the distribution Rules. While the Rules do not require this consultation step, it will assist all parties to prepare for the formal consultation.

NOTE: For simplicity, this submission uses the word 'guidelines' to refer to guidelines, models and schemes as a group, unless the context suggests otherwise.

2 Major Issues

2.1 Consistency with Transmission Guidelines

In AAE's view the AER's transmission guidelines should not be the 'default' option for distribution. The issues paper states or implies that the AER transmission guidelines will apply (unless DNSPs can demonstrate otherwise) in:

- section 2.1.2 dealing with the post tax revenue model;
- section 2.2.1 on the roll-forward model;
- section 2.3.2 on the cost allocation guidelines; and
- section 2.4.2 on efficiency benefit sharing.

While there may be common ground between transmission and distribution guidelines in some areas, simply uplifting the transmission guidelines without adaptation to account for the particular circumstances of distribution networks will not produce efficient or even workable guidelines. A transmission guideline may be worth consideration where it is clear that a better alternative is not available for distribution or where its adaptation to distribution may produce as reasonable an outcome as any other.

2.2 Economic Differences – Transmission and Distribution

There are clear economic differences between transmission and distribution which should inform the development of distribution guidelines. The distribution guidelines must also accommodate the diversity among distribution businesses. The guidelines should be less focused on strict uniformity than is the case in transmission.

Some of the economic differences that need to be recognised are:

Economic difference	Reason	Significance
Different customer focus	Transmission networks have few customers and provide services to the market as a whole. They have no relationship with end-users. Distributors	major

Economic difference	Reason	Significance
	supply individually connected end-users.	
Different focus of investment	The investment concerns of TNSPs are focused on overall market matters.[1] Distribution investment is driven by end-users.	major
Different operational focus	Transmission networks move energy to bulk supply points. Distributors transport energy directly to individual supply points.	Major
Different commercial relationships.	Transmission and distribution require different kinds of commercial relationships with stakeholders.	Medium

Distributors generally have to meet much more specific market needs than transmission, and thus the primary aim of distribution guidelines should not be uniformity. Guidelines should facilitate regulatory proposals that reflect the needs, drivers and market conditions of individual business.[2]

2.3 Developing the Guidelines

Rather than replicating transmission guidelines, the AER should produce distribution guidelines under a set of clear working principles. AAE's recommended principles and their application to key matters in the issues paper are set out below.

Principle 1:

Distinguish between the regulatory subject matter that must be addressed in a price determination and other matters to be addressed in guidelines.

There must be a clear distinction between matters which should be part of an AER revenue and/or price determination under the Rules, and matters that can be effectively dealt with in guidelines. AAE submits that it would be advisable to draft the guidelines in a general fashion whenever alternative outcomes are permitted by the Rules.[3] Matters that should be treated in a general way include:

[1] Such as supply security, timely augmentation and avoidance of congestion.

[2] As expressed by retailers and end-users.

[3] Thus ensuring that the guidelines do not (inappropriately) lock in regulatory decisions which should have been part of a determination.

- PTRM matters; eg the depreciation profile to be used, recognition of capex, and the form of control;
- Depreciation that should be used in rolling forward the regulatory asset base (ie actual or forecast);
- Broad features of an efficiency benefit sharing scheme and service target performance incentive scheme (leaving the DNSPs sufficient leeway to make individual proposals on these matters).

Principle 2:

Produce guidelines which are complete in themselves.

Matters that belong in a guideline should not be further dealt with (or exclusively dealt with) in the AER's initial framework and approach paper.

AAE submits that each of the AER's guidelines should be 'stand alone' and that the same subject matter should not be dealt with partly in a guideline and partly in the framework and approach. [4]

The AER is obliged by the Rules to make decisions on a wide range specified matters which will also be the subject of guidelines. Many stakeholders have been concerned with the potential for 'double guidelines' under the Rules. AAE welcomes the comment in the issues paper that the AER cost allocation guidelines will be a 'stand alone' document (2 3.3) and urges the AER to apply the same 'stand alone' principle to all its distribution guidelines

Principle 3:

Produce incentive schemes which are as much as possible simple and effective, and which do not seek to over-specify the regulatory framework

AAE acknowledges the complexity inherent in economic regulation which inevitably will be reflected in guidelines. However, regulatory design can be over-specified. The issues papers have discussed a number of hypothetical features of the incentive schemes required under the Rules (efficiency benefit sharing and service target performance) which AAE regards as unnecessarily complex. These features include the potential for:

- Excessive precision in gauging achieved capital and operating efficiencies under an efficiency benefit sharing scheme (EBSS);

[4] The Rules require the AER to produce a 'framework and approach paper' setting out its likely approach to a forthcoming distribution determination (clause 6.8.1).

- Elaborate methodologies to detect (presumed) distributor incentives to propose inaccurate forecasts of operating and/or capital expenditure in order to 'game' benefits under an EBSS;
- Excessive monitoring and information requirements accompanying the incentive schemes.

An issue allied to the above is the proposal that an EBSS should provide for negative carryovers. AAE submits that this would negate the incentive properties of the scheme, and in fact introduces a bias against the DNSP.

In AAE's view, there will always be imperfections in any EBSS. The introduction of design elements that deal with second and third order 'efficiency' issues and/or excessive concerns with gaming introduces additional complexity for little benefit. Over-specification will:

- be distracting to the focus of both the businesses and the AER;
- result in undue costs; and
- focus stakeholders on the wrong issues in seeking and delivering cost reductions.

Principle 4:

Implement realistic planning. Focus on what can be effectively implemented by guidelines in the short term.

There is a limit to what can be achieved in the time available. The AER's objective is to have its distribution guidelines ready by mid-2008, The AER should aim to get the major guideline structures in place and build on these over time through the guideline consultation process.[5]

Under the Rules, certain matters are optional for the guidelines . AAE suggests that design features which should be deferred for the initial guidelines are:

- incentives to optimise capital expenditure (capex) under an EBSS;
- incentives to optimise distribution losses under an EBSS;
- a demand management incentive scheme.

These features raise complex implementation issues which would be distracting for the AER in developing and consulting on its other guidelines. In AAE's view, deferral is a realistic option because:

[5] Under clause 6.16 of the Rules.

- It is likely that provision for actual capex and depreciation in an EBSS will provide a sufficient incentive to DNSPs to seek capex savings under initial efficiency benefit sharing arrangements. (SA would then be the only jurisdiction with a capex incentive in its EBSS);

- Distributor incentives for demand management and minimisation of distribution losses have been subject to extensive consultation under other processes conducted by the AEMC and MCE/SCO. The consultations established that the introduction of demand management and loss minimisation incentives into economic regulation requires a very careful balance with existing incentives and service and reliability standards generally.

AAE submits that the AER should observe how the basic EBSS operates in practice before incorporating additional incentives.

Principle 5:

Identify matters for possible future guidelines (or amendments to guidelines) which will require further development and consultation.

AAE considers that a national service target performance incentive scheme (STPIS) is also a major matter for future development.

In AAE's view, it is most likely that the development of a national framework which converges the jurisdictional schemes will be a long term process given the great disparity of existing jurisdictional schemes and service standards. Much may depend on the jurisdictions' willingness co-operate with the AER to wind back their existing schemes (and how quickly they do so).

The issues paper asks whether a national STPIS framework is feasible and canvasses a significant number of transitional issues. If national framework means a scheme:

- flexible enough to adjust to existing jurisdictional schemes; and

- allows businesses to propose individual incentive arrangements particular to their circumstances

then AAE submits that a framework of this kind could be possibly developed by the AER in the short term.

3 Post Tax Revenue Model

3.1 Basis and Policy Objectives

2.1.1	The AER seeks comment on whether other rule provisions exist that are relevant to developing the PTRM for electricity distribution. Comments are also invited on whether the provisions mentioned here may require a different approach or have different meaning in the context of distribution and transmission regulation.

The Rules specify the high level content of the PTRM (cl 6.4.2). However, there are several individual rules which further specify the principles to be established at the time of a revenue and price determination and these principles determine the type of calculation to be performed by the PTRM. The depreciation profile is an example (cl 6.5.5).

AAE submits that wherever the Rules provide for alternative approaches, the PTRM must have the flexibility to accept any Rule-compliant outcome on that matter. In particular, where the Rules provide for the DNSP to choose between alternatives in preparing a building block proposal, the PTRM must not be hard-coded to reflect one of those e.g. straight line depreciation. This would imply that the matter has been pre-determined. It also presents an obstacle to the implementation of any alternative.

The principal function of the PTRM is to process inputs accurately in accordance with agreed principles. Given that a new version of the PTRM will be required for distribution, it is important that there be an opportunity for the logic and mathematical integrity of the new version to be tested thoroughly before it is published. AAE suggests that a suitably qualified expert should be engaged to conduct an independent review of the new version and report to the AER and to industry generally.

3.1.1 Victorian Specific Features of PTRM

AAE notes that the PTRM must be consistent with clause 11.17.2 of the Rules which is specific to Victoria. The AER is required to adopt the ESC's:

- tax asset base;
- asset classification, and;
- tax depreciation method

subject to any changes in tax law and rulings.

3.2 Matters raised in Issues Paper

3.2.1 Consistency Between the PTRM for Transmission and Distribution Regulation

2.1.2	The AER seeks comment on whether the PTRM developed for electricity transmission provides a suitable basis for distribution regulation. If not, what particular features or aspects of the PTRM need to be amended?

The issues paper (s 2.1.2) lists four matters that were considered by the AER in developing the PTRM for transmission:

- Depreciation profile, where the transmission PTRM has mandated straight line depreciation;
- Capex recognition, where the transmission Rules require a hybrid approach i.e. return on capital is calculated from the time of expenditure and depreciation from the time of commissioning;
- Treatment of inflation, where several recent gas and electricity reviews have identified that the former approach of estimating inflation produces a biased estimate (ie by applying the Fisher equation to the relative yields of nominal and indexed Commonwealth Government Securities (CGS)), and
- The assumptions regarding annual cash flow timing implicit in the PTRM formulation which may overestimate the revenue requirement. The AER indicated that it intended to further consider transmission timing assumptions in a future guideline consultation process.

Taking these points in turn:

- Depreciation Profile

AAE notes that the Rules do not bind the DNSP or the AER to a particular depreciation profile. The PTRM must have the flexibility to accept any Rule-compliant depreciation profile. It should not be hard-coded for a particular profile.

- Capex Recognition

The revenue requirements for distribution under the hybrid approach are unlikely to be materially different from the results of capitalising all capex at the date of expenditure or using the ‘as spent’ approach .

The hybrid treatment of capex may be appropriate for transmission where projects are generally large and expenditure may occur over two or more years before an asset is commissioned. For the majority of distributors, the bulk of capex is 'program' expenditure with little lag between capital expenditure and commissioning. [6]

In AAE's view, the PTRM must have the flexibility to accept either capitalisation as spent or the hybrid approach, with the choice to be made at the time of a price determination. The choice would need to recognise that the hybrid approach may involve additional costs in collecting and providing relevant data to the AER.

As noted earlier, it would be inappropriate to lock a capex recognition framework into the PTRM when this should be a matter for a revenue or pricing determination.

- Treatment of Inflation

In the past forecast inflation has been estimated by applying the Fisher equation to the observed yields of nominal and indexed CGS. It is now well established that there is a bias in the observed yield for indexed CGS which, if used to forecast inflation, will produce a biased estimate. In March 2007, NERA estimated the bias to be approximately 20bp, attributing it to structural changes in the market for government bonds that have increased institutional demand for the real government bonds at a time of limited supply of these instruments.[7]

The ESC, the Reserve Bank of Australia (RBA), and the Commonwealth Treasury have all accepted that the bias exists.[8]

Based on commentary from the RBA and Treasury, the bias could be significantly greater than the 20bp estimated by NERA. For example, in October 2007, CECG recommended 2.5% as 'the best estimate of inflation over a ten year period' based on an analysis of independent forecasts of inflation.[9] The contemporaneous estimate of inflation from the yield spread on real and nominal government bonds is 3.4% which suggests a bias of the order of 90bp.

This bias is relevant to and must be taken into account in estimating the CPI. In particular it is no longer appropriate to estimate inflation by applying the Fisher equation to the relative yields of nominal and indexed CGS.

- Cash-flow timing (see 3.2.3 below).

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[6] This is a good example of the differences between transmission and distribution economics.

[7] NERA, *Bias in Indexed CGS Yields as a Proxy for the CAPM Risk Free Rate, A report for the ENA,* March 2007.

[8] This matter has been was dealt with extensively in the current Victorian Gas Access Arrangement Review.

[9] CECG, *A methodology for estimating expected inflation*, 26 October 2007.

3.2.2 Capital Contributions

2.1.3.1	The AER seeks comment on how the PTRM could be modified to recognise the treatment of capital contributions, or whether it may be more suitable to deal with this during reset processes.

Most, if not all, DNSPs receive capital contributions which in turn affect the their revenue requirements and therefore capital contributions should be modelled in the PTRM.

AAE recommends that the PTRM model capital contributions in a way that reflects their treatment for tax so that, after tax, the DNSP is kept whole. In our view the approach adopted by the ESC is appropriate. Contributions are treated as revenue for tax and the DNSP's revenue requirement for the year in which the contributions are received is increased to recover the tax payable on the contributions and on the increased revenue. The amount capitalised in the RAB is the DNSP's gross capex less contributions received.

There is a different treatment of capital contributions in Victoria and in Queensland (as described in the issues paper).[10] If a move to a common basis were to result in significant 'discontinuities' for DNSPs in some jurisdictions, then there is a case for a phased approach for those DNSPs to enable them to adjust to the change.

3.2.3 Cashflow Timing Issues

2.1.3.2	• Do the PTRM's current timing assumptions result in any systematic bias in favour of service providers? • If so, is there merit in considering modifications to the PTRM to remove this bias, for example, in the form of present value adjustments discussed here? • To what extent would these adjustments increase the administrative burden and complexity of the modelling?

There may be a case for refining the modelling of cash flow timing but the end result needs to be reasonable, simple and transparent. The outcome must also be consistent with the NEL pricing principles which require among other things that "a

[10] In Queensland contributions are not deducted from in the RAB, and instead are netted off revenue in the year of receipt.

regulated network service provider should be provided with a reasonable opportunity to recover *at least* the efficient costs the operator incurs …" (emphasis added).[11]

There is a view in some past regulatory determinations that the current PTRM (in which the return on capital is calculated by applying the cost of capital to the opening value of the RAB) may overestimate revenue in favour of the service provider. This is because of the implicit assumption that capital-related costs and revenues occur at year-end whereas in fact they occur throughout the year. For O&M costs and their associated revenue, the implicit assumption is that they coincide.

Work by Allen Consulting Group (ACG) in 2002 suggests that the bias relative to precise daily modelling may be 1.5 per cent to 2 per cent.[12] The extent of any bias depends on the service provider's actual intra-year cash flows. At the same time, ACG note that the principal inputs to the PTRM calculation will always be relatively imprecise. [13] AAE submits that there must be a sensible balance between the objectives of precision on the one hand, and simplicity and transparency on the other.

Cash flow timing is presently dealt with in a number of ways by the jurisdictions:

- IPART's approach is to assume that all cash flows occur at mid year. In the example considered by ACG, modelling mid year cash flows produces a small bias against the service provider. IPART then makes a separate allowance for the cost of working capital;
- The ESC applies the WACC to the average RAB for the year. On ACG's modelling this approach produces a somewhat smaller bias than current PTRM assumptions. This compensates for the fact that the ESC does not make separate allowance for the cost of working capital.

In its recent GasNet Draft Decision, the AER proposed to recognise the different intra-year profiles of the components of cash flow by applying 'adjustment factors' to revenue and opex and including a half-year return on capex.[14] In AAE's view, this would introduce an unnecessary layer of complexity. It would reduce clarity and transparency, and appears to be an unwarranted pursuit of precision.

As to what assumptions should be adopted now for the distribution PTRM, AAE notes that the AER intends to consider the timing assumptions in the transmission

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[11] National Electricity Law, s7A(2)

[12] The Allen Consulting Group (ACG), Report for ACCC: Working Capital – Relevance for the Assessment of Reference Tariffs, March 2002.

[13] ACG, op. cit., p3.

[14] ACCC, Draft decision—GasNet Australia—revised access arrangement 2008–12, November 2007, pp153-154

PTRM and may amend that PTRM under the guideline amendment process in the future. AAE's recommendation is that the current transmission PTRM assumptions should be retained in the distribution PTRM in the first instance, and that any changes to the assumptions should be considered for both models concurrently.

AAE recommends that, whatever approach is taken to modelling cash flow timing, the same 'benchmark' assumptions and approach should be adopted and applied to all DNSPs. There should be no attempt to model firm-specific circumstances. This would be similar to the way in which taxation and gearing are treated in the WACC calculation.

Any changes to current cash flow timing assumptions for DNSPs are likely to result in 'discontinuities', at least in some jurisdictions. A phased approach may be necessary to enable those DNSPs to adjust to the change.

3.2.4 Forms of Control

2.1.3.3	Stakeholders are invited to comment on the benefit of incorporating indicative X factor calculations in the PTRM under common forms of price control, namely revenue caps (as per the existing PTRM), weighted average price caps, and revenue yields.

The issues paper notes that Chapter 6A requires that the PTRM for transmission include the calculation of X, but Chapter 6 does not include that requirement for the distribution PTRM. However clause 6.5.9 of the Rules requires that a building block determination include the X factor for each control mechanism for each year. It would therefore be sensible to provide for X values to be calculated within the distribution PTRM.

As suggested in the issues paper, the model could be structured so that it can accommodate the range of alternatives envisaged by Clause 6.5.9 of the Rules as a 'menu of choices'.

3.2.5 Linkages with Information Requirements

2.1.4	Stakeholders are invited to comment on other likely information requirements associated with the PTRM.

The issues paper cites a number DNSP information requirements related to inputs and outputs of the PTRM. AAE is not aware of further items beyond those listed, but will bring these to the AER's attention if any are discovered.

4 The Roll Forward Model

4.1 Basis and Policy Objectives

2.2.1	The AER seeks comment on whether other rule provisions exist that are relevant to developing the RFM for electricity distribution. Comments are also invited on whether the provisions mentioned here may require a different approach or have different meaning in the context of distribution and transmission regulation.

AAE is not aware of any relevant Rule provisions, beyond those discussed in the issues paper.

4.1.1 Consistency Between the RFM for Transmission and Distribution Regulation

2.2.2	Stakeholders are invited to comment on whether there are any impediments to using the AER's transmission RFM as a basis for the distribution model.

The transmission RFM appears an acceptable starting point for the distribution RFM. However, there are at least three actual or potential points of difference for distribution.

The AER notes that Clause S6.2.1(e)(5) of the Rules allow for the roll-forward calculation to be based on either actual or forecast depreciation as proposed by the DNSP. If follows that the RFM must have the flexibility to accept either approach.

The transmission RFM is built around the "hybrid" approach to modelling capex required by the Rules. In commenting on capex recognition in section 3.2.2 above AAE noted that, for most DNSPs, the differences between the hybrid approach and the alternative of capitalising as spent may not be material. AAE submitted that the PTRM should have the flexibility to accept either approach and (to be consistent) similar flexibility should be reflected in the RFM.

The PTRM must provide for capital contributions. Depending on how capital contributions are modelled in the PTRM, it is possible that some changes will be required to the RFM. The RFM must be consistent with the PTRM and, where the Rules provide for alternative approaches to any element of a calculation, the RFM must similarly accept any of those alternatives.

4.1.2 Distribution Specific Issues

2.2.3	Distribution specific issues	The AER invites comments on whether the adoption of existing models is appropriate and whether there are specific issues regarding these models, and current jurisdictional revenue determinations, that the AER needs to consider in performing its first round of roll-forward calculations in each jurisdiction.

AAE is not aware of any features of the current Victorian determinations that require special consideration in the first round of AER roll-forward calculations.

5 Cost Allocation Guidelines

5.1 Proposed AER Approach to Cost Allocation Guidelines

2.3.3	• Given the similarity between the respective NER provisions for transmission and distribution, to what extent should the AER adopt a similar approach to cost allocation between distribution and transmission businesses? • Are the proposed general principles for the provision of information for cost allocation appropriate for distribution? • Should any other general principles be reflected in the cost allocation guidelines?

Section 2.3.2 of the issues paper gives the AER's proposed working assumptions and principles for preparation of the cost allocation guidelines. These include:

- Consistency with transmission guidelines, where possible;
- Cost allocations and attributions will be down to the level of services only, not individual price categories.

AAE would agree that these are workable generalities[15], but notes that the Rules also set out specific jurisdictional requirements for the guidelines.

5.2 Specific Guidelines for Victoria

The issues paper notes while a DNSP may be subject to the old regulatory regime for a transitional period, it must nevertheless comply with:

- the current clause 6.15.1 (comply with the cost allocation method approved by AER); and
- clause 6.15.4 (submit a cost allocation method to the AER for approval).

Thus, there will be a notional 'dual' cost allocation regime for DNSPs applying until the next distribution determination (as stated in cl 11.4.6).

[15] Subject to AAE's earlier comments about the imperative for distribution-specific guidelines.

This dual regime will not apply in Victoria, where provisions requiring specific Victorian guidelines have been inserted at clauses 11.17.4 and 11.17.5 of the amended Rules, as follows:

> **11.17.4 Cost Allocation Guidelines**
>
> (a) In formulating the Cost Allocation Guidelines under clause 6.15.3, the AER must include guidelines specifically applicable to Victorian Distribution Network Service Providers (the guidelines of specific application to Victoria).
>
> (b) The guidelines of specific application to Victoria:
>
> (1) must be formulated with regard to the ESC cost allocation guidelines; and
>
> (2) must be designed to ensure, to the maximum practicable extent, consistency between cost allocation as required by the ESC distribution pricing determination and cost allocation in later regulatory control periods.

5.2.1 Summarising Clause 11.17.4:

- There will be specific cost allocation guidelines for Victorian DNSPs;
- The AER must develop these guidelines 'with regard to' the ESC guidelines;
- The AER guidelines must 'to the maximum practical extent' ensure consistency between the cost allocation required by the (current) pricing determination and cost allocations in "later regulatory control periods".

Some implications which AAE draws from the above are that:

- If there is any inconsistency between the cost allocation principles in cl 6.15.2 of the Rules and the principles in the ESC guidelines, then presumably the ESC guidelines will prevail. However, the degree of discretion available to the AER in applying its own guideline principles when there is no inconsistency is not clear;
- The reference to 'later regulatory control periods' in the Rules would seem to indicate that the AER's Victorian-specific cost allocation guidelines will not simply apply for the next regulatory period but will have application to subsequent regulatory control periods. Thus, there appears to be an indefinite locking in period for the ESC guidelines.

Clause 11.17.5

This clause sets out Victorian transitional provisions relating to the submission of a cost allocation method by a DNSP under cl 6.15.4(a) and the AER's decision to approve or not approve it under cl 6.15.4(c).

> **Clause 11.17.5 Modification of requirements related to cost allocation method**
>
> (a) Clause 6.15.4(a) applies to a Victorian Distribution Network Service Provider as if, instead of requiring submission of the provider's proposed Cost Allocation Method within 12 months after the commencement of Chapter 6, it required submission of the proposed Cost Allocation Method together with the first building block proposal to be submitted by the provider after the commencement of Chapter 6.

(b) The references in clauses 6.5.6(b)(2) and 6.5.7(b)(2) to the Cost Allocation Method are, if paragraph (a) is applicable, to be read as references to the proposed Cost Allocation Method submitted with the building block proposal.

(c) The AER must include in its framework and approach paper prepared for a Victorian Distribution Network Service Provider, in relation to the first building block proposal to be submitted by the provider after the commencement of Chapter 6, a statement of its likely approach to cost allocation based on the guidelines then in force.

(d) The AER:

(1) must, in deciding under clause 6.15.4(c) whether to approve a Cost Allocation Method submitted by a Victorian Distribution Network Service Provider, have regard to previous cost allocation in accordance with the ESC distribution pricing determination; and

(2) must not approve the Cost Allocation Method unless it allows effective comparison of historical and forecast cost allocation between the period to which the ESC distribution pricing determination applies and later regulatory control periods; and

(3) may, subject to the relevant Cost Allocation Guidelines, refuse to approve the Cost Allocation Method if it differs from the method previously used by the Victorian Distribution Network Service Provider.

5.2.2 Summarising Clause 11.17.5

- The Victorian DNSPs are to submit their proposed cost allocation method to the AER with their first building block proposal after commencement of amended Chapter 6, and not automatically 12 months after that date as specified in the general Rules;
- The AER's framework and approach paper for Victorian DNSPs must include a statement of the likely approach to cost allocation based on the guidelines then in force (which as noted above will be based on the ESC guidelines);
- The AER must have regard to the previous cost allocation in accordance with the ESC distribution pricing determination, and may refuse to approve a DNSP's cost allocation method if it differs from the method previously used. Additionally, the proposed cost allocation method must allow effective comparison between historical and forecast cost allocation data;
- The wording of the above provisions again implies that they will have application to all subsequent regulatory control periods.

5.2.3 Comment on Victorian Transitional Clauses

AAE notes that the majority of stakeholders may, at some stage in the future, judge that the prolonged locking in of a single allocation approach is not in the best interests of a sound regulatory framework. At that point, an approach to the AEMC to amend the relevant section of the Rules could be a consideration.

5.3 Linkages with Information Requirements

AAE observes that the AER's cost allocation (CA) guidelines represent the pre-exercise of regulatory discretion under the Rules on this particular issue.

AAE welcomes the comment in s 2.3.3 of the issues paper that all substantive cost allocation provisions will be in the CA guidelines rather than in other regulatory instruments or guidelines. This accords with the principle 2 recommended by AAE in s 2.3 above.

5.4 Transmission Issues Relevant to Distribution

The AER's transmission consultation process revealed a number of stakeholder concerns with the AER's proposed approach to the CA guidelines which also appear relevant to distribution.

5.4.1 Collection and disclosure of information

Transmission stakeholders were critical of what were regarded as excessive requirements in the proposed guidelines for information to accompany a cost allocation method.

AAE considers that the need to be aware of excessive information requirements is even more pressing under the recent NEL amendments that provide the AER with widened information collection powers via regulatory information instruments.

AAE acknowledges that cost allocation is a detailed exercise, and that sufficient information must accompany a DNSP's cost allocation proposal. But AAE also submits that good design principles should lead the AER to (a) be as economical as is possible with its information requirements; (b) state them all upfront in the guidelines; and (c) state in the guidelines the specific circumstances under which the AER might require further clarification of information submitted.[16]

5.4.2 The use of Avoided Cost

The proposed initial transmission guidelines did not favour the use of avoided cost as a cost allocation method. The AER saw avoided cost as problematic, stating that there are potential difficulties with the concept under a full allocation approach as avoided cost attributes costs to one cost centre irrespective of whether the cost is shared. The AER decided to allow the use of avoided cost attribution, but only with the AER's approval.

AAE considers that the AER's concerns with cross-subsidisation under avoided cost should be minimal in the distribution context. Clause 6.2 of the Rules already

[16] Rather than relying on its general powers to make further requests.

provides for a detailed process to classify distribution services, and considerable weight is given to the previous regulatory approach used in this matter (which would have entailed a corresponding allocation of costs). Moreover, cl 6.2.8 provides that the AER may make guidelines on the classification of services, including 'the calculation of stand-alone, avoidable and long-run marginal costs'.

Economic efficiency recognises that efficient costs may lie between stand-alone and avoidable, and the potential use of the latter methodology should not be discouraged or marginalised by the AER guidelines.

6 Efficiency Benefit Sharing Scheme

6.1 Similarities with the Approach to Transmission Networks

2.4.2	• Is it reasonable to apply to DNSPs an EBSS with the same general approach as the transmission EBSS? • Are there any significant differences between transmission and distribution businesses that would require a different general approach?

The issues paper proposes that an EBSS applied to operating expenditure (opex) for distribution should be the same as that for transmission, unless there are significant differences in the incentives facing DNSPs compared to TNSPs.[17]

The issues paper proposes a scheme which requires:

- efficiency gains (or losses) to be carried over for five years;
- the efficiency gain for any year to be incremental - the difference between the under-spend in that year and the under-spend in the preceding year;
- the scheme to apply symmetrically to gains and losses (positive and negative carryovers);
- the focus to be on controllable costs so that forecasts and/or out-turns can be adjusted for changes in capitalisation polices and changes in demand vs forecast;
- allowance for some classes of uncontrollable costs to be excluded (proposed by the DNSP and agreed with the AER in advance);
- allowed increases/decreases for pass-through events to be excluded.

AAE notes that the above framework for an EBSS is similar to that operating in Victoria and SA. Generally, AAE has been satisfied with the operation of the carryover scheme in Victoria, but observes that a number of difficulties and anomalies had to be overcome in the early design of the scheme, and draws these to the AER's attention in the following sections.

[17] Noting that the five requirements for an EBSS set out in cl 6.5.8 of the distribution Rules are similar to the requirements in cl 6A.6.5 of transmission.

6.1.1 Properties of Incentive Schemes

Initial regulation in Victoria used a simple price path as a means of encouraging distribution network savings, whereby DNSPs could retain opex savings made within the regulatory period.

In the 2001 price determination, the ESC discerned a theoretical (but not proved) incentive for DNSPs to defer savings in the later years of a regulatory period in order to benefit from greater savings in the next period. The ESC therefore introduced the carryover mechanism, which it regarded as better providing a continuous incentive for DNSPs to seek cost savings[18].

AAE notes that in moving from a simple price path within a single period to a more complex carryover scheme, information requirements inevitably expand. For example s 2.4.10 of the issues paper anticipates that DNSPs will have to provide similar information to that required under the transmission guidelines, namely:

- evidence of no 'cost shifting' between regulatory periods;
- details of changes in capitalisation policies in the current period;
- adjustments for changes in regulatory responsibilities in the next period; and
- evidence for consistency between forecast demand growth in the next period and demand in the current period.

In AAE's view, these additional monitoring provisions can reduce business incentives to seek efficiencies. Excessive monitoring can end in debate about what is 'normal' versus 'exceptional' expenditure for a particular period, and finally result in the exercise of the regulator's judgement without establishing any clear principle for the business.

Further, the ESC carryover mechanism was applied to all businesses regardless of whether it was the best scheme to encourage savings for a particular business. No flexibility was built in for businesses to demonstrate that alternatives may have produced better results. For example, a simple price path using actual rather than forecast depreciation can provide an uncomplicated, low cost but effective incentive to achieve within-period capex savings.

This leads to the issue of risk profiles for individual DNSPs. The appetite for risk-taking may vary substantially between businesses. If a business is relatively entrepreneurial, it may well be prepared to accept a higher risk EBSS which offers it higher rewards to seek and achieve expenditure savings. At the same time, because the business is accepting the risk that the outturn may be negative (by not being

[18] Cl 6.5.8 (c)(2) of the Rules also requires a continuous incentive to reduce expenditure.

'adjusted' for a number of extraneous issues) then there should be little or no regulatory investigation of the outturn.

Conversely, if a business opts for a low risk/lower return EBSS, then it would have to accept a degree of regulatory inquiry into its costs. Nevertheless, as discussed below, regulators should not seek to adjust outcomes in order to attain excessive precision in gauging efficiencies.

6.1.2 Excessive Precision in Gauging 'Efficiencies'

Although the issues paper cites the 'efficiency gains' which are 'rewarded' by an EBSS, this terminology is inaccurate and does not describe what is really happening.

With a carryover mechanism, businesses are being rewarded for underspending compared with forecast. This may or may not result in a level of efficient costs. If the forecast costs were certain of being 100 per cent efficient, then underspending would result in less than efficient costs. This would be contrary to the requirement in section 7A of the NEL that a service provider be afforded a reasonable opportunity to recover at least the efficient costs in providing network services. Conversely, an increase in spending above forecast is not necessarily evidence of inefficiency.

There is a generally acknowledged degree of imprecision in arriving at forecast efficient cost levels, and an EBSS that purports to identify service provider efficiencies to an excessive degree of precision would be futile. For example, AAE sees little value in the issues paper proposal that distribution should follow transmission by requiring service providers to demonstrate that there has been no evidence of 'cost-shifting'[19] There are already extensive tests listed in cl 6.5.6 of the Rules for regulatory assessment of opex.

The issues paper proposes (s 2.4.2) that efficiency gains and losses would be applied symmetrically, ie there will be both positive and negative carryovers. AAE submits that to include this feature in an EBSS is not 'symmetrical' and that it is in fact biased against the DNSP for the following reasons:

- If the regulatory process has to a reasonable extent projected 'efficient' costs then the system is biased since the opportunities for efficient under-spending must be smaller than the potential for over-spending;
- As noted above, it is simplistic to interpret under or over spending (relative to what is only a forecast) as an accurate measure of efficiency or inefficiency;

[19] First dot point in section 2.4.10

- A negative carryover from one period to the next amounts to a double penalty – over-spending in the first instance goes directly to the DNSP's bottom line. By carrying over an aggregate negative to the subsequent period, the DNSP's revenue allowance would be less than the assessed efficient requirement. This would be contrary to the NEL requirement that a service provider be afforded a 'reasonable opportunity' to recover at least the efficient costs in providing network services.

6.1.3 Symmetric Carryover

The issues paper proposes (s 2.4.2) that efficiency gains and losses would be applied symmetrically, ie there will be both positive and negative carryovers. AAE submits that to include this feature in an EBSS is not 'symmetrical' and that it is in fact biased against the DNSP for the following reasons:

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6.1.4 Drivers of an EBSS

In AAE's view, the emphasis should be on establishing the correct drivers of an EBSS rather than excessive refinement of the scheme. One clear example is the proportion of benefits attributable to service providers.

The AER's analysis in transmission indicated that a five-year carryover results in a benefit-sharing ratio of about 30:70 between the service provider and network users. Given that the AER will be dealing with some businesses entering their fourth regulatory period (eg Victoria) it appears plain that additional efficiencies will be harder and more costly to achieve. An increase in the carryover period – or some equivalent technique to increase the benefit sharing ratio closer to 50:50 – should be

investigated in the light of the additional investment which will be dependent on longer term returns.[20]

6.2 Differences from the Approach to Transmission Networks

2.4.5	Would the application of an EBSS to capex yield sufficient benefits to consumers to offset the risk of windfall gains and losses? Could forecasts and/or actuals be adjusted ex post to reduce the risk of windfall gains and losses to acceptable levels?

The issues paper notes that the distribution Rules allow the AER to extend an EBSS to incorporate allowances for capital expenditure (capex) and/or distribution losses.

6.2.1 Capital Expenditure

In its discussion of capex incentives, the issue paper focuses on the incentives that service providers may have to:

- capitalise opex inappropriately in order to achieve an opex efficiency benefit (cl 6.5.8 (c)(4));
- produce contrived capex forecasts which (as a result of the inherent 'lumpiness' of capex) can provide service providers with unjustified financing benefits within the regulatory period; and
- contrive to defer capex (achieving a seeming 'efficiency' within the regulatory period) and then propose the same deferred projects in the next period.

In AAE's view, these presumed incentives are more relevant to the design of the regulatory framework overall than to the design of a capex incentive scheme.

If the overall framework provides adequate criteria for the assessment of forecast capex and opex, then there should be no need for an EBSS to require another round of detailed investigation into these costs. This reinforces points made in section 6.3 above that there is a substantial degree of imprecision in arriving at forecast efficient expenditure levels. Attempts to design an EBSS that purports to identify service provider efficiencies with greater precision than 'reasonable forecasts' will permit are meaningless, and in fact will negate any incentive properties of an EBSS

[20] In its final decision on the transmission EBSS, the AER noted that it would reconsider the appropriateness of the carryover period (and thus the sharing ratio) for TNSPs if presented with evidence that a TNSP is approaching the efficiency frontier.

In this regard, AAE wishes to respond to certain capex forecasting issues raised in the issues paper.

6.2.2 Inappropriate capitalisation

This should not be an issue for an EBSS, given the ex ante nature of regulatory expenditure assessment and the within-period submission of reporting information, including any change in capitalisation policy.

6.2.3 Incentives to Contrive Capex Forecast or Defer Capex

2.4.6	Would the application of an EBSS to capex provide inappropriate incentives to delay capex?

In AAE's view, the concept of 'contrived capex' should not be an issue for an EBSS. It is a matter for the ex ante assessment of capex at the pricing reset. Given that the Rules require extensive testing of forecast capex (cl 6.5.7), including capex/opex substitution (6.5.7(e)(7)), the clear presumption should be that any capex forecast submitted by a DNSP will have been thoroughly tested before it is incorporated into an EBSS.

Regarding 'deferred' capex, AAE agrees that capex can be deferred, but that:

- given the ex ante review of capex, any scope for significant deferral should be limited; and
- to the extent that capex can be deferred as a result of efficiencies achieved by DNSPs, this is an economic benefit to end users and should not be discouraged by an EBSS, even if a DNSP were to gain a measure of benefit also.

AAE submits that as long as the benefits from capex deferral attributable to DNSPs are not excessive, then potential deferral should not be an argument against including capex in an EBSS.

However, this still leaves open the question of whether it is necessary to include capex in an EBSS.

6.2.4 Should Capex be Included in an EBSS?

2.4.8	• Are the incentives for efficient capex in the broader regulatory framework sufficient or is there also a need for an EBSS that incorporates capex? • How would the exclusion of capex from the EBSS affect the overall regulatory incentives faced by DNSPs? • In considering whether or not it is appropriate to include capex in the EBSS for distribution networks, what issues should the AER consider in addition to those discussed in this issues paper?

The issues paper cites divided views amongst regulators as to whether a capex component of an EBSS must complement an opex component (issues paper 2.4.6). The ESC has a view that capex deferrals could skew the benefits of the scheme in favour of DNSPs, while ESCOSA has a view that inclusion of capex provides neutral incentives between seeking capex and opex efficiencies.

As noted, AAE regards the issues paper's concerns with including capex in an EBSS as somewhat overstated. Nevertheless, AAE considers that a much more thorough consideration of effective capex incentives is required. Deferral of a capex incentive scheme should provide stakeholders with sufficient time to consider effective alternative approaches, and should avoid the danger of a hastily devised, but over-elaborate capex scheme, in the initial guidelines.

AAE suggests that it is likely that provision for actual capex and depreciation could provide a sufficient incentive for DNSPs to seek capex savings in an initial EBSS.

As noted in the issues paper, the AER has a disposition to use actual depreciation to be rolled into the RAB rather than forecast depreciation (issues paper s 2.2.2). [21]

6.3 Impact of the EBSS on Incentives to Undertake Demand Side Responses and Invest in Distributed Generation

2.4.7	Would the application of an EBSS to only opex materially impact DNSPs' incentives to undertake demand side responses and invest in distributed generation?

The Rules provide that the AER may develop a demand management incentive scheme to give incentives for DNSPs to implement efficient non-network alternatives or to manage the expected demand for standard control services in some other way (cl 6.6.3).

AAE notes that the AER does not propose to develop a demand management incentive scheme under cl 6.6.3 at this time. This is a realistic option in AAE's view, given the very considerable complexities of implementing the EBSS and the STPIS (and gauging their operating effectiveness) before even considering whether a demand management scheme is warranted. The immediate issue is for the AER to assess whether and how it can implement clauses 6.5.8 (b) and 6.5.8 (c)(5) to give due weight to DSR and DG considerations.

In their April 2007 paper for the MCE/SCO, NERA/Allen Consulting argAAE that the lack of an efficiency benefit sharing mechanism for capex was a 'moderate' barrier to

[21] This matter is discretionary in distribution but not in transmission, where the latter requires that only actual depreciation may be rolled in.

the uptake of demand side response (DSR) and distributed generation (DG). As a result, the consultants recommended that the Rules should allow (but not require) the AER to include a capex efficiency incentive mechanism in the building blocks, and also require the AER to consult on any DSR and DG incentives in any proposed opex or capex incentive scheme.[22] These recommendations have since been reflected in clauses 6.5.8 (b) and 6.5.8 (c)(5) of the Rules.

The NERA/Allen papers were subject to extensive consultation by MCE/SCO and a significant recommendation from the Energy Networks Association was that:

> The fair sharing of efficiency benefits is a key component of the analysis of the relative costs and benefits of pursuing demand management. The development of appropriate mechanisms to allow this, as well as ensuring that incentives to pursue demand management are balanced across the regulatory period, requires further consideration. [23]

AAE notes that the very complex issue of balancing all regulatory incentives against the requirement to take due account of DSR and DG opportunities has not been pursued in any depth since the initial NERA/Allen consultation of May 2007. The ENA recommendation at that time was to further investigate these important matters via a Rule change process[24].

AAE considers that in view of the paucity of necessary analysis and data, including illustrative modelling under various regulatory scenarios, the AER should defer consideration of capex and other incentives as they may relate to DSR and DG until a much firmer analytical base has been established and consulted upon, either under a guideline consultation process or a Rule change process, or a combination of both.

6.4 Treatment of Distribution Losses

6.4.1 General Issues

NERA/Allen dealt with optimisation of distribution network losses in August 2007 and recommended that the Rules should allow (but not require) the AER to develop an incentive mechanism for loss factor management guided by cost/benefit

[22] NERA Economic Consulting, Distribution rules review – network incentives for demand side response and distributed generation, April 2007, p 84.

[23] Energy Networks Association, Network Incentives for Demand Side Response and Distributed Generation – Response to NERA Economic Consulting Papers, 25 May 2007, p 13

[24] AAE notes that there is a proposed AEMC Rule change process dealing with demand side issues in train at the moment, although at a very preliminary stage.

considerations.[25] Clause 6.5.8(b) of the Rules permits an EBSS for distribution losses.

NERA/Allen considered that control of losses by network augmentation rather than accuracy of forecasts was likely to be more significant for efficiency. They also cited two regimes to optimise losses (which the AER has noted in its issues paper):

- the IPART scheme of recognising the economic value of investments in the regulated asset base by reference to the wholesale market price of avoided energy losses; and
- the Ofgem scheme of setting loss factor targets, and rewarding or penalising DNSPs for over and under performance relative to these.

NERA/Allen noted that the Ofgem scheme was similar to the approach used by the ESC for Victorian gas distribution. However, the ESC did not implement a loss incentive scheme in the 2006 electricity price review since it considered the level of losses and accuracy of forecast to be appropriate.

6.4.2 Existing Losses

2.4.9	Is there any evidence available showing that the current level of distribution losses is significantly greater than the economically efficient level?

The issues paper observes that before implementing any EBSS for losses, the AER would need to assess whether the current level of losses is "significantly" greater than the economically efficient level. AAE considers this to be a reasonable approach, since (following the NERA/Allen recommendations) the benefits of a loss optimisation scheme must outweigh its costs. A parallel principle is included in cl 6.5.8 (c)(1) of the Rules which requires that the benefits to consumers from an EBSS are sufficient to warrant a reward or penalty under the scheme for DNSPs.

6.4.3 IPART and Ofgem Schemes

2.4.9	• If a distribution loss scheme is found necessary, would either of the Ofgem or IPART schemes be appropriate given the requirements of the NER? • If not, what would be the best form of scheme?

[25] NERA Economic Consulting and The Allen Consulting Group, Network planning and connection arrangements—national frameworks for distribution networks, August 2007, p. 106.

As to whether either the IPART or OFGEM schemes would be appropriate, AAE notes that both schemes raise issues of valuation and measurement.

6.4.4 IPART

IPART noted a number of issues relevant to its scheme as follows:

- the NPV of losses saved as a result of the investment needs to be estimated; and
- in principle, this value should be based on the long run marginal cost of generation but this is not directly observable.

To help resolve this valuation issue, the Tribunal established a working group in 2004 to identify:

- a framework for calculating the amount of energy loss avoided as a result of the investment;
- a methodology for calculating the per kWh value of energy loss based on an observable historic average of national pool prices for NSW; and
- how DNSPs could incorporate the estimates of the value of loss reductions into their capital expenditure planning assessment processes.

IPART's basic aim was to identify a methodology for assessing the value of loss reduction investments which was consistent with its approach to assessing the prudence of these investments as part of the roll forward of the asset base.[26]

AAE would expect that the AER would have to develop a similar framework under a national scheme taking into account the factors identified by IPART and applying them to DNSPs in various jurisdictions. This could be an information-intensive exercise for the AER. Also, as noted by NERA/Allen, to retain ongoing neutrality with other network incentives, there may need to be a later adjustment to account for the difference between the cost and value of avoided energy loss.[27]

6.4.5 Ofgem

The Ofgem scheme appears to be relatively straightforward and is described by Ofgem as follows[28]:

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[26] IPART, NSW Electricity Distribution Pricing 2004/05 to 2008/09, Final Report, p 105.

[27] NERA Economic Consulting and The Allen Consulting Group, Network planning and connection arrangements—national frameworks for distribution networks, August 2007, p. 105.

[28] Office of Gas and Electricity Markets, Electricity Distribution Price Control Review: Final Proposals, November 2004

- reported losses should simply reflect the difference between the estimated volume of electricity entering and exiting the system;
- the losses target will be fixed for the five years of the price control;
- the losses incentive rate will be fixed for the duration of the next price control period;
- an explicit adjustment to the level of reported losses may be made to reflect the impact of distributed generation;
- expenditure on low-losses equipment will be treated as any other capex, i.e. it will be eligible for inclusion in the [regulatory asset base] and subject to the rolling capex incentive; and
- [distribution businesses] keep the benefit and penalties of performance against the losses target for five years through the application of a rolling retention mechanism.

An obvious issue for any target scheme is setting a realistic target in the first place, although this may already have been considered to some extent in evaluating whether existing losses are efficient.

In addition, the AER issues paper notes that network design and operation are not the only factors affecting losses; other influences include consumer demand and weather factors. Consistent with AAE's earlier discussion on incentives, reliance on a carryover scheme can require a significant increase in information requirements to account for atypical outturns, since the latter can be matters of considerable debate. The scheme would need to strike a balance between information refinement and providing a realistic incentive to reduce losses. This further indicates the need for thje AER to undertake adequate data collection and analysis, together with wide consultation, before developing a loss optimisation scheme.

7 Service Target Performance Incentive Scheme (STIPS)

7.1 Purpose of STIPS

AAE agrees with the issues paper that the purpose of a STPIS is to balance any incentive to reduce expenditure with the need to maintain and improve service quality for customers through establishing a direct financial link between revenue and service standards for regulated services.

7.2 Requirements of Rules

In developing a STIPS, the AER is required under cl 6.6.2 to:

- Consult with the authorities who administer jurisdictional electricity legislation;
- Since the STIPS would operate concurrently with jurisdictional legislation, the AER is required to ensure that its service standards and targets, including guaranteed service levels (GSLs) do not 'put at risk' the DNSPs' compliance with the relevant service standards, targets and GSLs set in jurisdictional legislation.

AAE agrees with the generalisation in the issues paper that s-factor schemes are aimed at maintaining/improving average network performance, whereas GSL schemes are aimed at maintaining service to the worst served customers.

7.3 National Framework

2.3	• The AER would like views on whether it is feasible and appropriate to establish a common approach within a national framework • The AER would also like views on the issues it may need to consider in establishing this framework. In particular: – What should be the key elements? – How might a national scheme deal with differences between regions/jurisdictions? – What are the possible obstacles to achieving an effective national framework?

7.3.1 Current Practice

AAE notes that jurisdictional practice varies widely. For example, only Victoria and SA have ongoing s-factor schemes, which are service target schemes integrated into economic regulation. A feature of such schemes is that they place regulated revenue at risk if the specified targets are not met. All jurisdictions have GSL schemes, which set threshold levels of performance for individual customers. However, the schemes are implemented legislatively in diverse ways, and the services subject to the

scheme also vary considerably. Most jurisdictions require DNSPs to collect and provide service quality information, which may be published.

7.3.2 A common approach?

The issues paper asks whether a common approach is feasible under a national framework (s 2.3) and it appears that the AER is contemplating 'best practice' schemes which will somehow take account of the relative maturity of each of the jurisdictional schemes.

Whether a 'national framework' can be developed depends very much on what AER intends the purpose of such a framework to be.

If such a framework means a common (inflexible) approach to setting service incentives regardless of the circumstances and the risk/rewards faced by a particular business, then this outcome is unlikely to be achieved for the medium term. Given the great disparity of existing jurisdictional schemes and service standards, a convergent national approach will depend very much on the jurisdictions' willingness to wind back their existing schemes and how quickly they do so.

However, if national framework means one flexible enough to allow each DNSP to propose an incentive arrangement taking account of:

- the specific jurisdictional service performance scheme to which it is subject;
- the geographical and market circumstances of its network; and
- the risk/reward preferences of the business
- then such a framework may be possible.

Where service standard regulation has been established outside the economic regulatory framework such as in NSW[29], a national framework would have to adapt by having significantly more muted incentive signals. In jurisdictions where the service incentive scheme is tied to economic regulation (Victoria and SA) developing a consistent national approach is likely to be more feasible. However, service incentive schemes require collection of key information about historic service performance and customer willingness to pay, which raises issues of data availability and comparability amongst jurisdictions.

[29] In NSW reliability standards are established by Regulation under the Electricity Supply Act as part of the technical regulation and licensing arrangements

7.4 Public Reporting, GSLs and S-factor

AAE is comfortable that a scheme that involves public reporting, s-factors and GSLs can work satisfactorily, both for the businesses and in achieving the intended public policy outcomes. However, existing schemes of this kind could be improved by providing flexibility for individual businesses to propose an incentive arrangement within the scheme that reflects the DNSP's geographical and market circumstances and allows the business to manage its risk/reward preferences.

7.4.1 Public reporting schemes

3.1	• The AER would like views on whether it should require DNSPs to report on key aspects of their service performance for public reporting purposes. • If so, should DNSPs be required to report just on those aspects of service performance measured for an incentive scheme (e.g. GSL scheme or s-factor scheme) or on a common set of agreed measures? • The AER would also like views on how future reporting arrangements which may be multi-faceted (i.e. reporting to the AER in relation to an incentive scheme and potentially for public reporting purposes) could be simplified or rationalised to reduce compliance costs.

AAE agrees that public reporting delivers information so that both the regulator and the wider public are properly informed about service reliability, and that reporting can act as an incentive to improve performance through comparison. Importantly it also inhibits misinformation about the quality of service being put in the public domain.

Performance measures should provide a complete indication of service performance, but as noted in the issues paper, there are geographical, environmental and other factors which affect comparison between businesses, and these must be allowed for.

7.4.2 GSL schemes

3.2	• The AER would like views on whether it should develop a national GSL scheme. • The AER would also like views on issues associated with the implementation and operation of a national GSL scheme.

GSLs provide a signal for for improvement needed at the localised level (in general, the worst-served customers) and give customers assurance that repeated poor performance is recognised by a penalty payment.

AAE agrees that the DNSP should automatically make a GSL payment to customers once it is clear that the payment is due (ie the customer should not have to apply).

However, the cost of setting up or amending such a scheme may be significant, and this must be recognised in the DNSP's cost base as part of any pricing determination.

Given that all jurisdictions have GSL-type schemes in place, the development of a national framework involving some elements of commonality should, in concept, be feasible. Nevertheless, there appear to be several complexities:

- As noted earlier, the jurisdictional schemes are implemented legislatively in diverse ways, and the services subject to the schemes also vary considerably;
- In some jurisdictions, customer payments are made automatically, while in others payment is on request;
- In some jurisdictions, service standards and targets are mandated in (non-economic or technical) regulations and these have been taken up into the jurisdiction's GSL schemes;
- GSL schemes in Victoria and SA operate in parallel with s-factor schemes.

The issues paper (s 3.2) observes that the Rules apparently permit the AER to develop a national GSL scheme in addition to the jurisdictional schemes, subject to the requirement under cl 6.6.2 (b)(2) of the Rules that such a scheme must not 'put at risk' the DNSPs' compliance with the relevant GSLs set in jurisdictional legislation.

AAE submits that if a jurisdictional GSL scheme is already in place, then in the short/medium term the AER does not need to develop an additional layer of regulation. Over time, it would then be possible for the jurisdictions to wind down their schemes, subject to satisfactory resolution of any issues they may have with regard to service levels.

AAE cannot at this stage offer a definitive view on how such resolution can occur, except that:

- It must involve negotiating and agreeing with the jurisdictions on any changes to their current GSLs. AAE also notes that industry must be consulted in this process;
- Any such negotiation and resolution will take time;
- In the meantime, and as recognised in the issues paper (s 9.3), there will be a number of transitional issues to be addressed.
- AAE welcomes assurances in the issues paper (s 9.3) that DNSPs subject to existing GSL schemes should expect these to continue in the transition to any full national approach.

7.4.3 S-factor schemes

3.3	• The AER would like views on the overall design of a national s-factor scheme. In particular: – the form that a national s-factor scheme might take – whether the scheme should be symmetrical – the number of measures that should be included, and – any other relevant threshold matters not dealt with elsewhere in this paper. • To what extent should existing s-factor schemes form the basis of a national scheme?

The issues paper notes that s-factor schemes operate symmetrically, offering rewards and penalties linked to DNSP revenue via an additional factor incorporated in the price control formula.

The issues paper also notes that s-factors can take two forms:

- Target based, where actual performance is measured against a current or previous year target, and then weighted appropriately into the price control formula (this applies in Victoria); and
- Performance based, where (as in SA) performance bands are defined around the target and rewards/penalties accrue according to which performance band is attained in practice.

In AAE's view, a target-based scheme is considerably easier and less complex to administer, since it requires potentially less subjectivity in defining the relevant performance 'bands'.

An s-factor approach, well designed, and in concert with a GSL scheme and public information, can provide the appropriate tension in incentives between individual service quality and overall cost reduction. Key issues in design are an appropriate choice of service measures, the benchmark levels of service and the strength of the incentives. These are matters which the DNSP should free to incorporate in its revenue and pricing proposal for approval consistent with the Rules, given some broad overarching guidance from the AER in its STPIS.

7.4.4 Appropriate measures for s-factor schemes

The issues paper notes that s-factor scheme would need to rely on standard measures of service quality that are clearly defined, reliable and auditable.

The issues paper observes that there are generally three aspects of service quality:

- Reliability;
- Quality of supply; and

- customer service.

7.4.5 Reliability indicators

4.1	• The AER would like views on which measures of reliability to include in a national s-factor scheme. • The AER would also like views on the classification of feeders by type and whether the AER should distinguish between planned and unplanned interruptions.

In AAE's view, a national s-factor scheme cannot be implemented overnight. There must be an adequate history for each service measure to be measured and tailored to each DNSP before it can be included in an s-factor scheme. This is an obvious requirement for such 'traditional' reliability measures as SAIFI, SAIDI, CAIDI and MAIFI.

The issues paper (s 4.1) suggests that most jurisdictions should have sufficiently accurate historical data to set targets for these indicators (except MAIFI). Nevertheless, AAE would expect this observation to be conclusively demonstrated by the AER before it attempted to develop a national framework. It would not be in the interests of improved service quality to develop a framework and populate it with inadequate data. The issues paper itself notes the many qualifications that need to be made to indicators of 'average network performance' before meaningful inter-business reliability comparisons can be made.

7.4.6 Quality indicators

4.2	• The AER would like views on the appropriateness of incorporating quality indicators in a future s-factor scheme, including the likely costs and benefits of incorporating quality indicators, the possible types of measures that could be used, and the availability of historical data. • Should supply quality be addressed in a different way such as through a GSL scheme or some other scheme?

The issues paper observes (s 4.2) that no s-factor scheme in Australia includes a quality of supply measure, and that there are no commonly used indicators for measuring the average quality of supply to customers.

In AAE's view, measurement of service quality has not been undertaken in a meaningful way to date. Until this occurs , and the trade-off between cost and quality improvement can be reliably quantified, it should not be included as part of the service measures in an s-factor scheme.

One option to avoid undue complexity may be to simply account for service quality through a GSL scheme.

7.4.7 Customer service indicators

4.3	• The AER would like views on customer service indicators to be included in an s-factor scheme, including the likely costs and benefits, and feasibility, of incorporating a range of indicators. • Would customer service indicators be more appropriately addressed in a GSL or other scheme?

The issues paper lists a number of potential customer service indicators (s 4.3) but notes that only one – call centre response – has been included in the SA and Victorian schemes. This suggests the potential difficulty in objectively measuring customer service requirements.

As with the issue of quality of supply above, it may be best to avoid undue complexity in an s-factor scheme, and to simply account for customer service quality through a GSL scheme.

7.5 Approaches to Setting Rewards and Penalties in an S-factor Scheme

5	• The AER would like views on the above approaches for setting incentive rates and other possible approaches. • The AER would like views on the feasibility and associated costs and benefits of adopting each approach. • The AER would also like views on how it should determine relative weightings for measures.

AAE agrees with the issues paper that there are several issues in selecting appropriate rewards and penalties to apply in an s-factor scheme, and that the relationship between cost of service improvements in reliability and customers' willingness to pay may be difficult to establish. Each measurement approach (marginal cost, economic loss and customer surveys) poses individual difficulties. In AAE's view, regulators have simply adopted practical approaches to setting rewards and penalty levels, evident in the fact that different approaches have been tried over time.

AAE would expect that the setting of reward and penalty levels would respond to better and more relevant information emerging over time.

7.6 Risks and exclusions

7.6.1 Allowing for Risks

7	The AER would like views on mechanisms to deal with additional risk introduced by an s-factor type scheme and whether it is appropriate for such risks to be wholly borne by DNSPs and/or customers.

The issues paper notes a number of risk-mitigating devices used in its transmission STPIS, namely;

- 'Deadbands', where performance variations around a target have no effect;
- An overall financial penalty limit; and
- 'Collars', which remove outlier performance.

AAE acknowledges that these devices can remove some risk on a DNSP. In AAE's view, they should be considered in the light of historical data for a particular DNSP. If there are unacceptable risks to a DNSP from not including such devices, such as historically very asymmetrical and/or volatile outcomes, then these devices should be capable of being proposed by the DNSP as apart of its pricing proposal.

7.6.2 Allowing for Exclusions

8.2	• What approach should the AER take in applying exclusions? Q. Should exclusions cover reliability indicators and customer service indicators? • Should exclusions be determined by reference to qualitative or quantitative measures? • How appropriate is a standard such as IEEE 1366-2003?

Exclusions are essential to ensure that DNSPs are not inappropriately penalised in the event of extreme events which they cannot be expected to manage, or respond with optimal action in order to avoid supply outages. The issues paper notes two broad approaches:

- Qualitative measures, such as defining a 'rare' event. As noted, such a definition can be difficult and contentious (as past Victorian experience demonstrates);
- Quantitative measures, which are statistically based. The issues paper lists a range of benefits of such measures, including:
  - Ease of use;
  - No need to investigate particular events;
  - Ease of calculation; and
  - Consistency in reporting.

AAE favours a statistical technique along the lines of that developed by the US Institute of Electrical and Electronics Engineers Standard IEEE 1366-2003 (noted in s 8.2 of the issues paper). It is to be preferred over that which the ESC adopted for the 2006-10 Victorian EDPR.

The ESC's more recent approach is in AAE's view significantly more difficult to quantify, and has led to contention with Victorian DBs that would have been avoided under the IEEE approach.

7.6.3 Limiting the contribution of an excludable event

8.3	Where an exclusion threshold is exceeded what action should the AER take to limit the contribution of events?

In the event that an exclusion threshold has been exceeded, the issues paper notes three options for the regulator:

- Remove the event from the incentive scheme;
- Limit outcomes to the threshold value; or
- Substitute a value in the performance measure – eg average performance.

AAE submits that removal of the event provides the simplest and most generally useful solution.

7.7 Implementation Issues for the Transition to a National Scheme

The issues paper (s 9. sets out a range of transitional issues that would be relevant to the AER in developing a national STPIS. Given the complexity of possible issues, AAE observes that this is unlikely to be an exhaustive list.

The issues paper develops a framework to analyse three transitional scenarios: jurisdictions without an s factor scheme, jurisdictions with such a scheme; and GSL issues. AAE offers brief comments on some of the questions raised in the issues paper.

7.7.1 Issues for jurisdictions currently without an s-factor scheme

9.1.1, 9.1.2, 9.1.3	• The AER invites comments from interested parties on the current and future availability of data on reliability and quality of supply measures for DNSP's currently without an s-factor scheme • The AER invites comments from interested parties on the current and future accuracy of data for reliability and quality of supply measures. • How could the AER take changes in performance data, due to changes in recording systems, into account in setting targets and incentive rates? • The AER invites comments from interested parties on the current and future accuracy of data for reliability and quality of supply measures. • How could the AER take changes in performance data, due to changes in recording systems, into account in setting targets and incentive rates? • The AER invites comments on issues relating to the interaction between mandatory jurisdictional service standards and a national STPIS for DNSPs without an s factor scheme. For example, what beenfits and limitations could the existing mandatory jurisdictional service standards place on the implementation of a national s factor scheme?

AAE agrees with the issues paper generally that lack of data and data limitations may influence the AER's ability to implement an effective s factor scheme in jurisdictions which lack such a scheme.

Section 7.3.2 above raised several matters pertinent to a national scheme. In AAE's view, given jurisdictional diversity, a narrowly contrived scheme cannot produce effective service incentives for DNSPs. A national scheme must recognise and adapt to:

- Providing opportunities for distributors to propose incentive arrangements;
- Jurisdictional service schemes, targets and preferences;
- The geographical and locational features of businesses within jurisdictions;
- Different market features;
- Different risk/reward preferences of business; and
- Most importantly, the availability (or lack) of relevant information to support an appropriate EBSS.

Additionally, AAE considers that the AER would need to develop objective criteria to evaluate the adequacy of existing jurisdictional schemes.

7.7.2 Issues for Jurisdictions Currently with an S-factor Scheme

9.2.1	• The AER invites submissions from interested parties on current and future data availability and accuracy in relation to DNSPs currently with an s-factor scheme. In particular, the AER would like views on the availability and accuracy of service reliability and quality data, including the level of the network at which this data is recorded. • The AER invites comments from interested parties on whether changes in reporting and the incentive mechanisms themselves should be taken into account in developing targets for DNSPs currently with an s-factor scheme.

AAE acknowledges that in jurisdictions where the service incentive scheme is tied to economic regulation (Victoria and SA) developing a national approach is likely to be more feasible. AAE considers these schemes to be a good foundation for the AER to build upon, but would caution against making significant and too rapid changes to them. Some factors that would be important are:

- Ensuring that an adequate history of data is available to support any proposed changes in service measures;
- Ensuring that any change to the structure of existing mechanisms resulted in equal or improved incentives to DNSPs compared with existing schemes;
- Appropriate transitional arrangements to ensure DNSPs were not disadvantaged by any proposed changes to existing schemes

7.7.3 Transitional issues in relation to GSLs

9.3	• If the AER were to develop a national GSL scheme, what issues arise regarding existing GSL schemes (that are mandated under jurisdictional electricity legislation) operating concurrently with a national scheme. • In relation to existing GSL schemes that are not mandated, what issues arise in relation to transitioning these schemes to a national scheme, should this be considered appropriate?

The issues paper notes that the AER is obliged to consider current GSL schemes in jurisdictional arrangements when assessing whether to develop a national GSL scheme, and there would be a range of transitional issues to be addressed. As noted, AAE welcomes assurances that DNSPs subject to existing GSL schemes should expect these to continue in the transition to any full national approach.