



Draft decision – Appendices

South Australia

**Draft distribution determination
2010–11 to 2014–15**

25 November 2009

A. ETSA Utilities distribution services classification

This appendix sets out the AER's classification of ETSA Utilities distribution services for the next regulatory control period. Italicised terms are defined in the NER.

Direct control (standard control) services

A.1 'Standard' network services

- a. All *network services* except:
 - i. *network services* provided at the request of a *distribution network user*:
 1. with higher quality or reliability standards, or lower quality or reliability standards (where permissible), than are required by the NER, the *Electricity Distribution Code*, or any other applicable regulatory instruments, or
 2. in excess of levels of service or plant ratings required to be provided by ETSA Utilities' assets, or
 - ii. extension or augmentation of the *distribution network* associated with the provision of a new *connection point* or upgrading of the capability of a connection point to the extent that a *distribution network user* is required to make a financial contribution in accordance with the *Electricity Distribution Code*, or
 - iii. other *network services* that are classified as *negotiated distribution services* in sections B.7 to B.16 of this appendix B.

A.2 'Standard' connection services

- a. All *connection services* except:
 - i. *connection services* provided at the request of a *distribution network user*:
 1. with higher quality or reliability standards, or lower quality or reliability standards (where permissible), than are required by the NER, the *Electricity Distribution Code*, or any other applicable regulatory instrument, or
 2. in excess of levels of service or plant ratings required to be provided by ETSA Utilities' assets, or
 - ii. the provision of a new *connection point* or upgrading of the capability of a connection point to the extent a *distribution network user* is required to make a financial contribution in accordance with the *Electricity Distribution Code*, or
 - iii. other *connection services* that are classified as *negotiated distribution services* in sections B.7 to B.16 of this appendix B.

A.3 Fixed 'standard' 'small' customer metering services

- a. The provision of *energy data services* in respect of meters meeting the requirements of a *metering installation* type 6 except the quarterly meter read service.

A.4 Unmetered metering services

- a. The provision of metering services in respect of meters meeting the requirements of a *metering installation* type 7.

Direct control (alternative control) services

A.5 'Variable' 'standard' 'small' customer metering services

- a. The provision of:
 - i. meter provision services in respect of meters meeting the requirements of a *metering installation* type 6, and
 - ii. quarterly meter read services in respect of meters meeting the requirements of a *metering installation* type 6.

A.6 'Exceptional' large customer metering services

- a. Meter provision services provided in respect of meters meeting the requirements of a *metering installation* type 1, *metering installation* type 2, *metering installation* type 3 or *metering installation* type 4 installed prior to 1 July 2000.
- b. Meter provision services provided in accordance with the requirement of clause 27 of ETSA Utilities' distribution licence as in force at 30 June 2005.

Negotiated distribution services

A.7 'Non-standard' network services

- a. *Network services* provided at the request of a *distribution network user*:
 - i. with higher quality or reliability standards, or lower quality or reliability standards (where permissible), than are required by the NER, the *Electricity Distribution Code*, or any other applicable regulatory instruments, or
 - ii. in excess of levels of service or plant ratings required to be provided by ETSA Utilities' assets

A.8 'Non-standard' connection services

- a. *Connection services* provided at the request of a *distribution network user*:
 - i. with higher quality or reliability standards, or lower quality or reliability standards (where permissible), than are required by the NER, the *Electricity Distribution Code*, or any other applicable regulatory instrument, or

- ii. in excess of levels of service or plant ratings required to be provided by ETSA Utilities' assets.

A.9 New and upgraded connection point services

- a. Extension or augmentation of the *distribution network* associated with the provision of a new *connection point* or upgrading of the capability of a *connection point* to the extent that a *distribution network user* is required to make a financial contribution in accordance with the *Electricity Distribution Code*.
- b. The provision of a new *connection point* or upgrading of the capability of a *connection point* to the extent a *distribution network user* is required to make a financial contribution in accordance with the *Electricity Distribution Code*.
- c. Responding to an enquiry in relation to the provision of a new *connection point* referred to in paragraph B.9(a) or (b).
- d. Providing technical specifications in relation to the upgrading of the capability of a *connection point* referred to in paragraph B.9(a) or (b).
- e. Preliminary communications with a customer, being an existing or potential *distribution network user* where more than 6 hours work is required.

A.10 'Non-standard' 'small' customer metering services

- a. In relation to 'small' *distribution network users* (at present, those consuming less than 160MWh per annum), the provision of metering services:
 - i. at all first tier *connection points* and second tier *connection points* where a meter meeting the requirements of a *metering installation* type 1, *metering installation* type 2, *metering installation* type 3, *metering installation* type 4 or *metering installation* type 5 is or is to be installed
 - ii. in respect of meters meeting the requirements of a *metering installation* type 6 and *metering installation* type 7 containing a meter different to the type of meter ETSA Utilities would ordinarily install (including prepayment meter systems), which is installed at the request of a retailer or a *distribution network user*.
- b. In relation to energy data services, the provision of special meter readings and associated services.

A.11 'Large' customer metering services

- a. The provision of *metering services* to 'large' customers (at present, those consuming more than 160MWh per annum), except for:
 - i. meter provision services provided in respect of meters meeting the requirements of a *metering installation* type 1, *metering installation* type 2, *metering installation* type 3 or *metering installation* type 4 installed prior to 1 July 2000, or

- ii. meter provision services provided in accordance with the requirement of clause 27 of ETSA Utilities' distribution licence as in force at 30 June 2005.

A.12 Public lighting services

- a. Street lighting use of system services
 - i. The provision of public lighting assets, and the operation and maintenance of those assets where ETSA Utilities retains ownership of the assets.
- b. Customer lighting equipment rate services
 - i. The replacement of failed lamps in customer-owned streetlights where the customer retains ownership of the assets and is responsible for all other maintenance.
- c. Energy only services
 - i. The maintenance of a database relating to street lights, and recording and informing customers of streetlight faults reported to ETSA Utilities where customers retain ownership of the assets and are responsible for all maintenance (including replacement of failed lamps).

A.13 Stand-by and temporary supply services

- a. The following services associated with stand-by and temporary supply:
 - i. provision of electric plant or stand-by generator for the specific purpose of enabling the provision of top-up or stand-by supplies or sales of electricity
 - ii. provision of *network services* for a *connection point* where a *distribution network user* operates parallel generation requiring a stand-by supply
 - iii. provision of temporary supplies, and
 - iv. provision of reserve (duplicate) supply.

A.14 Asset relocation, temporary disconnection and temporary line insulation services

- a. Moving mains, services or meters forming part of the *distribution system*, providing temporary disconnection, or temporary line insulation to accommodate extensions, re-design or re-development of any premises or otherwise as requested by a *distribution network user*.
- b. Provision of network access management services for a distribution network user or external party.

A.15 Embedded generation services

- a. Services and system augmentation or extension required to receive energy from an embedded generator and meet the requirements of the NER.

- b. Services associated with non-compliance of the embedded generator with the *connection agreement*, including but not limited to reactive power, power factor, harmonics, voltage dips and test supply arrangements.

A.16 Other Services

- a. The following services provided in connection with the *Electricity Distribution Code*, *Electricity Metering Code* or the NER:
 - i. application for an account or new supply;
 - ii. provision of a copy of the *Electricity Distribution Code* or the *Electricity Metering Code*;
 - iii. provision of old billing data;
 - iv. meter testing at the request of a distribution network user;
 - v. after-hours reconnection;
 - vi. reconnection due to a distribution network users' fault; and
 - vii. disconnection services provided to a retailer, or a distribution network user.
- b. Provision of reactive power and energy to a *connection point* or receipt of reactive power and energy from a distribution *connection point*.
- c. Investigation and testing services.
- d. Asset location and identification services.
- e. The transportation of electricity not consumed in the *distribution system*.
- f. The transportation of electricity to *distribution network users* connected to the distribution system adjacent to the transmission system.
- g. Repair of equipment damaged by a *distribution network user* or a third party.
- h. Provision of:
 - i. high load escorts
 - ii. measurement devices
 - iii. protection systems, and
 - iv. pole attachments, ducts or conduits (excluding for the provision of telecommunications services).
- i. Costs incurred by ETSA Utilities as a result of a customer not complying with ETSA Utilities' standard connection and supply contract or other obligation.

- j. Additional costs incurred by ETSA Utilities where service provision could not be undertaken and/or completed as planned due to the actions, or inaction, of a customer or their agent.
- k. Provision of a television or radio interference investigation where it is determined that the distribution system is not the cause of the interference.
- l. Provision of a supply interruption investigation where it is determined that the distribution system was not the cause of the interruption.
- m. Provision of information to *distribution network users* or third parties not related to connection enquiries.

B. Assigning customers to tariff classes

Procedures for assigning or reassigning customers to tariff classes

Assignment of existing customers to tariff classes at the commencement of the next regulatory control period

1. Each customer who was a customer of ETSA Utilities prior to 1 July 2010, and who continues to be a customer of ETSA Utilities as at 1 July 2010, will be taken to be “assigned” to the tariff class which ETSA Utilities was charging that customer immediately prior to 1 July 2010.

Assignment of new customers to a tariff class during the next regulatory control period

2. If, after 1 July 2010, ETSA Utilities becomes aware that a person will become a customer, then ETSA Utilities must determine the tariff class to which the new customer will be assigned.
3. In determining the tariff class to which a customer or potential customer will be assigned, or reassigned, in accordance with section 2 or 5, ETSA Utilities must take into account one or more of the following factors:
 - (a) the nature and extent of the customer’s usage
 - (b) the nature of the customer’s connection to the network¹²⁴²
 - (c) whether remotely-read interval metering or other similar metering technology has been installed at the customer’s premises as a result of a regulatory obligation or requirement.
4. In addition to the requirements under section 3, ETSA Utilities, when assigning or reassigning a customer to a tariff class, must ensure the following:
 - (a) that customers with similar connection and usage profiles are treated equally
 - (b) that customers which have micro-generation facilities are not treated less favourably than customers with similar load profiles without such facilities.

Reassignment of existing customers to another existing or a new tariff during the next regulatory control period

5. If ETSA Utilities believes that an existing customer’s load characteristics or connection characteristics (or both) have changed such that it is no longer appropriate for that customer to be assigned to the tariff class to which the customer is currently assigned or a customer no longer has the same or materially similar load or connection characteristics as other customers on the

¹²⁴² The AER interprets ‘connection’ to include the installation of any technology capable of supporting time based tariffs.

customer's existing tariff, then it may reassign that customer to another tariff class.

Objections to proposed assignments and reassignments

6. ETSA Utilities must notify the customer concerned in writing of the tariff class to which the customer has been assigned or reassigned by it, prior to the assignment or reassignment occurring. If ETSA Utilities does not know the identity of the customer then it must notify the customer's retailer instead.
7. The notice under section 6 must include advice that the customer may request further information from the DNSP and that it may object to the proposed assignment or reassignment. This notice must specifically include:
 - a. either a copy of ETSA Utilities internal procedures for reviewing objections or the link to where such information is available on ETSA Utilities' website
 - b. that if the objection is not resolved to the satisfaction of the customer under ETSA Utilities' internal review system, then to the extent that resolution of such disputes are within the jurisdiction of a state based energy Ombudsman scheme the customer is entitled to escalate the matter to such a body
 - c. that if the objection is not resolved to the satisfaction of the customer under the DNSP's internal review system, then the customer is entitled to seek resolution via the dispute resolution process available under Part 10 of the NEL.
8. If, in response to a notice issued in accordance with section 6, ETSA Utilities receives a request for further information from a customer, then it must provide such information. If any of the information requested by the customer is confidential then it is not required to provide that information to the customer.
9. If, in response to a notice issued in accordance with section 7, a customer makes an objection to ETSA Utilities about the proposed assignment or reassignment, ETSA Utilities must reconsider the proposed assignment or reassignment, taking into consideration the factors in sections 3 and 4 above, and notify the customer in writing of its decision and the reasons for that decision.
10. If a customer's objection to a tariff assignment or reassignment is upheld by the relevant external dispute resolution body, then any adjustment which needs to be made to prices will be done by ETSA Utilities as part of the next annual review of prices.

System of assessment and review of the basis on which a customer is charged

11. Where the charging parameters for a particular tariff result in a basis of charge that varies according to the customer's usage or load profile, ETSA Utilities must set out in its pricing proposal a method of how it will review and assess the basis on which a customer is charged.
12. If the AER considers that the method provided under section 11 does not provide for an effective system of assessment and review of the basis on which a customer is charged, the AER may request additional information or request that ETSA Utilities revise and resubmit a revised method.

13. If the AER considers the method provided in accordance with section 11 is reasonable it will approve that method by notice in writing to ETSA Utilities.

C. Negotiated distribution service criteria

National Electricity Objective

1. The terms and conditions of access for a negotiated distribution service, including the price that is to be charged for the provision of that service and any access charges, should promote the achievement of the national electricity objective.

Criteria for terms and conditions of access

Terms and Conditions of Access

2. The terms and conditions of access for a negotiated distribution service must be fair and reasonable and consistent with the safe and reliable operation of the power system in accordance with the NER.
3. The terms and conditions of access for a negotiated distribution service (including in particular, any exclusions and limitations of liability and indemnities) must not be unreasonably onerous taking into account the allocation of risk between a distribution network service provider (DNSP) and any other party, the price for the negotiated distribution service and the costs to a DNSP of providing the negotiated distribution service.
4. The terms and conditions of access for a negotiated distribution service must take into account the need for the service to be provided in a manner that does not adversely affect the safe and reliable operation of the power system in accordance with the NER.

Price of Services

5. The price for a negotiated distribution service must reflect the costs that a DNSP has incurred or incurs in providing that service, and must be determined in accordance with the principles and policies set out in the DNSP's Cost Allocation Method.
6. Subject to criteria 7 and 8, the price for a negotiated distribution service must be at least equal to the cost that would be avoided by not providing that service but no more than the cost of providing it on a stand alone basis.
7. If a negotiated distribution service is a shared distribution service that:
 - i. exceeds any network performance requirements which it is required to meet under any relevant electricity legislation: or
 - ii. exceeds the network performance requirements set out in schedule 5.1a and 5.1 of the NER,then the difference between the price for that service and the price for the shared distribution service which meets network performance requirements must reflect a DNSP's incremental cost of providing that service (as appropriate).

8. If a negotiated distribution service is the provision of a shared distribution service that does not meet or exceed the network performance requirements, the difference between the price for that service and the price for the shared distribution service which meets, but does not exceed, the network performance requirements, should reflect the cost a DNSP would avoid by not providing that service (as appropriate).
9. The price for a negotiated distribution service must be the same for all Distribution Network Users unless there is a material difference in the costs of providing the negotiated distribution service to different Distribution Network Users or classes of Distribution Network Users.
10. The price for a negotiated distribution service must be subject to adjustment over time to the extent that the assets used to provide that service are subsequently used to provide services to another person, in which case such adjustment must reflect the extent to which the costs of that asset are being recovered through charges to that other person.
11. The price for a negotiated distribution service must be such as to enable a DNSP to recover the efficient costs of complying with all regulatory obligations or requirements associated with the provision of the negotiated service.

Criteria for access charges

Access Charges

12. Any charges must be based on costs reasonably incurred by a DNSP in providing distribution network user access, and, in the case of compensation referred to in clauses 5.5(f)(4)(ii) and (iii) of the NER, on the revenue that is likely to be forgone and the costs that are likely to be incurred by a person referred to in those provisions where an event referred to in those provisions occurs (as appropriate).
13. Any charges must be based on costs reasonably incurred by a DNSP in providing transmission network user access to services deemed to be negotiated distribution services by clause 6.24.2(c) of the NER, and, in the case of compensation referred to in clauses 5.4A(h) to (j) of the NER, on the revenue that is likely to be foregone and the costs that are likely to be incurred by a person referred to in those provisions where an event referred to in those provisions occurs (as appropriate).

D. Required amendments to ETSA Utilities' proposed negotiating framework

As set out in section 3.6 of this draft decision, the AER does not approve the negotiating framework proposed by ETSA Utilities. As required under clause 6.12.3(h) of the NER, the AER requires amendments to the negotiating framework proposed by ETSA Utilities, for it to be approved in accordance with the NER.

The following amendments to ETSA Utilities' proposed negotiating framework are required:

1. removal of the pricing principles in schedule 3 and referred to throughout the negotiating framework
2. removal of schedule 4 — connections requiring network extension and/or augmentation
3. amendment to section 6, to capture clause 6.7.5(c)(2) of the NER. The amendment must acknowledge that the list of information types provided by section 6 in no way restricts the type of information to be provided if reasonably required by the applicant
4. removal of the footnote in section 6, page 5, stating that for price list services, commercial information will be provided by virtue of the annual price list. Section 6 must be amended, ensuring clause 6.7.5(c)(2) of the NER is met for all negotiated distribution services including price list services
5. amendment to section 7, to remove references to ETSA Utilities' proposed pricing principles. Section 7 or elsewhere in the negotiating framework as appropriate, must be amended, ensuring clause 6.7.5(c)(3) of the NER is met for all negotiated distribution services, including price list services. This clause requires ETSA Utilities to identify and inform service applicants of the reasonableness of costs and their movements, how its prices/charges reflect these costs, and include arrangements for the assessment and review of the charges and the basis upon which they were made. The AER requires that the NDSC be the basis referred to in this clause
6. amendment to part C or elsewhere in the negotiating framework as appropriate, to address clause 6.7.5(c)(5) such that time-limit provisions be applied to all negotiated distribution services, including price list services
7. amendment to sections 14 and 20, removing reference to ETSA Utilities' internal dispute resolution process. The amendment must, consistent with clause 6.7.5(c)(6) of the NER, provide that all disputes are to be dealt with by the AER in accordance with Part 10 of the NEL and Part L of the NER
8. amendment to part C or elsewhere in the negotiating framework as appropriate, such that consistent with clause 6.7.5(c)(7) of the NER, arrangements are specified for the payment of ETSA Utilities' reasonable direct expenses in processing an application to provide negotiated distribution services, including price list services
9. amendment to part C or elsewhere in the negotiating framework as appropriate, such that consistent with clause 6.7.5(c)(8) of the NER, ETSA Utilities must

determine the potential impact on other distribution network users of the provision of all negotiated distribution services, including price list services

10. amendment to section 16.1, removing reference to incurred and/or committed costs in relation to the termination of negotiations that are beyond those captured by clause 6.7.5(c)(7) of the NER.

E. Changes to tariff structures

Changes to tariff structures can occur for customers in the following circumstances:

- the introduction of new tariffs or tariff components (for example, introducing a step rate for the usage component of the domestic tariff)
- adjustments to existing tariffs or tariff components (for example, changing the threshold on an inclining block tariff or the time bands associated with time of use tariffs). This situation is essentially the same as introducing new tariffs or tariff components
- when customers move between existing tariffs (from origin tariffs to alternative tariffs).

The weighted average price cap (WAPC) and side constraints formulas applying to the control mechanism will require adjustments for those tariffs subject to a change in structure. Specifically, adjustments will be required to:

- the historical quantity weights (q_{t-2}^{ij} and q_{t-2}^j) for these tariffs
- the values of the current tariffs/tariff components in the WAPC and side constraints formulas (p_{t-1}^{ij} and d_{t-1}^j).

This appendix sets out the approach to estimating the historical quantity weights and the substitute values for the current tariffs/tariff components to be used when calculating compliance with the WAPC and the side constraint formulas. For simplicity of presentation, any discussion in this appendix in relation to p_{t-1}^{ij} and q_{t-2}^{ij} (for the WAPC) should be taken to be equally applicable to d_{t-1}^j and q_{t-2}^j (for the side constraints).

E.1 Introducing new tariffs or tariff components

E.1.1 The value of q_{t-2}^{ij}

Both the WAPC and side constraints are calculated using audited historical quantities of consumption. However, historical quantities for any new tariffs/tariff components will not be available for two years.

In order to incorporate new tariff structures in the WAPC and the side constraints, the AER requires reasonable estimates to be submitted by the DNSP, based on the quantities that would have been sold if the new tariff/tariff components had been introduced in year 't-2'.

First, the DNSP must nominate the origin tariffs/tariff components, which represent the tariffs/tariff components that the customers, who will be moved to the new network tariffs/tariff components, are currently being charged.

Second, the DNSP must provide reasonable estimates of q_{t-2}^{ij} for all applicable units of measure (for example kWh, kW) for both the new tariffs/tariff components, and the origin tariffs/tariff components. The DNSP must make the following assumptions when calculating these reasonable estimates:

1. The only customers who would have moved to the new network tariff/tariff component in year $t-2$ did so due to a change in tariff structures initiated by the DNSP and as permitted under the customers' network connection contract. This means that no new customers are included in the estimate,¹²⁴³ and nor are customers who request to change tariff either voluntarily, or through the actions of a retailer.
2. Customers have the same consumption and load profile on the new tariff/tariff component as they did on the origin tariff/tariff component. This implies that the sum of the reasonable estimates for year $t-2$ for each unit of measure on the new tariff/tariff component plus the reasonable estimates for year $t-2$ for each unit of measure on the origin tariff/tariff component, equals the actual audited quantities that occurred for the origin tariff/tariff component in year $t-2$.

In the year after a new tariff/tariff component has been introduced, there will still be no full year of audited historical data available to be used for q_{t-2}^{ij} . As a result the DNSP will be required to again submit reasonable estimates for both the new tariff/tariff component and the corresponding origin tariff/tariff component. At this time, however, the DNSP may base the reasonable estimates on the actual quantities that have occurred to date on the new tariff/tariff components and origin tariff/tariff components. The DNSP must demonstrate how it has arrived at the estimates.

E.1.2 The value of p_{t-1}^{ij}

The p_{t-1}^{ij} of the corresponding origin tariff/tariff components will be used as the p_{t-1}^{ij} for the new tariff/tariff components, where both the origin and new tariff components are measured in the same units of measure. If there is no corresponding origin tariff/tariff components with the same units of measure, p_{t-1}^{ij} will be set to zero.

E.1.3 Example 1: Introducing an inclining block tariff component

This example assumes that a domestic tariff with a single variable rate is amended so that there are now two variable rates based on a customer's level of consumption. For each of the 25 000 customers on this tariff, their historical consumption is split between consumption up to 5000kWh per annum and any residual consumption above this amount. Under this approach, the total consumption for this tariff class of 200 000MWh is split, 150 000MWh against variable rate 1 and 50 000MWh against variable rate 2 as shown in the example set out in table E.1.

¹²⁴³ New customers have been allowed for in the growth assumption used when setting the X factor.

Table E.1: Determining p_{t-1}^{ij} and q_{t-2}^{ij} in example 1

Tariffs		p_{t-1}^{ij}	q_{t-2}^{ij}
Origin tariff – standard domestic			
Fixed charge	\$ pa per customer	30	25 000 customers
Variable rate (all consumption)	c/kWh	0.04	200 000 MWh
Proposed tariff with new component			
Fixed charge	\$ pa per customer	30	25 000 customers
Variable rate 1 (consumption \leq 5000kWh pa per customer)	c/kWh	0.04 (as per origin tariff)	150 000 MWh
Variable rate 2 (consumption $>$ 5000kWh pa per customer)	c/kWh	0.04 (as per origin tariff)	(200 000 – 150 000) = 50 000 MWh

Note: While the variable rates (1 & 2) that the DNSP proposes for the next year (p_t^{ij}) are likely to differ, the divergence in these rates is constrained by the overall WAPC and the side constraints for this tariff class.

E.2 Customers transferred to an alternative tariff

E.2.1 The value of q_{t-2}^{ij}

The DNSP may decide to transfer customers if a customer’s consumption or load profile has changed and the DNSP decides it is no longer appropriate for them to remain on the same tariff. Alternatively the DNSP may change the structure of an existing tariff to suit the majority of customers. Appendix A sets out the procedures a DNSP must adhere to in assigning or reassigning customers to tariff classes.

If the DNSP proposes to move a number of customers across to an alternative existing tariff, the rate at which revenue will accrue from these customers will be different to that used to calculate the X factor and will be different to what will be calculated under the WAPC formula. In addition, the side constraint formula will not fully reflect the actual tariff change for the customers being transferred, as the overall tariff change observed by these customers will reflect not only the side constraint on the alternative tariff but the difference between the origin tariff the customer was on and the alternative tariff to which they are being transferred. In these circumstances, the AER will require the DNSP to submit reasonable estimates for q_{t-2}^{ij} for each origin tariff that the customer is currently on, and the new tariff that the DNSP will move the customers to, taking the transfer into account.

For compliance purposes, the assumptions the DNSP must make when calculating the reasonable estimates are:

1. the customer movement occurred in year t–2
2. the customers only moved as a result of a change in tariff structures initiated by

the DNSP and as permitted under the customers' network connection contract. The estimates are not to include customers who choose to move at their discretion or movements caused by a retailer's action

3. customers have the same consumption and load profile under either tariff.

Reasonable estimates will also be required in the year following the movement as there will still be no full year of audited historical data available.

E.2.2 The value of p_{t-1}^{ij}

The p_{t-1}^{ij} for the corresponding origin tariff/tariff components will be used as the p_{t-1}^{ij} for the new tariff components.

E.2.3 Example 2: Re-assigning some customers from the domestic flat rate tariff to the domestic TOU tariff

This example assumes 10 000 customers with consumption of 70 000 MWh will be moved by the DNSP from the domestic tariff to the domestic TOU tariff, which already has 5000 customer. Both tariffs remain in existence and there will be customers on both. The allocation of the 70 000 MWh across the peak, shoulder and off-peak reflects historical consumption patterns of these customers and is shown in table E.2.

Table E.2: Determining p_{t-1}^{ij} and q_{t-2}^{ij} in example 2

Tariffs		p_{t-1}^{ij}	q_{t-2}^{ij}
Domestic			
Fixed charge	\$ pa per customer	30	(25 000 existing – 10 000) = 15 000 customers
Variable rate (any time)	c/kWh	0.04	(200 000 existing – 70 000) = 130 000 MWh
Domestic TOU – existing customers			
Fixed charge	\$ pa per customer	22	5 000 existing
Peak rate	c/kWh	0.09	10 000 MWh existing
Shoulder rate	c/kWh	0.05	10 000 MWh existing
Off-peak rate	c/kWh	0.02	10 000 MWh existing
Domestic TOU – customers being transferred			
Fixed charge	\$ pa per customer	30 (as per domestic)	10 000 customers
Peak rate	c/kWh	0.04 (as per domestic)	25 000 MWh
Shoulder rate	c/kWh	0.04 (as per domestic)	20 000 MWh
Off-peak rate	c/kWh	0.04 (as per domestic)	25 000 MWh

Note: The Domestic TOU tariff the DNSP proposes for next year (p_t^{ij}) will apply equally across all (15 000) customers now on that tariff, which must be within the constraints of the WAPC and side constraints.

E.3 AER assessment of reasonable estimates

When assessing the reasonableness of quantity estimates provided by ETSA Utilities, the AER will take the following information into account:

1. the actual audited quantities sold in relevant units under the origin tariff in previous years
2. a forecast of the number of distribution customers that the DNSP states will move to the new tariff/tariff components, and the reasons for the move
3. a forecast of the number of distribution customers that the DNSP expects will remain on the origin tariff
4. a forecast of the quantities that the DNSP expects will be sold, in relevant units, to those distribution customers that are to be moved to the new tariff/tariff components
5. a forecast of the quantities that the DNSP expects will be sold, in relevant units, to those distribution customers that will remain on the origin tariff
6. a forecast of the distribution tariff, and associated revenue, the DNSP expects will be payable by those distribution customers that will be moved to the new tariff/tariff components
7. a forecast of the distribution tariff, and associated revenue, the DNSP expects will be payable by those distribution customers that will remain on the origin tariff
8. the approach the DNSP used to determine its forecasts (for 2–7 above)
9. the materiality of the reasonable estimates
10. further information as required by the AER.

F. Transmission use of system unders and overs account

To demonstrate compliance with clause 6.18.7 of the NER and this draft decision in the next regulatory control period, the AER requires ETSA Utilities to maintain a transmission use of system (TUOS) unders and overs account. ETSA Utilities must provide information on this account to the AER as part of its annual pricing proposals under clause 6.18.2(b)(7) of the NER.

As part of its pricing proposal for each regulatory year of the next regulatory control period, ETSA Utilities must provide the amounts for the following entries in its TUOS unders and overs account for the most recently completed regulatory year, the current regulatory year and the next regulatory year:

1. opening balance for each year
2. interest accrued on the opening balance for each year, calculated at the rate of the post-tax nominal rate of return as approved by the AER in its distribution determination
3. the amount of revenue recovered from TUOS charges applied in respect of that year, less the amounts of all transmission related payments made by the DNSP in respect of that year
4. six months interest on the net amount in item 3, accrued at the approved post-tax nominal rate of return
5. summation of the above amounts to derive the closing balance for each year.

ETSA Utilities must provide details of calculations in the format set out in table F.1 of this draft decision. Amounts provided for the most recently completed regulatory year must be audited. Amounts for the current and next regulatory year will be regarded as estimates and forecasts respectively.

In proposing variations to the amount and structure of TUOS charges, ETSA Utilities are to achieve a zero expected balance on its TUOS unders and overs account at the end of each regulatory year in the next regulatory control period.

For transitional purposes, no interest charge (in steps 2 and 4 above) will be applied to any unders and overs for 2008–09 and 2009–10. This transitional arrangement is to maintain consistency with ESCOSA's current approach that did not index under and over amounts.

Table F.1: Calculation of TUOS unders and overs account (\$'000)

	year t-2 (actual)	year t-1 (estimate)	year t (forecast)
Revenue from TUOS charges	36 221	36 836	40 968
Transmission charges to be paid to TNSPs	25 214	27 602	35 791
Avoided TUOS payments	572	638	681
Inter-DNSP payments	8579	9575	10 221
Total transmission related payments	34 365	37 816	46 694
Under/over recovery for financial year	1856	-980	-5726
Unders and overs account			
Annual rate of interest applicable to balances	9.70%	9.70%	9.70%
Half-year rate of interest	4.74%	4.74%	4.74%
Opening balance	3624 ^a	5919 ^b	5467
Interest on opening balance	351	574	530
Under/over recovery for financial year	1856	-980	-5726
Interest on under/over recovery	88	-46	-271
Closing balance	5919	5467	0

- (a) The opening balance for year t-2 is based on the cumulative balance of actual under and over recoveries over the preceding years and using the same indexing approach for these actuals. In other words, in the example above, the reader could imagine additional columns before year t-2, presenting actuals for year t-3, year t-4 etc and which accumulate to the opening balance for year t-2.
- (b) This balance will be the opening balance for year t-2 when the DNSP presents its next pricing proposal to the AER in 12 months time.

G. Real cost escalators

G.1 Introduction

In recent regulatory determinations for electricity network service providers, the AER has allowed capex and/or opex allowances to be escalated, in real terms, for expected input cost increases.¹²⁴⁴ This involves the disaggregation of expenditure allowances into specific inputs (for example labour, land and materials) which are priced in terms of a base year. These base year costs are increased or decreased for each year of the regulatory control period relative to changes in the real price level, as the nominal price level (that is, the real price plus inflation) is taken into account when prices and revenues are adjusted at the aggregated level under the CPI-X control mechanism.

The methodology employed to determine the real cost escalators generally combines forecast movements in the price of input components with weightings for the relative contribution of each component to final equipment/project costs. This in turn generates real capex and opex forecasts for the regulatory control period. The weightings are typically specific to each regulated business given differences in the composition of their respective expenditure forecasts.

PB has reviewed the weightings applied by ETSA Utilities, as well as the application of the resultant escalators in its capex and opex models. The AER's consideration of specific modelling applications of the real cost escalation factors assessed in this appendix are set out in chapters 7 (capex) and 8 (opex).

Historically, the objective of introducing real cost escalation has been to take account of the impact of the commodities boom and skills shortages in the engineering field in Australia in recent years. In light of these external factors, the AER has considered that cost escalation at CPI did not reasonably reflect a realistic expectation of the movement in some of the input costs faced by electricity network service providers. The AER has previously expressed that the real cost escalation regime should be applied symmetrically to also reflect real cost decreases.¹²⁴⁵ This approach provides the opportunity for network service providers to recover the efficient costs of real increases, while ensuring that end users receive the benefit of real cost reductions.

Given that there is no futures market for the procurement and installation of electrical equipment (for example transformers, switchgear), in previous AER decisions cost escalation rates have been estimated with reference to the expected growth in key input 'cost factors' such as:¹²⁴⁶

¹²⁴⁴ AER, *Final decision, NSW DNSPs*, 28 April 2009, pp. 478–507; AER, *Decision, Powerlink Queensland*, 14 June 2007, pp. 60–70; AER, *Draft Decision, SP AusNet*, 31 August 2007, pp. 87–91, 316–331; and AER, *Final Decision, ElectraNet*, 11 April 2008, pp. 29–48.

¹²⁴⁵ AER, *Final Decision, SP AusNet*, January 2008, p. 80.

¹²⁴⁶ AER, *Final decision, NSW DNSPs*, 28 April 2009, pp. 478–507; AER, *Decision, Powerlink Queensland*, 14 June 2007, pp. 60–70; AER, *Draft Decision, SP AusNet*, 31 August 2007, pp. 87–91, 316–331; and AER, *Final Decision, ElectraNet*, 11 April 2008, pp. 29–48.

- copper
- aluminium
- steel
- crude oil
- construction costs
- electricity, gas and water (EGW) sector labour costs
- general labour costs
- land and easement costs.

All other inputs are typically escalated in line with CPI only.

In assessing the escalators proposed by ETSA Utilities, the AER considers that its conclusions from the recent NSW, ACT and Tasmanian decisions are still generally applicable with respect to the methodology used for estimating each escalator.¹²⁴⁷

The AER has a preference for updating real cost escalation factors with the most up to date forecasts at the time of its final decision. This preference is a result of the NER requirement that the capex and opex forecasts should reflect a realistic expectation of cost inputs required to achieve the capex and opex objectives.¹²⁴⁸ The AER considers that using the most recently available data to update cost escalation forecasts, where appropriate, satisfies this requirement.

G.2 ETSA Utilities regulatory proposal

ETSA Utilities engaged Sinclair Knight Merz Pty Ltd (SKM) to develop real input cost escalation rates to apply to its opex and capex forecasts for the next regulatory control period.

SKM recommended methods for escalating aluminium, copper, steel, oil and other input cost drivers that are largely consistent with the methods the AER has previously allowed in its most recent decisions.¹²⁴⁹

ETSA Utilities also engaged BIS Shrapnel to develop forecasts for construction costs,¹²⁵⁰ internal labour costs, construction related contract services, and other outsourced contract services.¹²⁵¹

¹²⁴⁷ AER, *Final decision, NSW DNSPs*, 28 April 2009; AER, *Final decision, ACT DNSP*, 28 April 2009; AER, *Final decision, TransGrid*, 28 April 2009; and AER, *Final Decision, Transend*, April 2009.

¹²⁴⁸ NER, clauses 6.5.6 (c) and 6.5.7(c).

¹²⁴⁹ For example AER, *Final decision, NSW DNSPs*, 28 April 2009; AER, *Final decision, ACT DNSP*, 28 April 2009; AER, *Final decision, TransGrid*, 28 April 2009; and AER, *Final Decision, Transend*, April 2009.

¹²⁵⁰ ETSA Utilities did not apply the construction costs escalator developed by BIS Shrapnel in its cost escalation modelling.

G.3 Materials cost escalators

This section discusses the real materials cost escalators proposed by ETSA Utilities to apply to its forecast capex and opex allowances over the next regulatory control period.

ETSA Utilities engaged SKM to forecast real growth in ETSA Utilities' materials costs. SKM estimated the following escalators for ETSA Utilities to apply in its regulatory proposal:

- aluminium and copper
- steel
- crude oil
- exchange rates and inflation (used to develop the materials cost escalators).

G.3.1.1 Aluminium and copper

The method proposed by SKM to develop cost escalators for aluminium and copper was to firstly determine the average of the last 30 days of London Metal Exchange (LME) spot prices for aluminium and copper, and the LME 3 month, 15 month and 27 month contract prices for aluminium and copper. The Consensus Economics long-term forecast (taken as 7.5 years from the survey date) for aluminium and copper prices was also determined. Each of the above data points was then interpolated to produce a monthly average prices series for aluminium and copper respectively.¹²⁵²

SKM uses financial year average (July to June) to convert monthly nominal aluminium and copper prices to yearly averages. SKM adjusted the nominal US dollar (USD) aluminium and copper prices to real Australian dollar (AUD) values using SKM forecast USD/AUD exchange rates and SKM forecast Australian CPI.¹²⁵³

The escalation rates for aluminium and copper that SKM calculated for ETSA Utilities are shown in table G.1.

Table G.1: SKM real aluminium and copper cost escalators (per cent)

	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
Aluminium	–39.2	15.1	5.5	8.8	9.4	8.4	7.7
Copper	–52.5	7.0	–0.4	3.6	5.3	5.0	4.9

Sources: ETSA Utilities, *Regulatory proposal*, July 2009, attachment E.5 SKM: Distribution asset cost escalation rates, 22 May 2009, p. 22.

¹²⁵¹ ETSA Utilities, *Regulatory proposal*, July 2009, attachment E.4. BIS Shrapnel: Outlook for wages, contract services and customer connections expenditure to 2014–15: South Australia.

¹²⁵² ETSA Utilities, *Regulatory proposal*, July 2009, attachment E.5 SKM: Distribution asset cost escalation rates, 22 May 2009, p. 17.

¹²⁵³ ETSA Utilities, Response to AER questions, AER.EU.38, 29 October 2009, spreadsheet SI502.

AER considerations

The method proposed by SKM to forecast the escalation of aluminium and copper costs for ETSA Utilities is the same as that allowed by the AER in recent decisions for TNSPs and DNSPs.¹²⁵⁴ To summarise previous decisions, the method adopted by SKM was considered reasonable by the AER for the following reasons:

- the AER considered that using two data sources (LME and Consensus Economics) is reasonable because it captures market data up to the extent it is available and includes credible views from a range of professional forecasters on the price of aluminium and copper¹²⁵⁵
- the AER considered that a linear interpolation between the LME forecasts and the Consensus Economics' long-term forecasts appears to be the most reasonable approach to merge the short-term LME data with Consensus Economics' long-term forecasts¹²⁵⁶
- the AER considered that using a monthly average of LME forward contract prices is more appropriate than using prices from a single day because it removes potential price distortions that may arise on a single day.¹²⁵⁷

The AER notes that since the earlier decisions in which these views were expressed, prices for aluminium and copper futures contracts have become available for a period that covers the next regulatory control period. As a result, it is no longer necessary to rely on economic forecasts as an indicator of future aluminium and copper prices. The AER notes that SKM's preferred approach is to use commodity futures contract prices in preference to economic forecasts, on the basis that:¹²⁵⁸

- forward contract markets for aluminium and copper are well established and sufficiently liquid to indicate future prices
- futures contracts represent the stated future position of market participants who have actively placed money behind their individual predictions
- futures contract markets provide greater and more immediate financial risk than economic forecasts that do not involve any direct financial risk to the forecasters.

The AER considers that cost escalators based on futures contract prices alone provide a more accurate indication of future materials costs than escalators based on a combination of futures contract prices and economic forecasts.

The AER notes that SKM adjusted the nominal USD aluminium and copper prices to real AUD values using SKM forecast exchange rates and SKM forecast Australian

¹²⁵⁴ For example, see AER, *Final decision, NSW DNSPs*, 28 April 2009, pp. 478–507; and AER, *Final Decision, ElectraNet*, 11 April 2008, pp. 29–48.

¹²⁵⁵ AER, *Final Decision, ElectraNet*, 11 April 2008, p. 43.

¹²⁵⁶ AER, *Draft decision, New South Wales distribution determination 2009–10 to 2013–14*, November 2008, p. 545.

¹²⁵⁷ AER, *Final Decision, ElectraNet*, 11 April 2008, p. 43.

¹²⁵⁸ ETSA Utilities, *Regulatory proposal*, July 2009, attachment E.5 SKM, Distribution asset cost escalation rates 2008-2015, pp. 13.

CPI. As discussed below, the AER does not agree with the approaches SKM has taken on exchange rates (section G.3.1.4) and inflation (section G.3.1.5).

For the reasons discussed and as a result of the AER’s analysis of the regulatory proposal, the AER considers that the method adopted by SKM does not provide a realistic expectation of the cost of aluminium and copper required for ETSA Utilities to achieve the capex objectives in the next regulatory control period.

In addition to the issues identified above, the AER considers that to develop a robust forecast it is appropriate to update the forecast materials cost escalators using the most recent data.¹²⁵⁹

The AER considers that these are the minimum adjustments necessary to ensure that the material cost escalators used by ETSA Utilities provide a realistic expectation of the cost of aluminium and copper.

AER conclusions

Based on the most recent data at the time of this draft decision and the methodology outlined at the end of this appendix, the AER’s conclusions on real aluminium and copper escalators for this draft decision are presented in table G.2.

Table G.2: AER updates of ETSA Utilities’ real aluminium and copper cost escalators (per cent)

	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
Aluminium	–18.8	–12.0	20.2	16.1	5.5	1.6	0.4
Copper	–27.3	10.4	14.7	10.6	1.1	–2.6	–3.9

Source: AER analysis.

G.3.1.2 Steel

ETSA Utilities engaged SKM to forecast real growth in ETSA Utilities’ materials costs, which included taking account of changes in the cost of steel.

SKM stated that it was not possible to forecast steel costs using the same methodology used for aluminium and copper because there is no liquid futures market for steel. SKM considered that the Commodities Research Unit (CRU) steel price index and Consensus Economics forecasts (hot rolled coil variety) provided the best available outlook for steel over the short and long term. The Consensus Economics publication provides two separate forecasts for steel prices, one being relative to the US domestic market and the other for the European domestic market. SKM used the average of the US and European quarterly forecast market prices for steel as the best representative of the price of steel.¹²⁶⁰

¹²⁵⁹ AER, *Final Decision, ElectraNet*, 11 April 2008, p. 43.

¹²⁶⁰ ETSA Utilities, *Regulatory proposal*, July 2009, attachment E.5 SKM, Distribution asset cost escalation rates 2008–2015, pp. 19–20.

The method proposed by SKM to escalate steel costs was to use the CRU steel price index for escalating historical steel costs and then linear interpolate this series with forecasts of quarterly market prices from Consensus Economics. This series was then further interpolated with the Consensus Economics long-term forecast (taken as 7.5 years from the survey publication date) to establish forecast steel prices for the remainder of the regulatory control period.¹²⁶¹ The forecasts were then converted from nominal US dollars (USD) to real Australian dollars (AUD) using SKM's USD/AUD exchange rate forecast and SKM's CPI forecast.

Based on this approach, the escalation rates for steel that SKM calculated for ETSA Utilities are shown in table G.3.

Table G.3: SKM's real steel cost escalators (per cent)

	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
Steel	-23.8	19.5	4.4	2.8	0.7	0.9	1.2

Sources: ETSA Utilities, *Regulatory proposal*, July 2009, attachment E.5 SKM, Distribution asset cost escalation rates 2008–2015, p. 22.

AER considerations

The method proposed by SKM to forecast the escalation of steel costs for ETSA Utilities is similar to that allowed by the AER in recent decisions.¹²⁶² This method is outlined at the end of this appendix. However, the AER has identified two issues in relation to SKM's methodology.

The AER notes that to calculate historical steel costs, SKM used CRU steel price data, which the AER understands to be a weighted average of steel industry prices that includes, but is not limited to, hot rolled coil variety steel. The AER therefore considers that the resultant measure of historical steel costs would not be consistent with the Consensus Economic forecast for hot rolled coil variety steel than, for example, the Bloomberg hot rolled coil variety steel price data currently used by the AER.

The AER notes that SKM's conversion of the long-term (5–10 years) Consensus Economics forecasts from real USD directly into real AUD using the USD/AUD nominal exchange rate assumes that inflation differences between the two countries are already accounted for. While SKM did not provide any evidence that this assumption holds, the AER notes that the issue can be avoided entirely if the following approach is adopted:

- convert real USD prices into nominal USD terms using US Congressional Budget Office historical and forecast US inflation data¹²⁶³

¹²⁶¹ ETSA Utilities, *Regulatory proposal*, July 2009, attachment E.5 SKM, Distribution asset cost escalation rates 2008–2015, pp. 19–20.

¹²⁶² For example, see AER, *Final decision, NSW DNSPs*, 28 April 2009, pp. 478–507; and AER, *Final Decision, ElectraNet*, 11 April 2008, pp. 29–48.

¹²⁶³ <<http://www.cbo.gov/doc.cfm?index=10521>>.

- convert the nominal USD prices into nominal AUD prices using historical and forecast USD/AUD exchange rate, and then
- use Reserve bank of Australia (RBA) historical and forecast Australia inflation data to convert the nominal AUD prices into real AUD terms.

This approach is consistent with the AER’s previous decision for the NSW DNSPs.¹²⁶⁴ The AER does not consider that a change from this approach is warranted on the basis of material provided by SKM.

AER conclusion

For the reasons discussed and as a result of the AER’s analysis of the regulatory proposal, the AER is not satisfied that SKM’s approach provides a realistic expectation of the cost of steel required for ETSA Utilities to achieve the capex objectives in the next regulatory control period. The AER also considers that to develop a robust forecast it is appropriate to update the forecast materials cost escalators using the most recent data.¹²⁶⁵ The AER considers that these are the minimum adjustments necessary to ensure that the material cost escalators used by ETSA Utilities provide a realistic expectation of the cost of steel.

Based on the most recent data at the time of this draft decision and the methodology outlined at the end of this appendix, the AER’s conclusions on real steel escalators for this draft decision are presented in table G.4.

Table G.4: AER conclusion on real steel cost escalators for ETSA Utilities (per cent)

	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
Steel	7.1	–29.4	28.6	21.0	4.6	0.6	–0.8

Source: AER analysis.

G.3.1.3 Crude oil

ETSA Utilities engaged SKM to develop an escalator for crude oil. This escalator was used to reflect the cost of insulator oil components of capital equipment, not as a proxy for the cost of fuel for transport.

SKM stated that world oil markets provide futures contracts with settlement dates sufficiently far forward to allow their use in forecasting escalation rates for crude oil costs, without the need to refer to Consensus Economics forecasts.¹²⁶⁶ However, in response to questions from the AER, SKM indicated that the futures data it sourced on 2 February 2009 was less reliable than normal as a result of volatility caused by the global financial crisis (GFC). SKM was particularly concerned about the November 2011 forecast of US\$121.12, which was significantly higher than values before and

¹²⁶⁴ For example, see AER, *Final decision, NSW DNSPs*, 28 April 2009, p. 502.

¹²⁶⁵ AER, *Final Decision, ElectraNet*, 11 April 2008, p. 43.

¹²⁶⁶ ETSA Utilities, *Regulatory proposal*, July 2009, attachment E.5 SKM: Distribution asset cost escalation rates, 22 May 2009, p. 21.

after that month. SKM therefore decided to use only two years of futures prices and long-term Consensus Economics prices thereafter.¹²⁶⁷

Based on this approach, the escalation rates for crude oil that SKM calculated for ETSA Utilities are shown in table G.5.

Table G.5: SKM real crude oil cost escalators calculated for ETSA Utilities (per cent)

	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
Crude oil	–43.5	23.4	8.5	10.3	5.4	5.2	5.0

Sources: ETSA Utilities, *Regulatory proposal*, July 2009, Attachment E.5 SKM: Distribution asset cost escalation rates, 22 May 2009, p. 22.

AER considerations

The AER considers that SKM’s approach to forecasting the escalation of ETSA Utilities’ crude oil costs is similar to the method previously approved by the AER in recent decisions.¹²⁶⁸

The AER notes that the price of oil futures contracts are available for the duration of the next regulatory control period. As a result, it is not necessary to rely on economic forecasts as an indicator of future oil prices. The AER notes that SKM’s preferred approach is to use commodity futures contract prices in preference to economic forecasts, on the basis that:¹²⁶⁹

- forward contract markets for oil are well established and sufficiently liquid to indicate future prices
- futures contracts represent the stated future position of market participants who have actively placed money behind their individual predictions
- futures contract markets provide greater and more immediate financial risk than economic forecasts that do not involve any direct financial risk to the forecasters.

The AER considers that cost escalators based on futures contract prices alone provide a more accurate indication of future materials costs than escalators based on a combination of futures contract prices and economic forecasts.

The AER notes that SKM based its estimate of futures contract prices on observations from a single trading day. The AER considers that using a monthly average of New York Mercantile Exchange (NYMEX) futures contract prices is more appropriate than

¹²⁶⁷ ETSA Utilities, Response to AER question AER EU 36, 23 October 2010.

¹²⁶⁸ For example, see AER, *Final decision, NSW DNSPs*, 28 April 2009, pp. 505–506; and AER, *Final Decision, ElectraNet*, 11 April 2008, pp. 43.

¹²⁶⁹ ETSA Utilities, *Regulatory proposal*, July 2009, attachment E.5 SKM, Distribution asset cost escalation rates 2008–2015, pp. 13.

using prices from a single day because it removes potential price distortions that may arise on a single day.¹²⁷⁰

AER conclusion

For the reasons discussed, and as a result of the AER's analysis of the regulatory proposal, the AER is not satisfied that ETSA Utilities' proposed methodology for forecasting the cost of crude oil reasonably reflects the capex and opex criteria, including the capex and opex objectives. In coming to this view the AER has had regard to the capex and opex factors.

Based on the most recent data at the time of this draft decision and the methodology, the AER's conclusions on the escalation of crude oil costs for this draft determination are presented in table G.6.

Table G.6: AER conclusion on ETSA Utilities' real crude oil cost escalators (per cent)

	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
Crude oil	-17.3	-8.3	22.0	15.8	5.5	1.7	0.4

Source: AER analysis.

G.3.1.4 Exchange rates

The SKM cost escalation modelling process makes use of USD to AUD exchange rates to restate USD based market prices of copper, aluminium, steel and oil, into their comparable AUD prices.¹²⁷¹

SKM stated that due to the recent volatility in exchange rates, it has used the 10 year historical average USD/AUD exchange rate from the RBA exchange rate database as a basis for forecasting the exchange rate over the next regulatory control period.¹²⁷²

Based on this approach, exchange rate forecasts used by SKM are shown in table G.7.

Table G.7: SKM's exchange rate forecast for ETSA Utilities (USD/AUD)

	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
Exchange rate	0.825	0.688	0.688	0.688	0.688	0.688	0.688

Sources: ETSA Utilities, *Regulatory proposal*, July 2009, attachment E.5 SKM Materials Cost Escalation, p. 16.

AER considerations

The AER considers that it is inappropriate to rely only on historical data to prepare forecasts. The AER considers that Econtech's Australian National State and Industry

¹²⁷⁰ AER, *Final Decision, ElectraNet*, 11 April 2008, p. 43.

¹²⁷¹ ETSA Utilities, *Regulatory proposal*, July 2009, attachment E.5 SKM, Distribution asset cost escalation rates 2008–2015, p. 15.

¹²⁷² ETSA Utilities, *Regulatory proposal*, July 2009, attachment E.5 SKM, Distribution asset cost escalation rates 2008–2015, p. 16.

Outlook (ANSIO) report is a credible source for providing exchange rate forecasts, because it is based on credible views from a range of professional forecasters and up to date information. The AER therefore considers that the most recent available exchange rate forecasts from Econtech’s ANSIO report should be used to convert USD forecast values into AUD in SKM’s cost escalation model. This approach is consistent with the AER’s previous decisions for the NSW DNSPs.¹²⁷³

AER conclusions

For the reasons discussed and as a result of the AER’s analysis of the regulatory proposal, the AER is not satisfied that ETSA Utilities’ proposed methodology in forecasting exchange rates reasonably reflects the capex criteria, including the capex objectives. In coming to this view the AER has had regard to the capex factors.

Based on the most recent data at the time of this draft decision and the methodology outlined at the end of this appendix, the AER’s conclusions on exchange rate forecasts for this draft decision are presented in table G.8.

Table G.8: AER conclusion on exchange rate forecasts for ETSA Utilities (USD/AUD)

	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
Exchange rates	0.744	0.800	0.656	0.603	0.585	0.581	0.580

Source: AER analysis; Econtech, *ANSIO*, 20 August 2009 p. 110

G.3.1.5 Inflation

Inflation forecasts are needed to convert forecasts of materials prices from nominal terms into real terms.

SKM considered the inflation forecasts from Econtech’s September 2008 report to the AER to be the most recent and credible forecasts of inflation available.¹²⁷⁴ ETSA Utilities also applied these forecasts to derive nominal values for all cost elements not covered by materials or labour cost escalators.¹²⁷⁵

The inflation forecasts used by ETSA Utilities in its cost escalation model are shown in table G.9.

Table G.9: SKM’s inflation forecasts for ETSA Utilities (June to June, per cent)

	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
Inflation rate	3.7	2.5	2.6	3.0	3.5	2.6	2.2

Sources: ETSA Utilities, *Regulatory proposal*, July 2009, attachment E.5 SKM Materials Cost Escalation, p. 21.

¹²⁷³ For example, see AER, *Final decision, NSW DNSPs*, 28 April 2009, pp. 502.

¹²⁷⁴ ETSA Utilities, *Regulatory proposal*, July 2009, attachment E.5 SKM Materials Cost Escalation, p. 21.

¹²⁷⁵ ETSA Utilities, *Regulatory proposal*, July 2009, attachment E.5 SKM Materials Cost Escalation, p. 21.

AER consideration

The AER has concerns about the use of Econtech's inflation forecasts by ETSA Utilities for its cost escalation model, as the inflation outlook has changed significantly since the publication of Econtech's forecast in September 2008.

In the absence of more recent forecasts from Econtech, the AER considers the forecasts provided by the RBA, in its quarterly statement on monetary policy, is an independent and credible source of inflation forecasts. The AER also considers that inflation forecasts for the remainder of the regulatory control period beyond the RBA forecast should be established by interpolating the RBA forecasts using an annual inflation rate of 2.5 per cent (being the mid-point of the RBA inflation target band of 2 to 3 per cent). This approach is consistent with the AER's recent decision for the ACT and NSW DNSP's.¹²⁷⁶ The AER also considers that this approach should be adopted to ensure that consistent approaches to inflation rate forecasts are used for real cost escalators and the post-tax revenue model (PTRM).

AER conclusion

For the reasons discussed and as a result of the AER's analysis of the regulatory proposal, the AER is not satisfied that ETSA Utilities' proposed methodology in forecasting inflation reasonably reflects the capex and opex criteria, including the capex and opex objectives. In coming to this view the AER has had regard to the capex and opex factors.

Based on the most recent data at the time of this draft decision and the methodology outlined in section G.3.2, the AER's conclusions on inflation rate forecasts for this draft decision are presented in table G.10.

Table G.10: AER conclusion on inflation rate forecasts for ETSA Utilities (June to June, per cent)

	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
Inflation rate	1.5	2.7	2.0	2.5	2.5	2.5	2.5

G.3.1.6 Land

ETSA Utilities regulatory proposal

ETSA Utilities did not develop a specific cost escalator for land. In ETSA Utilities' expenditure modelling, land is treated as a material and therefore the weighted average materials escalator is used as a proxy for a land cost escalator.¹²⁷⁷

AER considerations

The AER has reviewed ETSA Utilities' modelling and derivation of its escalators and notes that the weighted average materials escalator is applied consistently across all

¹²⁷⁶ For example, see AER, *Final decision, NSW DNSPs*, 28 April 2009, pp. 478–507; and AER, *Final Decision, ElectraNet*, 11 April 2008, pp. 29–48.

¹²⁷⁷ ETSA Utilities, email response, issue no: PB.ETS.EM.60, 1 August 2009.

relevant expenditure categories. A review of ETSA Utilities' materials escalation model and supporting information indicates that land is not weighted as an expenditure component in the calculation of the weighted average materials cost escalator.¹²⁷⁸ As a result, the application of the weighted escalator to individual land components within the opex and capex modelling should not result in any net real cost escalation being applied to the total value of land expenditures in the forecast capex program. That is, ETSA Utilities assumes land costs will increase in line with the CPI during the next regulatory control period.

The AER has tested the appropriateness of ETSA Utilities' assumption of CPI escalation for land expenditures. This was done with reference to the full historical series (1989–2008) of South Australian land value data published by the Australian Bureau of Statistics (ABS).¹²⁷⁹ The AER derived an average nominal growth rate based on South Australian ABS land type categories (residential, commercial and rural), which was then deflated by the Adelaide CPI to calculate a real historical annual growth rate. This analysis indicates that CPI escalation is conservative compared to the long-term historical average growth in South Australian land values. Based on its analysis, the AER considers that ETSA Utilities' use of CPI to escalate its land forecasts is reasonable.

AER conclusions

For the reasons discussed, and as a result of the AER's consideration of ETSA Utilities' regulatory proposal and supporting information, the AER is satisfied that ETSA Utilities' forecast land escalation assumptions reasonably reflect the capex criteria, including the capex objectives. In coming to this view the AER has had regard to the capex factors.

G.3.2 AER approach to calculating key materials cost escalators

Aluminium and copper

Cost escalators for aluminium and copper are based on LME spot prices up to the most recent month. The AER then uses a linear interpolation between the LME spot price and the LME forward contract price for aluminium and copper for the periods 3 months, 15 months, 27 months, 63 months and 123 months.¹²⁸⁰

The forecast aluminium and copper prices from LME are in nominal USD terms. The interpolated series are converted to nominal AUD through the use of the Econtech ANSIO exchange rate forecast. The figures are then converted to real forecast mineral prices using the Australian inflation forecast.

The resulting data series represents the monthly materials price that is used to account for base months. These monthly prices are then converted to a yearly average for each

¹²⁷⁸ ETSA Utilities, *Regulatory proposal*, July 2009, RIN38 Materials escalation model.xls; RIN19 Expenditure estimation processes – 2.3.10; and RIN25 Materials component categorisation summary.xls.

¹²⁷⁹ ABS, Cat No. 5204.0, *Australian system of national accounts*, table 61, Value of land by land use by State/Territory, as at 30 June 2008.

¹²⁸⁰ The LME 63 month and 123 month forward contract prices are closing prices which are sourced from Bloomberg.

financial year. This approach results in less volatility than can occur using only values for the last month of each year to determine annual changes. This is the index used to escalate aluminium and copper prices over the next regulatory control period.

Steel

The cost escalator for steel is based on historical data from Bloomberg for hot rolled coiled steel contract prices in Europe and the United States. The AER then interpolates these actual steel prices with Consensus Economics steel forecasts for Europe and the US.

The US steel prices are then adjusted for volume, as they are in short-tonnes and must be converted to metric tonnes. The long-term Consensus Economics forecast price is estimated to be for the period of 5 to 10 years. The AER takes the mid-point (7.5 years) and interpolates from Consensus Economics short term forecast prices to its long term steel prices. The long-term steel price is also converted from real to nominal USD by the US Congressional Budget Office inflation forecast. All other Consensus Economics forecasts are already in nominal terms.

The interpolated series is then averaged between Europe and US prices and then converted to nominal AUD through the use of the Econtech ANSIO exchange rate forecast. The figures are then converted to real forecast mineral prices using the Australian inflation forecast discussed in section G.3.2. The resulting data series represents the monthly materials price index that is used to account for base months.

The resulting data series represents the monthly materials price that is used to account for base months. These monthly prices are then converted to a yearly average for each financial year. This approach results in less volatility than can occur using only values for the last month of each year to determine annual changes. This is the index used to escalate steel prices over the next regulatory control period.

Crude oil

The cost escalator for crude oil is based on West Texas Intermediate average monthly prices from the US Department of Energy – Energy Information Agency. The AER interpolates this with Bloomberg forecast crude oil contract prices that use West Texas Intermediate crude oil prices as its reference price.

The interpolated series is then converted to nominal Australian dollars through the use of the Econtech ANSIO exchange rate forecast. The figures are then converted to real forecast prices and the resulting data series then represents the monthly crude oil index that is used to account for base months.

The resulting data series represents the monthly materials price that is used to account for base months. These monthly prices are then converted to a yearly average for each financial year. This approach results in less volatility than can occur using only values for the last month of each year to determine annual changes. This is the index used to escalate crude oil costs over the next regulatory control period.

Exchange rates

Historical exchange rates from the RBA are interpolated with Econtech ANSIO exchange rates to convert materials forecasts and prices from USD to AUD.

Inflation

The inflation series used to convert nominal materials series into real terms is based on the consumer price index from the ABS. This series is then interpolated with the RBA's two year CPI forecasts from the Statement on Monetary Policy. This series is further interpolated with a 2.5 per cent per year inflation rate (which is the midpoint of the RBA's 2 per cent to 3 per cent inflation band) for the remainder of the regulatory control period. This is consistent with the AER's approach in other elements of its decision.

In general, the AER attempts to maintain consistency between any forecast nominal series and the consistent inflation forecast within its real cost escalation model.

This index is used to increase all elements of the cost escalators that are not covered by materials or labour escalators. This includes wood poles, information technology systems, office equipment and motor vehicles.

G.4 Labour cost escalators

This section discusses the real labour cost escalation assumptions applied by ETSA Utilities in developing its capex and opex forecasts for the next regulatory control period. The proposed labour cost escalators fall into two general categories:

- internal labour cost growth forecasts
- contract services cost growth forecasts.

G.4.1 ETSA Utilities regulatory proposal

G.4.1.1 Internal labour cost escalators

ETSA Utilities engaged BIS Shrapnel to prepare forecasts of its real wage growth for the period 2008–09 to 2014–15.¹²⁸¹ BIS Shrapnel prepared a single set of labour cost escalation rates to apply to ETSA Utilities' internal labour forecasts for the period.

BIS Shrapnel derived its forecasts by employing small mathematical sectoral models of wage growth. In developing its labour cost growth escalators, BIS Shrapnel considered macro-economic factors and ETSA Utilities' specific circumstances, including contract terms and historical and future conditions.¹²⁸² Further, BIS Shrapnel's forecasts were informed by analysis of past and future (expected) wage movements in the workforce, based on the three main methods of setting pay and working conditions.¹²⁸³

- awards (federal minimum wage / Fair Pay Commission decisions)
- collective agreements

¹²⁸¹ BIS Shrapnel, *Outlook for wages, contract services and customer connections expenditure to 2014–15, South Australia*, May 2009.

¹²⁸² ETSA Utilities, *Regulatory proposal*, July 2009, p. 103.

¹²⁸³ BIS Shrapnel, *Outlook for wages, contract services and customer connections expenditure to 2014–15, South Australia*, May 2009, p. 15.

- individual agreements.

BIS Shrapnel weighted these factors by the relative share of the workforce who have their pay set by each of these means. It noted that collective bargaining dominates pay setting arrangements in the electricity, gas and water (EGW) sector at 84.4 per cent of wage outcomes, while 14.7 per cent of EGW employees have their pay set by individual arrangements. BIS Shrapnel noted that only around 0.9 per cent of EGW workers have their pay set by awards.¹²⁸⁴

BIS Shrapnel considered its sector based modelling of wage movements to be superior to methodologies using economic regression techniques which forecast wages growth at the industry level. BIS Shrapnel made the following observations in support of its forecasting methodology:¹²⁸⁵

- BIS Shrapnel's sectoral modelling approach accounts for the present complexity of wage determination processes at the national and industry sector level
- econometric equations struggle with the changes in the relative importance of different factors influencing wages growth that have occurred over the past two-to-three decades
- as many regression equations include lagged variables, econometric-based models can miss 'turning points' in the cycle and, based on its own experience, can produce spurious results.

BIS Shrapnel noted that the methodology used to derive ETSA Utilities' wage growth forecasts involved a more detailed approach than its usual model of wage determination. This is a result of ETSA Utilities specific forecasts quantifying bonuses and incentives, and (where applicable) accounting for quantified compositional effects. BIS Shrapnel's revised methodology therefore, quantified a number of ETSA Utilities' internal initiatives to improve pay structure and incentives, including the following:¹²⁸⁶

- enterprise agreements
- Wage Classification Structure Review (WCSR).

In summary, BIS Shrapnel's forecasts indicate stronger wage growth in the South Australian EGW sector compared to other sectors, due to stronger demand for labour, competition for skilled labour and the impact of capex programs planned by network infrastructure businesses in South Australia and nationally.¹²⁸⁷ It also noted that the

¹²⁸⁴ BIS Shrapnel, *Outlook for wages, contract services and customer connections expenditure to 2014–15, South Australia*, May 2009, p. 15.

¹²⁸⁵ BIS Shrapnel, *Outlook for wages, contract services and customer connections expenditure to 2014–15, South Australia*, May 2009, p. 16 and ETSA Utilities, response to AER.EU.15.08, received 4 September 2009, p. 2.

¹²⁸⁶ BIS Shrapnel, *Outlook for wages, contract services and customer connections expenditure to 2014–15, South Australia*, May 2009, pp. 45–47.

¹²⁸⁷ BIS Shrapnel, *Outlook for wages, contract services and customer connections expenditure to 2014–15, South Australia*, May 2009, p. 2.

structural initiatives adopted by ETSA Utilities also contribute to wages growth that is higher than the South Australian average. BIS Shrapnel stated that the basic logic behind the forecast strength in wage increases is the need to attract and retain skilled employees in what it expects to be a relatively tight labour market for these skills in South Australia during the next regulatory control period.¹²⁸⁸

ETSA Utilities proposed real cost escalators for its internal labour resources, as derived by BIS Shrapnel, as shown in table G.11.

Table G.11: ETSA Utilities real internal labour escalation rates (per cent)

	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
Labour cost growth	4.3	3.8	2.7	3.8	3.5	3.3	3.5

Source: ETSA Utilities, *Regulatory proposal*, July 2009, p. 103; and BIS Shrapnel, *Outlook for wages, contract services and customer connections expenditure to 2014–15, South Australia*, April 2009, p. 1.

G.4.1.2 Submissions

The AER received submissions from the ECCSA, SA Water, Business SA and UnitingCare Wesley (UCW) which commented on ETSA Utilities' proposed cost escalators.¹²⁸⁹ Submissions raised general concerns with the AER's policy of allowing real cost escalation, and concerns regarding the magnitude of the labour cost increases proposed by ETSA Utilities. Specifically:

- ECCSA submitted that the AER approach of allowing real cost escalation relieves DNSPs of cost pressures faced by other firms and effectively excludes them of having to achieve any productivity improvements. It stated that the AER should only allow for wages growth which is higher than the average for the sector over the long term.¹²⁹⁰
- ECCSA also submitted that ETSA Utilities was able to absorb real cost increases last time and still underspend, and should be able to do so this time also. It stated that there is no basis to allow for any premium for expected wages growth over the coming period.¹²⁹¹
- SA Water considered it is not prudent to forecast material increases in labour and materials costs in a recovering economic climate.¹²⁹²
- Business SA submitted that the proposed annual average labour cost escalation rate of 3.3 per cent appears high and should be reduced to the forecast growth in real average weekly ordinary time earnings (AWOTE).¹²⁹³

¹²⁸⁸ BIS Shrapnel, *Outlook for wages, contract services and customer connections expenditure to 2014–15, South Australia*, May 2009, p. 48.

¹²⁸⁹ Business SA, Submission to the AER, August 2009, p. 7 and ECCSA, *Submission to the AER*, 28 August 2009, p. 38.

¹²⁹⁰ ECCSA, *Submission to the AER*, 28 August 2009, p. 20.

¹²⁹¹ ECCSA, *Submission to the AER*, 28 August 2009, pp. 35–36.

¹²⁹² SA Water, *Submission to the AER*, 28 August 2009, p. 3.

- UCW stated that ETSA Utilities’ proposal for significant increases in aggregate labour costs is at odds with the 2009 wage decision by the Fair Pay Commission.¹²⁹⁴

G.4.1.3 Consultant review

The AER engaged Access Economics to provide labour cost growth forecasts for the EGW sector and general state labour price indices (LPIs) for NSW, Victoria, Queensland, South Australia, ACT and nationally.¹²⁹⁵ Access Economics’ national and South Australian forecast labour cost growth rates are shown in table G.12.

Table G.12: Access Economics’ real labour forecasts for South Australia and Australia (per cent)

	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
South Australia – EGW	1.4	2.3	0.6	0.7	1.3	1.8	2.0
National – EGW	1.4	1.6	0.4	0.6	1.1	1.6	1.7
South Australia – LPI	0.7	1.7	1.2	1.0	1.2	1.7	1.9
National – LPI	0.9	1.7	0.9	0.9	1.1	1.6	1.8

Source: Access Economics, *Forecast growth in labour costs*, 16 September 2009, pp. xiv, 74.

The macroeconomic forecasts prepared by Access Economics were developed using a formal econometric modelling approach (Access Economics macro model – AEM). The wage forecasting methodology applied by Access Economics involves estimating deviations between industry, state-specific, and broad measures of wages in the Australian economy.¹²⁹⁶

Access Economics noted that its modelling of specific LPIs begins with movements in the total Australian LPI. From this index, the AEM adds in deviations from the average. Access Economics noted three key factors driving wage differentials which are incorporated into its modelling:¹²⁹⁷

- business cycle factors – the model considers how fast the industry/State is growing relative to the national and historical averages
- productivity factors – the model uses an average of productivity trends across the past two years

¹²⁹³ Business SA, *Submission to the AER*, August 2009, p. 9.

¹²⁹⁴ UCW, *Submission to the AER*, August 2009, p. 19.

¹²⁹⁵ Access Economics, *Forecast growth in labour costs*, 16 September 2009.

¹²⁹⁶ Access Economics, *Forecast growth in labour costs*, 16 September 2009, appendix C, p. 104

¹²⁹⁷ Access Economics, *Forecast growth in labour costs*, 16 September 2009, appendix C, pp. 104–105.

- competition (relative wage) factors – the model sees wages in competitor industries moving closer together.

Access Economics noted the importance of judgement when determining movements in wages, particularly in current circumstances where data volatility and the effects of factors, not relevant to wage determination, on broader output and employment measures exist.¹²⁹⁸

In deriving its forecasts, Access Economics applied a concordance table to reclassify the LPI estimates to align with updated ABS Australian and New Zealand Standard Industry Classifications (ANZSIC) structure.¹²⁹⁹

Electricity Gas and Water sector LPI

Access Economics noted that, as a result of the jobs boom since the year 2000, the EGW sector (at a national level) was in competition for skilled labour with other sectors. This has resulted in EGW wages growing faster than overall national wages.¹³⁰⁰

The recent downturn in the Australian economy has affected the utilities sector and other sectors which would normally compete for workers. Access Economics noted there have been substantial job losses in the manufacturing and mining sectors, while the share of Australian workers in the construction industry is expected to weaken in 2010. Access Economics also forecast business demand to weaken with the EGW sector expected to suffer the short term weaknesses before recovering to usual growth rates. This is reflected within the national EWG LPI forecasts, where the projected trends over the next regulatory control period illustrate moderate growth relative to national mining, construction and manufacturing sectors wage growth forecasts.¹³⁰¹

Access Economics stated that it expects wage growth in the EGW sector to be weak in the short term, before recovering to its usual growth rate, averaging slightly below that of the wider Australian economy.¹³⁰²

Over the next regulatory control period, Access Economics has forecast average annual growth for the national utilities LPI of 1.1 per cent (real). In comparison, the forecast average annual growth rate for the South Australian utilities sector LPI is expected to be slightly stronger at 1.3 per cent (real).¹³⁰³

Access Economics made the following observations on South Australia's EGW sector:¹³⁰⁴

¹²⁹⁸ Access Economics, *Forecast growth in labour costs*, 16 September 2009, appendix C, p. 105.

¹²⁹⁹ Access Economics, *Forecast growth in labour costs*, 16 September 2009, appendix C, p. 114.

¹³⁰⁰ Access Economics, *Forecast growth in labour costs*, 16 September 2009, p. 31.

¹³⁰¹ Access Economics, *Forecast growth in labour costs*, 16 September 2009, pp. 34–35.

¹³⁰² Access Economics, *Forecast growth in labour costs*, 16 September 2009, pp. 34.

¹³⁰³ Access Economics, *Forecast growth in labour costs*, 16 September 2009, pp. 48, 66.

¹³⁰⁴ Access Economics, *Forecast growth in labour costs*, 16 September 2009, pp. 75–76.

- South Australia has an ageing profile of EGW sector workers resulting in relatively greater short term pressures on employers from staff lost to retirement
- there is increased pressure to attract and retain younger workers
- South Australia will face greater competition with larger States for utility workers which may result in increased labour costs, compared to national averages
- EGW wages growth movements align closely with the general wages growth in South Australia.

Access Economics noted South Australia is experiencing solid overall growth in the wider State economy, and the most recent wage gains in the EGW sector have been higher than those of any other state.¹³⁰⁵

State All Industries LPI – general labour

Access Economics developed forecasts of on general labour cost growth for NSW, Victoria, Queensland, South Australia, ACT and Australia. Access Economics' general labour cost growth rates are shown in table G.13.

Table G.13: Access Economics real general labour escalation rates for South Australia and Australia (per cent)

	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
South Australia – LPI	0.7	1.7	1.2	1.0	1.2	1.7	1.9
Australia – LPI	0.9	1.7	0.9	0.9	1.1	1.6	1.8

Source: Access Economics, *Forecast growth in labour costs*, pp. 48, 90.

Access Economics considered that, in the current market, there is an expectation for wages growth to ease. Access Economics noted the national LPI fell below 4 per cent over the past year and further expects overall future wages growth to ease further. Access Economics noted that wage growth has moderated in sectors suffering from the recent economic downturn, while gains in well protected areas are also evident.¹³⁰⁶

Access Economics expects national wage growth will ease to 3.5 per cent (nominal) in 2010, before rising in 2011 and continuing with moderate growth for the remainder of the next regulatory control period.¹³⁰⁷ It made the following observations on the South Australian economy, impacting its general labour wage growth:¹³⁰⁸

- the South Australian economy has typically grown more slowly than Australia as a whole, held back by its heavy reliance on the manufacturing sector, which has grown more slowly than Australia as a whole

¹³⁰⁵ Access Economics, *Forecast growth in labour costs*, 16 September 2009, p. 76.

¹³⁰⁶ Access Economics, *Forecast growth in labour costs*, 16 September 2009, p. 27.

¹³⁰⁷ Access Economics, *Forecast growth in labour costs*, 16 September 2009, p. 29.

¹³⁰⁸ Access Economics, *Forecast growth in labour costs*, 16 September 2009, pp. 74, 93–94.

- South Australia has relatively weaker population growth, and a relatively older population compared to other states
- South Australia was not as affected by the economic slowdown as other states due to modest exposure to the finance and mining sectors
- economic growth is expected to record solid recovery in 2010.

Access Economics forecast South Australian general labour cost wages will grow faster than the national average, projected to peak at close to 4.5 per cent (nominal) by mid-2011. Access Economics expects labour cost growth to then return to growing broadly in line with the national average, as has generally been the historical trend.¹³⁰⁹

G.4.1.4 AER considerations

The AER has considered ETSA Utilities' proposed internal labour cost growth forecasts, including examining BIS Shrapnel's methodology for deriving those forecasts. While the AER considers BIS Shrapnel's forecasting methodology appears generally reasonable, it has concerns with applying BIS Shrapnel's modelling of labour cost growth rates.

Allowances and bonuses

The AER notes in addition to the application of ETSA Utilities workplace agreement increase, BIS Shrapnel's forecasts recognise the expected impact of internally determined pay increase/bonus schemes in determining ETSA Utilities' specific labour cost forecasts.

The AER has reviewed information provided by ETSA Utilities regarding the WCSR, and other bonus schemes, which BIS Shrapnel modelled in deriving ETSA Utilities' internal labour cost growth forecasts.

The AER notes the WCSR is designed to improve the pay structure of the grades for wage employees with the aim of enhancing incentives and productivity.¹³¹⁰ This will result in an aggregate pay increase of 5 per cent to wage staff.¹³¹¹

BIS Shrapnel's modelling has also applied the impact of individual voluntary remuneration agreements (IVRA's) which ETSA Utilities considers will enhance its flexibility in attracting and retaining staff, in addition to responding to increased competition for skilled labour. ETSA Utilities is anticipating that its internal staff on IVRA's will increase from 2 per cent currently, to around 18 per cent by the end of the next regulatory control period.

BIS Shrapnel's methodology is quite detailed in its consideration of each of these factors. In developing its forecasts, BIS Shrapnel considered each discrete component of ETSA Utilities' labour costs (for example, the type of agreement, bonuses and

¹³⁰⁹ Access Economics, *Forecast growth in labour costs*, 16 September 2009, p. 94.

¹³¹⁰ BIS Shrapnel, *Outlook for wages, contract services and customer connections expenditure to 2014–15, South Australia*, April 2009, p. 46.

¹³¹¹ BIS Shrapnel, *Outlook for wages, contract services and customer connections expenditure to 2014–15, South Australia*, April 2009, p. 46.

internal initiatives etc.) and weighted these according to their expected impact on final labour costs based on the historical actual proportions of eligible staff receiving these payments. However, the AER has two key concerns regarding this forecasting approach.

The AER notes that performance bonuses generally reflect individual employee productivity improvements and as such are selective, rather than broad based payments. Any bonus paid by ETSA Utilities, provided it is less than the cost of employing new staff to increase output by the equivalent productivity increase, should result in cost savings for ETSA Utilities.¹³¹² Therefore, the AER is not satisfied that ETSA Utilities has appropriately quantified the net cost impact of these incentive programs and individual performance/productivity bonuses in light of the expected productivity gains.¹³¹³

Further, while BIS Shrapnel has presented a detailed forecasting method, the AER considers this may not be appropriate given the incentive based regulatory framework. The modelling approach and resultant forecasts are highly specific to ETSA Utilities' own internal labour cost structure and have been, in part, primarily developed for the purposes of internal budgeting.¹³¹⁴ The AER considers that accepting these specific forecasts, rather than applying a benchmark measure, would effectively represent a shift from an incentive based regulation framework, to cost of service regulation.

Compensating for actual increases, which are specific to ETSA Utilities' internally determined pay initiatives, does not provide incentives for the DNSP to actively pursue efficient and competitive wage outcomes during negotiations, or develop innovative strategies to attract and retain labour resources, as required by businesses faced with competitive market pressures. The AER acknowledges that salaries, and annual salary increases, are fundamental bargaining tools in EBA negotiations. However, it also considers that efficient and prudent businesses would actively seek to negotiate favourable terms and conditions by leveraging other, non-financial negotiables, even in circumstances of perceived or apparent skilled labour shortages.

The AER does not consider ETSA Utilities demonstrated that its structural initiatives to attract and retain staff are prudent and efficient responses to current, or forecast, labour market conditions, or justified why these costs are reasonably required to meet the opex and capex objectives under the NER. Therefore, the AER is not satisfied ETSA Utilities has justified why its forecast labour costs should be higher than the relevant state average growth rates for relevant labour types over the next regulatory control period.

The AER also notes that ETSA Utilities' opex modelling includes a separate line item for forecast employee bonus costs, which are escalated by the proposed labour cost growth rates.¹³¹⁵ The AER considers this is inappropriate and appears to result in double counting of increased internal labour costs arising from ETSA Utilities'

¹³¹² That is, while labour costs may increase, total costs per unit of output will decrease.

¹³¹³ This approach is consistent with the AER's final determination for ActewAGL.

¹³¹⁴ BIS Shrapnel, *Outlook for wages, contract services and customer connections expenditure to 2014–15, South Australia*, April 2009, p. 1.

¹³¹⁵ ETSA Utilities, *Regulatory proposal*, July 2009, attachment F.1 SEM Opex model version xx and Attachment F.4, Derivation of escalators - detailed description.

internal structural labour incentive arrangements. Modelling of bonus costs in the forecast opex allowance necessarily means that these costs are implicit in the base year expenditure. Therefore it is unlikely to be appropriate to further escalate these costs by a labour cost growth escalator which explicitly incorporates growth in bonus costs. This issue is noted in chapter 8 of this draft decision.

Data currency

The AER notes that the macroeconomic outlook and some key external factors have changed since the BIS Shrapnel report was prepared in May 2009. In particular, the AER notes that while an increase in employment in the electricity, gas and water sector was observed until March 2009, it is now the case that employment in that sector is decreasing. Also, wage data released for the June quarter of 2009 was weaker than expected, particularly for the electricity, gas and water sector.¹³¹⁶

On this basis, the AER does not consider that ETSA Utilities' proposed labour cost growth rates are a reasonable reflection of likely future labour costs as they are not based on the most recent available information. The AER considers that it is appropriate to apply forecasts based on the latest available data. Therefore, the AER will apply the Access Economics labour cost growth forecasts for South Australia, as produced in September 2009, in deriving labour cost escalators for ETSA Utilities. The AER also considers it appropriate to further update these forecasts for the purposes of its final decision.

Application of labour cost growth escalators

The forecasting and modelling approach taken by BIS Shrapnel and ETSA Utilities does not provide for specific labour escalators to apply to its specialist (EGW) labour, and general internal labour resources, respectively. However, the AER notes that, in estimating a single internal labour growth forecast relevant to ETSA Utilities internal labour, BIS Shrapnel has incorporated the impact of EGW sector wages, ETSA Utilities' workplace agreement pay increases and ETSA Utilities specific bonus payments and incentive arrangements.

The AER sought further information from ETSA Utilities regarding the composition of its internal workforce by labour type (EGW and general labour resources).

ETSA Utilities' advised that its internal workforce consists of a combination of wage employees including tradespersons, general skilled workers and apprentices. ETSA Utilities noted that it also retains salaried employees including management, professionals, para-professionals and clerical/administration staff.¹³¹⁷ ETSA Utilities estimated that approximately two thirds of its internal workforce are specialist EGW workers, and include trade and engineering employees involved in field services (construction and maintenance), demand management and network management (asset management) group employees, and relevant managers of these groups.¹³¹⁸

¹³¹⁶ Access Economics, *Forecast growth in labour costs*, 16 September 2009.

¹³¹⁷ BIS Shrapnel, *Outlook for wages, contract services and customer connections expenditure to 2014–15, South Australia*, April 2009, p. 45.

¹³¹⁸ ETSA Utilities, email response to AER.EU.21, 17 September 2009.

Based on information provided by ETSA Utilities, the AER considers the positions described by ETSA Utilities reasonably reflect specialist EGW labour resources.¹³¹⁹ The remaining one third of ETSA Utilities' internal labour resources represent salaried workers, and perform roles that the AER considers are consistent with general labour resources, rather than specialised utilities labour.

ETSA Utilities and BIS Shrapnel have argued that the growth differential between average all industries labour costs, and utilities sector labour costs is expected to persist for the next regulatory control period.¹³²⁰ Given this, the AER considers that these growth differentials should be explicitly recognised in ETSA Utilities' labour cost escalation rates, considering the actual composition of its internal workforce by labour type. These two labour categories have historically tended to exhibit some wage growth differentials and this characteristic is forecast to remain, albeit less pronounced, during the early years of the next regulatory control period.¹³²¹ The AER considers that an appropriate internal labour cost escalator should consider these factors.

The AER considers that an appropriate labour cost escalator should consider these factors. Therefore, the AER considers a weighted average labour cost escalator should be applied to ETSA Utilities' internal labour cost forecasts (for opex and capex), based on the relative contribution of specialist EGW and general labour resources to the forecast expenditure programs.

The AER has calculated a weighted labour escalator based on ETSA Utilities' internal labour resources being estimated at 66 per cent specialist EGW, and 33 per cent general labour types. These values were used to weight the respective general and EGW labour cost forecasts developed by Access Economics for South Australia. The AER's weighted average labour escalators for ETSA Utilities' forecast internal labour costs are set out at table G.14.

Table G.14: AER weighted average internal labour escalators for ETSA Utilities

	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
AER real weighted average internal labour escalator	3.0	2.30	0.99	0.83	1.26	1.79	1.97

Source: AER analysis; Access Economics, Forecast growth in labour costs, 16 September 2009. Escalation in 2008–09 represents actual EBA adjustment as advised by ETSA Utilities.

Application of actual EBA rates

The AER notes ETSA Utilities forecast EGW labour rates are initially based on its current workplace agreement, where annual pay increases (of 4.5 per cent nominal) are applicable.

¹³¹⁹ The AER considers EGW employees as specialist electrical industry employee's undertaking direct project work.

¹³²⁰ BIS Shrapnel, *Outlook for wages, contract services and customer connections expenditure to 2014–15, South Australia*, April 2009.

¹³²¹ See, Access Economics, *Forecast growth in labour costs*, 16 September 2009, p. 68.

The AER has reviewed ETSA Utilities current workplace agreement and has confirmed the annual nominal escalation rate of 4.5 per cent. Based on the information provided by ETSA Utilities, the AER considers it reasonable to adopt actual wage increases up until 2009–10 provided for under ETSA Utilities workplace agreement. For the next regulatory control period, AER has adopted Access Economics labour cost growth forecasts in deriving the weighted average labour cost escalators for ETSA Utilities.

Summary of AER considerations

In summary, the AER does not consider ETSA Utilities' proposed internal labour cost growth rates provide a reasonable reflection of the efficient costs a prudent operator in the circumstances of ETSA Utilities would require to achieve the opex objectives. In coming to this view, the AER has considered the following key issues:

- the forecasts developed by BIS Shrapnel in May 2009 are no longer based on the latest available information and expectations, specifically, expectations regarding the macro economic climate which underpin the forecasts
- the internal labour growth forecasts explicitly reflect the impact of ETSA Utilities' own internally determined performance and incentive initiatives, including bonus payments, which the AER considers have not been demonstrated to be efficient by ETSA Utilities
- the forecasts do not appear to accurately consider the actual composition of ETSA Utilities' internal and contract service labour resources, by labour type.

The AER acknowledges its responsibility under section 7A of the NEL to provide a reasonable opportunity to recover at least the efficient costs the operator incurs in providing direct control services. It also notes the requirement under clause 6.5.6(c) that it must accept the forecast opex if it is satisfied that it reasonably reflects the efficient costs of achieving the opex objectives and, the costs that prudent operator in the circumstances of the DNSP would require to achieve those objectives.

However, the AER is not required to allow compensation for every internal decision made by DNSP which impacts on its costs. The AER considers that its draft decision adequately addresses these requirements by allowing ETSA Utilities to recover the cost of real increases in forecast labour costs based on reputable economic forecasts which are:

- specific to South Australia
- specific to the utilities sector, and general labour sector, taking into account the unique conditions (historical and forecast) impacting growth rates in these sectors
- based on the most recent available data and will be updated for the final determination to reflect the most recent data
- applied transparently and accurately according to ETSA Utilities actual labour force composition, based on advice received from ETSA Utilities.

The AER considers that its draft decision to apply state and industry specific average labour growth forecasts, developed using latest information, also sufficiently addresses the concerns raised in submissions, specifically that:

- the AER should only allow for wages growth which is higher than the average for the sector over the long term
- it is not prudent to forecast material increases in labour and materials costs in a recovering economic climate¹³²²
- the proposed annual average labour cost escalation rate of 3.3 per cent appears high and should be reduced to the forecast growth in real AWOTE¹³²³
- the proposal for significant increases in aggregate labour costs is at odds with the 2009 wage decision by the Fair Pay Commission.

G.4.1.5 AER conclusions

For the reasons discussed and as a result of the AER's analysis of ETSA Utilities regulatory proposal, the AER is not satisfied that ETSA Utilities internal labour cost escalation forecasts reasonably reflect the capex and opex criteria, including the capex and opex objectives. The AER has substituted the escalators set out in table G.15, and considers this is the minimum adjustment necessary for the internal labour cost growth forecasts to comply with the NER. In coming to this view, the AER has had regard to the capex and opex factors.

Table G.15: AER conclusion ETSA Utilities' internal labour cost escalators (per cent)

	2010–11	2011–12	2012–13	2013–14	2014–15
AER's EGW labour forecast	0.9	0.7	1.3	1.8	2.0
AER's general labour forecast	1.2	1.0	1.2	1.7	1.9
Weighted average internal labour escalator	0.99	0.83	1.26	1.79	1.97

Source: AER analysis, Access Economics, *Forecast growth in labour costs*, 16 September 2009, pp. 74, xi.

Note: EGW forecast includes adjustments for ETSA Utilities' actual EBA increases incurred in the last year of the current regulatory control period.

¹³²² SA Water, *Submission to the AER*, 28 August 2009, p. 3.

¹³²³ Business SA, *Submission to the AER*, August 2009, p. 9.

G.4.2 Contract services

G.4.2.1 Regulatory proposal

ETSA Utilities engaged BIS Shrapnel to develop input cost escalation factors for contract services over the next regulatory control period. BIS Shrapnel recommended that ETSA Utilities use two separate services escalators; one for construction related contract services, and another for other outsourced contract services.¹³²⁴

BIS Shrapnel applied a similar approach to develop its contract services escalators, as that used to derive its internal labour escalators for ETSA Utilities. BIS Shrapnel considered macro-economic factors and ETSA Utilities' specific circumstances, including specific contract terms and conditions, surveys conducted with suppliers and drivers of suppliers' price path projections. ETSA Utilities submitted that contracts ending after 30 June 2010 have been taken into account in the development of its contract services escalators.¹³²⁵

Based on BIS Shrapnel's analysis, ETSA Utilities applied weighted average forecast growth rates to escalate each category of its forecast contract services costs.¹³²⁶ ETSA Utilities' proposed contract services cost escalators are shown in table G.16.

Table G.16: ETSA Utilities real contract services cost escalators (per cent)

	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
Construction-related	–	0.68	1.06	1.71	2.49	2.52	1.53
Other outsourced	–	0.06	0.84	0.53	0.76	1.00	1.02

Source: ETSA Utilities, *Regulatory proposal*, July 2009, p. 104.

Services – construction related

BIS Shrapnel developed the construction related services escalators by examining the breakdown of ETSA Utilities' construction services contract activities. Based on this analysis, BIS Shrapnel assumed that around half of the activities were related to civil works, for which construction wages were used as the relevant escalator. For the remaining half of projects, BIS Shrapnel assumed that around half (25 per cent of the total) of these were related to 'turn-key' projects where all materials and labour were provided by the contractor.¹³²⁷ As a result, BIS Shrapnel derived its weighted average construction services escalators by using the Australian electricity construction price index to 25 per cent of construction works, and growth in construction wages for the remaining 75 per cent of activities.

¹³²⁴ ETSA Utilities, *Regulatory proposal*, July 2009, p. 13 and RIN19 2.3.10 Expenditure estimation processes.

¹³²⁵ ETSA Utilities, *Regulatory proposal*, July 2009, p.14 and RIN 19 2.3.10: Expenditure estimation processes.

¹³²⁶ ETSA Utilities, *Regulatory proposal*, July 2009, p. 104.

¹³²⁷ BIS Shrapnel, *Outlook for wages, contract services and customer connections expenditure to 2014–15, South Australia*, April 2009, p. 54.

Services – other outsourced services

Using a similar approach as used to derive its construction services escalators, BIS Shrapnel developed ‘other outsourced services’ cost escalators based on details of ten of ETSA Utilities’ relevant contract services.¹³²⁸ BIS Shrapnel’s detailed discussion on how it has derived these escalators is set out in its report to ETSA Utilities.¹³²⁹ The contract services examined by BIS Shrapnel include:

- aerial services
- vegetation clearance
- building maintenance and cleaning
- meter reading
- transport services
- fleet management
- financial / audit
- legal services
- traffic management
- call centre and full retail contestability.

BIS Shrapnel derived detailed escalation rates for each of these services which were then weighted according to ETSA Utilities’ actual spend on these activities during the last 5 years to derive a single set of escalators.¹³³⁰

G.4.2.2 AER considerations

Services - construction related services

The AER notes ETSA Utilities applied its construction related contract services escalator to services where the component of work involves substantively trade related field work.¹³³¹

The AER notes BIS Shrapnel considered labour costs were the biggest component of contractor costs and therefore applied movements in South Australian construction AWOTE for 75 per cent of price movements and the remaining 25 per cent was based

¹³²⁸ BIS Shrapnel, *Outlook for wages, contract services and customer connections expenditure to 2014–15, South Australia*, April 2009, p. 54.

¹³²⁹ BIS Shrapnel, *Outlook for wages, contract services and customer connections expenditure to 2014–15, South Australia*, April 2009, p. 54.

¹³³⁰ BIS Shrapnel, *Outlook for wages, contract services and customer connections expenditure to 2014–15, South Australia*, April 2009, p. 53.

¹³³¹ ETSA Utilities, response to AER.EU.21.08, 16 September 2009, p. 4.

on the Australian electricity construction price index, to determine its construction related contract services escalator.

In general, the AER accepts the application of wage rates included in contracts which are negotiated through a commercial tender process. Further, the AER accepts the application of labour cost growth rates which reflect the specific circumstance of the service which is being provided. For example, the AER would expect a general labour escalator to be applied to services which do not require specialist EGW labour.

The AER has reviewed the information supporting BIS Shrapnel's methodology to support the derivation of its construction related contract services forecasts and considers the approach to be generally reasonable and rigorous. However, the AER has some concerns regarding the use of BIS Shrapnel's forecasts.

The AER sought further information from ETSA Utilities to determine the nature of the services which it considers construction related. In response, ETSA Utilities advised that it has assumed:¹³³²

- 50 per cent of contract work relates to civil works (for example, general earth works, trenching, boring and footing)
- 25 per cent relate to 'turn-key' contracts where all labour, materials and services are provided by the contractor
- 25 per cent relate to construction services where the plant and materials are provided by ETSA Utilities, but labour is provided by the contractor.

The AER also notes that the economic outlook has changed since BIS Shrapnel's forecasts were produced in May 2009 and therefore considers it appropriate to use updated data sources in developing escalators for this draft decision.

Based on its analysis, the AER considers that a weighted average escalator for construction related contracts should be applied, using latest available data. In deriving this, the AER has been guided by the data within BIS Shrapnel's report,¹³³³ and supplementary information received from ETSA Utilities, and has determined that:

- the engineering/consultancy component (8.92 per cent of the total construction services costs) is likely to reflect specialist EGW labour and should be escalated by Access Economics' EGW labour cost growth forecasts for South Australia, rather than construction AWOTE
- the civil works and 'turn-key' project cost components should be escalated by the latest available Construction Forecasting Council (CFC) construction cost forecasts (68.31 per cent of total construction related contracts)

¹³³² ETSA Utilities, response to AER.EU.21, 17 September 2009.

¹³³³ BIS Shrapnel, *Outlook for wages, contract services and customer connections expenditure to 2014–15, South Australia*, May 2009, table 3, p. 53.

- the remaining 22.77 per cent of activities in this category represent contract construction activities where ETSA Utilities provides materials, and this component should be escalated by Access Economics' forecast construction AWOTE for South Australia.

Based on this analysis, the AER has developed a weighted average escalator for ETSA Utilities construction related services, based on the most recently available forecasts from Access Economics and CFC. These escalation rates are set out at table G.17.

Services - other outsourced services

ETSA Utilities other outsourced works escalator has been derived as a weighted average of ten separate contract service types, weighted according to their proportional contribution to ETSA Utilities' total other contract services expenditure.¹³³⁴

The AER sought further information from ETSA Utilities regarding the nature of its other outsourced contract services.

The AER has reviewed information provided by ETSA Utilities and notes that this escalator was specifically developed to apply to services of a more generalist nature, and not specific to the electricity industry. The AER further notes that, of the ten major contract services used by BIS Shrapnel to derive ETSA Utilities other outsourced works escalator, both aerial services and vegetation clearance labour resources (accounting for 25 per cent of this escalator) reasonably require specialist industry knowledge and labour.¹³³⁵ The remaining 75 per cent can reasonably be considered to utilise general labour resources only.

The AER considers that Access Economics' general labour cost growth forecast is an appropriate measure to escalate direct general contract services costs (i.e. other than specialist or EGW) to 75 per cent of these costs incurred by ETSA Utilities. The AER also considers its EGW labour growth forecasts are an appropriate escalation rate to apply to the remaining 25 per cent of ETSA Utilities other outsourced contract services, as the AER considers this proportion of contract services reasonably require specialist electrical industry knowledge.

Based on these considerations, the AER has developed a weighted average escalator for ETSA Utilities other outsourced contract services, based on the most recently available forecasts from Access Economics. These escalation rates are set out at table G.17.

G.4.2.3 AER conclusion

For the reasons discussed and as a result of the AER's analysis of ETSA Utilities regulatory proposal, the AER is not satisfied that ETSA Utilities contract services cost growth forecasts reasonably reflect the capex and opex criteria, including the capex and opex objectives. The AER substituted the escalators set out in table G.17, and

¹³³⁴ BIS Shrapnel, *Outlook for wages, contract services and customer connections expenditure to 2014–15, South Australia*, May 2009, p. 54.

¹³³⁵ ETSA Utilities, response to AER.EU.21.09, received 16 September 2009, p. 6.

considers that this is the minimum adjustment necessary for the escalators to comply with the NER. In coming to this view, the AER has had regard to the capex and opex factors.

Table G.17: AER conclusion on ETSA Utilities real contract services cost escalators (per cent)

	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
Services – construction related	2.10	1.32	–0.26	0.25	1.18	0.75	–0.19
Services – other outsourced	0.87	1.86	1.05	0.96	1.24	1.76	1.93

H. Self insurance

This appendix sets out the AER's assessment of ETSA Utilities' proposed self insurance allowance in the opex forecasts for the next regulatory control period.

H.1 ETSA Utilities regulatory proposal

ETSA Utilities' proposed allowance for self insurance premiums for the next regulatory control period is shown in Table H.1.

Table H.1: ETSA Utilities self insurance costs (\$m, 2009–10)

	2010–11	2011–12	2012–13	2013–14	2014–15	Total
Baseline costs ^a	3.6	3.6	3.6	3.6	3.6	18.0
Variation ^b	3.4	3.6	3.7	3.9	4.0	18.6
Total self insurance ^c	7.0	7.1	7.3	7.5	7.6	36.5

Source: ETSA Utilities, *Self insurance expenditure*, excel spreadsheet, confidential; and ETSA Utilities, email response, issue number AER.EU.25, 15 September 2009, revised schedules I–5 and R–2, confidential.

Note: Totals may not add due to rounding.

- (a) baseline costs are self insurance premiums that were incurred in the 2008–09 base year. These costs are included in other opex categories other than self insurance.
- (b) variation costs represent the difference between the baseline costs in ETSA Utilities 2008–09 base year and the self insurance premiums recommended by AON Global.
- (c) total self insurance is the summation of the baseline and variation self insurance premiums.

ETSA Utilities commissioned AON Global Risk Consulting (AON Global) to provide actuarial assessments of ETSA Utilities' self insurance costs.¹³³⁶

AON Global identified several self insured risk categories to which ETSA Utilities is exposed. Deductible amounts represent the amount that a network service provider must cover if an insurance event occurs, before the DNSP can make a claim on an insurance policy. ETSA Utilities' proposed self insurance allowance includes the following risk categories:¹³³⁷

- below deductible property damage
- below deductible liability (including fire liability)
- below deductible motor vehicle
- uninsured poles and wires (resulting from 3rd party damage)
- below deductible and uninsured Guaranteed Service Levy (GSL) payments

¹³³⁶ AON Global Risk Consulting is a provider of risk management services, insurance and reinsurance brokerage and human capital and management consulting.

¹³³⁷ AON Global, *Self insurance risk quantification – ETSA Utilities*, May 2009, confidential.

- uninsured underground and environmental liability
- below deductible worker's compensation.

For each of these categories, AON Global calculated an average premium associated with each event that is to be expected in an average year.¹³³⁸ ETSA Utilities took the average values and escalated them by certain factors (for example network growth, line length growth, customer numbers growth, employee numbers growth and labour costs) to determine the total self insurance costs for each year of the next regulatory control period.¹³³⁹ ETSA Utilities then subtracted the baseline self insurance costs that were already included in its historical opex to derive variation costs. The variation costs represent the difference between the escalated costs as per the AON Global report and the historical baseline self insurance costs.¹³⁴⁰ ETSA Utilities advised that the costs that were used to derive the baseline self insurance costs were old estimates, and actuals were now available.¹³⁴¹ As a result, the variation figures presented in ETSA Utilities' regulatory proposal are incorrect.¹³⁴² The figures presented in Table H.1 show the revised figures.¹³⁴³

It is important to note that the data shown in ETSA Utilities' regulatory proposal are not the total self insurance costs proposed. The total self insurance costs are the variation costs shown in ETSA Utilities' regulatory proposal plus the baseline self insurance costs that are included across other opex categories.¹³⁴⁴

H.2 Issues and AER considerations

H.2.1 Self insurance assessment criteria

Self insurance is an alternative risk management method to external insurance, where the network service provider bears the risk of an event that is beyond the network service provider's control. Self insurance may also be necessary if insurance is not available or only available on uneconomic terms or conditions.¹³⁴⁵ It is important to note that self insurance should only be for risks that are not otherwise remunerated through other components of the total revenue building blocks.

¹³³⁸ AON Global, *Self insurance risk quantification – ETSA Utilities*, May 2009, confidential.

¹³³⁹ ETSA Utilities, *Self insurance expenditure*, excel spreadsheet, confidential.

¹³⁴⁰ ETSA Utilities, *Self insurance expenditure*, excel spreadsheet, confidential; and ETSA Utilities, email response, AER.EU.25, 15 September 2009, p. 1.

¹³⁴¹ ETSA Utilities, email response, AER.EU.25, 15 September 2009, p. 2 and revised schedules I–5 and R–2.

¹³⁴² ETSA Utilities, *Regulatory proposal*, table 2, p. 16 and table 7.9, p. 156.

¹³⁴³ ETSA Utilities, email response, AER.EU.25, 15 September 2009, p. 2 and revised schedules I–5 and R–2.

¹³⁴⁴ ETSA Utilities, email response, AER.EU.25, 15 September 2009, pp. 1–2.

¹³⁴⁵ D.G. Hart, R.A. Buchanan, B.A. Howe, *Actuarial Practice of General Insurance*, 7th Edition, 2007, p. 782.

The AER notes that self insurance for certain events have been previously considered by the ACCC and AER, with subsequent decision being made under the National Electricity Code and the NEL.¹³⁴⁶

It is generally recognised that there is a difference between self insurance and risk retention. Even if a risk is insurable, a prudent network service provider may not insure against minor risks, meaning that the external insurance policy will stipulate a minimum amount that the claimant must pay if a claim is made. This amount is called the deductible. The practice of not insuring to certain limits, or including deductibles in external insurance policies, is called risk retention. Actuaries distinguish risk retention from self insurance by self insurance's more formal application, as well as risk retention applying to small recurrent risks while self insurance applies to much larger deductibles relative to the value of the loss being covered.¹³⁴⁷

Regardless of whether the risk is managed by external or self insurance, the risk must be predictable and measurable. This means that it is possible to estimate an amount that needs to be set aside to pay for future uncertain losses (usually by means of actuarial techniques). Premiums represent the periodic allocation of that loss amount. Any approved opex for self insurance is equivalent to an external insurance premium that would otherwise be incurred.

Unlike external insurance, in which a lump sum payment for compensation is payable for future losses when the risk event occurs, self insurance requires the network service provider to internally fund the cost of the specified event.

There are several issues the AER needs to consider when assessing proposed self insurance events consistent with the opex criteria, including:

- the attitude of the network service provider to managing risk and its capacity to self insure
- the approaches to funding a future loss when a self insurance event occurs
- the reporting and administration of self insurance.

With respect to the specific self insurance events nominated, the issues to be considered are:

- whether an insurance premium can be determined and whether the self insurance event relates to an incurred cost
- whether the premium estimated is an efficient cost.

¹³⁴⁶ AER, *Final Decision, NSW DNSPs*, 28 April 2009; AER, *Final Decision, ACT DNSP*, 28 April 2009; AER, *Final Decision, TransGrid*, 28 April 2009; AER, *Final Decision, SP AusNet transmission determination 2008–09 to 2013–14*, January 2008; AER, *Final Decision, Powerlink Queensland transmission network revenue cap 2007–08 to 2011–12*, 14 June 2007; ACCC, *Final decision, Electranet Transmission network revenue cap 2008–09 to 2012–13*, 14 June 2007, ACCC, *Final Decision, NSW and ACT Transmission Network Revenue Cap TransGrid 2008–09 to 2012–13*, 27 April 2005.

¹³⁴⁷ D.G. Hart, R.A. Buchanan, B.A. Howe, *Actuarial Practice of General Insurance*, 2007, p. 781.

The AER considers that these five principles are relevant to the opex objectives and criteria outlined in section 6.5.6 of the NER. In particular, the attitudes to managing risk, the approaches to funding self insurance events and the reporting of events are all directly related to opex objective 6.5.6(3) which states that a building block proposal must include the total costs required to:

- (3) maintain the quality, reliability and security of supply of standard control services.

The attitudes to managing risk, the approaches to funding self insurance events and the reporting of events are all directly related to the maintenance of the quality, reliability and security of supply of electricity. Likewise, the AER considers that whether a self insurance premium can be determined and whether this premium is an efficient cost directly relate to clause 6.5.6(c)(3) which states that the AER must accept the proposed costs in the network service providers regulatory proposal if the AER is satisfied that the proposed expenditure reasonably reflects:

- (3) a realistic expectation of the demand forecast and cost inputs required to achieve the operating expenditure objectives.

These matters are considered in the assessment of ETSA Utilities' proposal in sections H.2.2–H.2.9.

DNSPs attitude to managing risk

Section 6.5.6(c) of the NER requires that forecast opex must reflect the costs that a prudent operator in the circumstances of the relevant DNSP would require to achieve the opex objectives. This is relevant for the AER's consideration about the commitment of the DNSP to take on self insurance risks. One of the most difficult aspects of evaluating self insurance is discerning the attitude of the network service provider towards commercial risks and the willingness of the network service provider to accept these risks.¹³⁴⁸

Self insurance may be via a formal decision not to insure for certain events, which implies any losses will be made up by the network service provider after the event has occurred. The AER considers that a prudent network service provider can demonstrate this attitude by providing verification that its board of directors has considered and agreed that certain risks the business faces will be managed by self insurance. Among other things, this can be evinced by a board resolution or similar document that provides a formal endorsement supporting the self insurance strategy. This can also be determined by the DNSP's corporate governance procedures and internal approaches to risk management. This does not mean that every network service provider should self insure. However, if it is appropriate, then self insurance should form a part of any comprehensive risk management plan for the relevant business.

¹³⁴⁸ D.G. Hart, R.A Buchanan and B.A. Howe, *The Actuarial Practice of General Insurance*, 2007, p. 784.

Funding of losses when an event occurs

In relation to how losses may be funded, there are two equally acceptable options.¹³⁴⁹

- setting aside amounts to meet future uncertain losses
- meeting the loss out of current income in the year the loss is incurred.

In a regulatory context, the expectation of the AER in approving the opex allowance for self insurance is that the network service provider will cover the cost of the event, if that event occurs at a future date. Any shortfall will need to be met by the network service provider through internal funding methods rather than compensation through future regulatory revenue.

As future losses may be required to be met from internal funding and will not be compensated by additional regulated revenue, it is imperative that care is taken when self insuring key income generating assets.¹³⁵⁰ In this regard, a key asset is an asset that is crucial to the delivery of services from which the company's income is generated. Without such a key asset, the network service provider's ability to generate income may be severely restricted. The AER recognises that the geographical spread of a DNSPs network helps to mitigate risk associated with the inability to fund losses associated with key asset events. However, in general, the AER's preference is that these events are not self insured and that alternative regulatory options such as the use of cost pass through mechanisms are considered. This ensures that the event can be judged in terms of efficiency and scale once the costs associated with the event are known with certainty.

If key assets are affected, the DNSPs may apply for a cost pass through, subject to the pass through assessment process.¹³⁵¹ However, in accordance with 6.6.1(j)(3) of the NER, the AER must take consideration of the following:

In the case of a positive change event, the efficiency of the provider's decisions and actions in relation to the risk of the *positive change event*, including whether the provider has failed to take any action that could reasonably be taken to reduce the magnitude of the *eligible pass through amount* in respect of that *positive change event* and whether the provider has taken or omitted to take any action where such action or omission has increased the magnitude of the amount in respect of that *positive change event*.

Accordingly, the AER expects that DNSPs would mitigate the amount that is proposed to be passed through to customers via a prudent prioritisation of the opex programs. This means that the AER expects that any damage done to the network would be addressed through the pool of funds that would be approved as an efficient level of emergency response opex (or equivalent category). This means that the AER expects that any damage done to the network would be addressed through the pool of funds that would be approved as an efficient level of storm response opex (or

¹³⁴⁹ D.G. Hart, R.A. Buchanan, B.A. Howe, *The Actuarial Practice of General Insurance*, 2007, pp. 784–785.

¹³⁵⁰ D.G. Hart, R.A. Buchanan, B.A. Howe, *The Actuarial Practice of General Insurance*, 2007, p. 783.

¹³⁵¹ Refer chapter 15 for details on cost pass throughs.

equivalent cost category). As the network service provider will not know the final incurred cost of the event at the time the event manifests, the AER expects that any damage to network assets would be addressed in this fashion, irrespective of whether the event is eventually considered a material cost pass through event or not.

Reporting and administrative arrangements

The AER considers that Australian Accounting Standards are the relevant benchmark for industry best practice with respect to reporting and administration. The AER notes that self insurance events are similar in nature to contingent liabilities. Contingent liabilities are defined under Australian Accounting Standards Board (AASB) 137 as:¹³⁵²

a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of an entity.

The standard defines contingent liabilities as liabilities that are not recognised as they are either a possible obligation which is yet to be confirmed or a present obligation which cannot be reliably estimated or is not probable.¹³⁵³

Under AASB 137 self insurance events cannot be recognised as a provision because there is no present obligation, no probable outflow of resources and no reliable estimate of the amount of the obligation.¹³⁵⁴ However for contingent liabilities the standard does require that certain disclosures are made in the financial accounts of the business.

In the absence of any other administrative arrangements, the AER considers a prudent provider should disclose self insurance events each regulatory year and provide a brief description of the nature of the self insurance event in accordance with AASB 137 in its regulatory and audited financial accounts. AASB 137 requires the business, where practical, to also disclose an estimate of the financial effect of the liability, an indication of the uncertainties relating to the amount or timing of the outflow, and the possibility of any reimbursement.

When a self insurance risk manifests, the AER considers a prudent network service provider will have in place appropriate reporting procedures to inform the AER that an event has occurred. This report would necessarily provide an estimate of the cost of the event that is supported by independent audit information and verification about how these costs are segregated from regulated revenue.

Thus, the AER considers that when a self insurance event occurs it is preferable that the event is reported as soon as possible. The AER considers that any notification also needs to outline the following information for each event:

- the nature of the event
- the total cost of the event, separately identifying:

¹³⁵² AASB 137, *Provisions, contingent liabilities and contingent assets*, paragraph 10.

¹³⁵³ AASB 137, *Provisions, contingent liabilities and contingent assets*, paragraph 13(b).

¹³⁵⁴ AASB 137, *Provisions, contingent liabilities and contingent assets*, paragraph 14.

- costs that are provided for by external funding such as through insurance or where the cost is paid for by third parties
 - costs that are covered by self insurance
 - costs to be passed through
 - other costs, for example which do not relate to the regulated assets
- independently verifiable information to justify the estimated total cost of the event and funding components of the total cost used to cover the loss.

Underlying risk being self insured

Industry best practice stipulates that a risk is insurable if the risk is predictable and measurable.¹³⁵⁵ This is primarily about whether the network service provider can establish a reasonable insurance premium for the proposed self insured event. Industry best practice requires that forecast costs can be measured or estimated with some accuracy and are predictable so that the costs are appropriately considered as incurred costs in the regulatory control period. However, an insurable risk cannot be considered in isolation to the regulatory framework, which places constraints on what costs may be included in forecast expenditure for regulatory purposes. This means that not all insurable risks will be costs that are incurred and relevant for determining total revenue allowances.

As a result the AER needs to establish that the risk is insurable (so a self insurance premium can be determined) and that it is an incurred cost relevant to regulated services. That is, the self insurance premium must be in relation to an event for which there will be an incurred cost recorded amongst the building block components.¹³⁵⁶ In this regard, the AER rejects self insurance for events such as key person risk and business interruption, which relate to a loss of value rather than an incurred cost for regulatory purposes.

Further, such an incurred cost must not be provided for in another building block item. For example, self insurance must not be approved to cover systematic risk as systematic risks are provided for in the return on capital building block.

Basis for determining the efficient self insurance premium

Once it can be established that the defined risk is insurable under the regulatory framework (the risk relates to an event for which there is an incurred cost under the NER), the premium must be estimated for the proposed self insurance event. As with any forecast opex category, the onus is on the network service provider to justify forecast opex for self insurance against the elements of the opex criteria. This requires establishing that the estimate for the self insurance premium reasonably reflects the

¹³⁵⁵ D.G. Hart, R.A. Buchanan, B.A. Howe, *The Actuarial Practice of General Insurance*, 2007, p. 780.

¹³⁵⁶ When the self insurance event manifests, the event must be directly attributable to an incurred cost among one of the building block components. Following this logic, an event such as key person risk where the loss is judged as a loss of value, but not an incurred expense amongst the building block components, would be rejected.

efficient costs that a prudent operator would require to achieve the opex objectives. In order to justify the opex for self insurance, it is necessary to demonstrate that sound actuarial techniques have been used to derive the estimate.

The basic premise of self insurance is that a network service provider has a different view of risks (both its ability to manage those risks and the pricing of those risks) than an insurance company. For example, the network service provider believes it can self insure for a lower cost than would be incurred if it externally insured the same event. In some cases an external insurance market may not establish an efficient premium. A network service provider may seek to self insure if it cannot get external insurance on reasonable terms or for a reasonable price. This may be because the risk is business specific, which is difficult to diversify, or the potential losses may be too large for the risk appetite of commercial insurance markets. As the AER outlines in its analysis of particular events, it considers these types of uninsurable or difficult to insure risks, if material, are best considered as a cost pass through event.

However, in some cases risks can be diversified more effectively by external insurers. Risks such as public liability, theft, motor vehicle insurance, trade creditors insurance and certain property insurance, can be clearly defined and a discernable premium determined. In this case, where an existing external insurance policy is in place and the network service provider is seeking to self insure part of the cost of the event (the deductible), the current insurance policy premium may be used as a maximum efficient cost benchmark to establish the self insurance premium. The external insurance premium is a maximum benchmark efficient cost as network service providers have a different view of risks than external insurers or they think they can self insure for less than an external insurance policy would cost.¹³⁵⁷ Thus, where an existing external insurance policy is in place and the network service provider is seeking to self insure part of the cost of the event, the current insurance policy premium should be used as a benchmark to establish the self insurance premium.

H.2.2 Assessment of ETSA Utilities proposal

The AER has assessed the proposed self insurance premiums by considering the relevant opex criteria and other relevant principles outlined in section H.2.1.

Self insurance for certain events has been considered in previous ACCC and AER decisions. Specifically, the AER has made certain decisions regarding self insurance for DNSPs under the NEL and NER in its NSW distribution determinations.¹³⁵⁸

However, the AER has further developed its position on self insurance for certain items including whether the self insurance premium is connected with an insurable risk and meets the opex criteria under section 6.5.6 of the NER.

The attitude and capacity of ETSA Utilities to self insure, the approaches to funding a potential loss and the reporting and administration of self insurance events are considered for all the self insurance events proposed by ETSA Utilities. Following this assessment, the AER has considered whether an insurance premium can be

¹³⁵⁷ D.G. Hart, R.A. Buchanan, B.A. Howe, *The Actuarial Practice of General Insurance*, 2007, p. 782.

¹³⁵⁸ AER, *Final Decision: NSW DNSPs*, 28 April 2009.

determined and whether the underlying risk being insured relates to an incurred cost. Finally, the AER has considered whether the estimated premium represents an efficient and prudent cost.

The AER has not assessed any self insurance events for which ETSA Utilities has not proposed a self insurance allowance.

H.2.3 Self insurance events - Property damage / Poles and wires

Property risks are defined by ETSA Utilities as damage to physical assets belonging to ETSA Utilities, including offices, substations, depots, warehouses and support locations.¹³⁵⁹ Poles and wires risks are uninsured risks relating to third party damage to poles and wires distribution assets.¹³⁶⁰

For the next regulatory control period, AON Global recommended an average self insurance premium of \$248 419 per annum in relation to ETSA Utilities' property damage risks.¹³⁶¹ ETSA Utilities escalated this premium to derive its proposed total self insurance premium of \$1.3 million for the next regulatory control period.¹³⁶²

AON Global also recommended an average self insurance allowance of \$1.3 million in relation to ETSA Utilities' poles and wires risks.¹³⁶³ ETSA Utilities escalated this premium to derive its proposed total self insurance premium of \$8.4 million in relation to poles and wires risks.¹³⁶⁴

H.2.3.1 Attitude and capacity to self insure

The AER accepts the extract from the board minutes provided by ETSA Utilities as evidence of its attitude and capacity to self insure.¹³⁶⁵

H.2.3.2 Approaches to funding future losses

ETSA Utilities did not propose arrangements for funding future losses, so the AER has assumed that any future losses incurred by the ETSA Utilities will be funded from future income.

Funding of future losses can be covered by setting aside current income and maintaining a fund over time or being paid from future income. This is the choice of the business, and as a notional or provisional fund cannot be accommodated by Australian Accounting Standards, businesses generally choose to fund future losses from future income at the time of the loss.

While this is a generally accepted method of funding loss events, the AER considers that care must be taken when self insuring its key income generating assets. Once an asset is destroyed or is severely impaired, there is a risk that there will be no income or means to fund the self insurance event. If a network service provider loses a key

¹³⁵⁹ ETSA Utilities, email response, issue number AER.EU.17, 9 September 2009, confidential.

¹³⁶⁰ ETSA Utilities, email response, issue number AER.EU.17, 9 September 2009, confidential.

¹³⁶¹ AON Global, *Self insurance risk quantification – ETSA Utilities*, p. 9, confidential.

¹³⁶² ETSA Utilities, *Self insurance expenditure*, excel spreadsheet, confidential.

¹³⁶³ AON Global, *Self insurance risk quantification – ETSA Utilities*, p. 14, confidential.

¹³⁶⁴ ETSA Utilities, *Self insurance expenditure*, excel spreadsheet, confidential.

¹³⁶⁵ ETSA Utilities, *Extract from board minutes from 26th May 2008*, 10 July 2009, confidential.

asset and is unable to earn income as a result, the network service provider may be unable to meet even a modest repair or replacement bill. This is in contrast to external insurance, where the losses are funded by an external party or insurer, and is not required to be funded from the income flow (or key income producing assets) of the business. In general, the AER considers that events affecting key income generating assets are better dealt with through the cost pass through mechanism. This ensures that the event can be judged in terms of efficiency and scale once the timing and quantum of the costs associated with the event are known with certainty.

H.2.3.3 Reporting and administration

The AER notes that ETSA Utilities did not include any information on administrative arrangements for the management of self insurance in its regulatory proposal. The AER considers that self insurance should be reported as a contingent liability in accordance with AASB 137, as well as providing the information outlined in section H.2.1 of this draft decision.

H.2.3.4 Determining a premium and determining the efficient premium

ETSA Utilities advised that property damage includes a provision for losses related to interruption or interference to the business.¹³⁶⁶ ETSA Utilities has not stipulated the amount which is related to this subcategory within property damage. The AER considers that losses related to business interruption fail the self insurance assessment principles. This is because a loss of value or a loss of revenue does not relate to an event for which there is an incurred cost recorded in the building block components. As such, the AER rejects the proposed self insurance premiums for business interruption.

ETSA Utilities proposed a controllable opex allowance in relation to storm damage to the network.¹³⁶⁷ As the nature of storms is highly variable, some years the DNSPs will overspend and some years the DNSPs will underspend in this category. The AER considers that ETSA Utilities should be able to prudently and efficiently prioritise its opex, which may include directing resources to network repairs following storm damage.

The AER notes that there is a significant allowance proposed in the opex forecast to cover such events as unexpected damage to the network, which is based on historical trends. In other words, these costs are extrapolated from ETSA Utilities' historical incurred costs that are related to storm events. ETSA Utilities has proposed a total opex allowance of \$176 million for emergency response in the next regulatory control period.¹³⁶⁸ The AER considers that, using the pool of funds to be allocated for opex, a network service provider should prudently and efficiently prioritise its opex as it sees fit, which may include directing resources to network repairs following an event that damages the network.

¹³⁶⁶ ETSA Utilities, *Regulatory proposal*, 1 July 2009, attachment OX 164, Self insurance costs, p. 1.

¹³⁶⁷ ETSA Utilities provided for maintenance associated with work incurred due to a fault or incident within the category emergency response. ETSA Utilities, RIN proforma 2.2.2.

¹³⁶⁸ ETSA Utilities, *Regulatory proposal*, July 2009, RIN proforma 2.2.2. The emergency response category is defined by ETSA Utilities as “expenditure associated with work incurred where supply has been interrupted and/or assets damaged or rendered unsafe by a fault/incident, making immediate operations and/or repairs necessary.”

If the costs meet the pass through criteria outlined in chapter 15 of this draft decision, then ETSA Utilities could also apply to recoup losses through a cost pass through. If a cost pass through were to be considered, according to clause 6.6.1(j)(3) of the NER the AER must consider the actions of ETSA Utilities to reduce the magnitude of the cost pass through.¹³⁶⁹

The AER considers that DNSPs should prioritise their opex programs as part of every day business. This includes actions such as preventative maintenance that may serve to mitigate the impact or cost of potential pass through events. This would be in line with opex objectives outlined in section 6.5.6 of the NER. These objectives state that a DNSP must forecast the opex required to:

- (3) maintain the quality, reliability and security of supply of standard control services
- (4) maintain the reliability, safety and security of the distribution system through the supply of standard control services.

In addition, assuming the DNSP does not receive funding for self insurance or external insurance cover, any capex associated with replacing assets damaged by storm will be recouped by adding the value of actual capex to the regulatory asset base. The incurred loss is therefore not the total capex to replace an asset, but rather the foregone return on the asset in the lead up to rolling the replacement asset's value into the regulatory asset base. This would occur at the next distribution determination. Additionally, the depreciation on the assets destroyed by storm would also continue to be recouped even though these assets may no longer be providing a service.

H.2.3.5 Summary

In conclusion, the AER considers that the appropriate self insurance premium for property damage and poles/wires for ETSA Utilities is \$0 per annum for the following reasons:

- loss of value or revenue resulting from interruption or interference to ETSA Utilities regulated distribution network does not relate to an event for which there is an incurred cost recorded in the building block components
- ETSA Utilities has the ability to cover losses that do not meet the pass through definition through its opex and capex programs.

For the reasons discussed and as a result of the AER's analysis of the regulatory proposal, the AER is not satisfied that the self insurance premiums proposed in relation to property damage and poles and wires risks reasonably reflect the opex criteria, including the opex objectives. The AER considers that its adjustment is the minimum adjustment necessary for this opex component to comply with the NER. In coming to this view the AER has had regard to the self insurance principles outlined in section H.2.1 and the opex factors. The AER's draft decision is shown in Table H.2.

¹³⁶⁹ NER, clause 6.6.1(j)(3).

The AER considers that in the event of a loss arising from property damage and poles and wires, ETSA Utilities may have the option of seeking a cost pass through when the timing and cost estimates of the event are known with certainty.

Table H.2: ETSA Utilities total self insurance for property and poles and wires risks (\$m, 2009–10)

	2010–11	2011–12	2012–13	2013–14	2014–15	Total
ETSA Utilities	1.8	1.9	1.9	2.0	2.0	9.7
AER adjustments	-1.8	-1.9	-1.9	-2.0	-2.1	-9.7
Total self insurance	0	0	0	0	0	0

Source: ETSA Utilities, *Self insurance expenditure*, excel spreadsheet, confidential.

Note: Table shows totals for both property and poles and wires risks.

H.2.4 Self insurance events – liability risks

ETSA Utilities described liability risks as risks that manifest from legal or contractual liability arising from, or in connection with, the operations of the business.¹³⁷⁰

AON Global recommended an average self insurance allowance of \$2.3 million per annum for liability risks, including \$1.1 million for fire liability.¹³⁷¹ ETSA Utilities escalated this premium to derive its proposed total self insurance premium of \$12.8 million for the next regulatory control period (including \$6 million for fire liability).

H.2.4.1 Attitude and capacity to self insure

The AER accepts the extract from the board minutes provided by ETSA Utilities as evidence of its attitude and capacity to self insure.¹³⁷²

H.2.4.2 Approaches to funding future losses

ETSA Utilities did not outline any arrangements for funding future losses, so the AER has assumed that any future losses incurred by ETSA Utilities will be funded from future income.

The AER considers that ETSA Utilities would be able to fund liability claims from future income, as a public liability event would not impact on the operation of its main income generating assets.

H.2.4.3 Reporting and administration

The AER notes that ETSA Utilities did not include information on administrative arrangements for the management of self insurance in its regulatory proposal. The AER considers that self insurance should be reported as a contingent liability in accordance with AASB 137, as well as providing the information outlined in section H.2.1 of this draft decision.

¹³⁷⁰ ETSA Utilities, *Regulatory proposal*, 1 July 2009, attachment OX 164, Self insurance costs, p. 2.

¹³⁷¹ AON Global, *Self insurance risk quantification – ETSA Utilities*, pp. 10–12, confidential.

¹³⁷² ETSA Utilities, *Extract from board minutes from 26th May 2008*, 10 July 2009, confidential.

H.2.4.4 Determining a premium and determining the efficient premium

The AER accepts that some liability claims are an unavoidable cost for a prudent network service provider. The AER considers that a comparison between the insurance quote for coverage to the upper limit, including the deductible, and the proposed self insurance premium will provide a reliable way of judging the efficiency of the proposed self insurance premium. Alternatively, a rough guide can be determined by examining the current premiums being paid on the external policies, and then calculating what would be paid, via a proportionate analysis, to insure the deductible.

ETSA Utilities provided a document outlining the premiums paid on its insurance policies as part of its regulatory proposal.¹³⁷³ ETSA Utilities also provided information regarding the deductibles and insured limits for each policy.¹³⁷⁴ By examining these documents, the AER has been able to analyse the efficiency of the proposed self insurance premiums for public liability.

ETSA Utilities currently pays a premium of \$■ million (\$2008–09) on its policies that are related to liability insurance.¹³⁷⁵ This provides ETSA Utilities with an insured limit of \$■ billion.¹³⁷⁶ The self insurance premium proposed by ETSA Utilities to cover the \$■ million deductible is \$2.3 million (\$2008–09). Using proportionate analysis based on the liability policies held by ETSA Utilities, the AER has determined the average cost to obtain \$■ million worth of insurance coverage is \$422 per annum. The AER recognises that the deductible will have a higher premium associated with it due to the higher probability of events occurring in this band. This is compared to events over the \$■ million deductible, which, as the liability cost goes higher, have a decreasing probability of occurring and thus attracts a lower premium per dollar insured. However, in the absence of a formal quote, or the provision of similar information, illustrating the cost to externally insure the deductible the premium paid on external insurance policies should be utilised as an estimate of the efficient cost. The self insurance premium proposed by ETSA Utilities for coverage of the \$■ million deductible is almost a third more than the premium being paid for the external coverage for \$■ billion. The AER considers that the self insurance premiums proposed for public liability are not efficient.

The AER considers that the efficient self insurance premium for general public liability for ETSA Utilities is \$422 per annum.

H.2.4.5 Summary

The AER considers that the efficient premium for ETSA Utilities' public liability category is \$ 422 per annum because using the external insurance policies as a maximum efficient benchmark cost, the AER has determined that the premiums

¹³⁷³ AON Global, *Forecast of ETSA Utilities' insurance costs*, February 2009, confidential.

¹³⁷⁴ ETSA Utilities, email response, issue number AER.EU.17, *Summary of events covered by insurance*, 9 September 2009, p. 1.

¹³⁷⁵ AON Global, *Forecast of ETSA Utilities' insurance costs*, February 2009, p. 8, confidential.

¹³⁷⁶ ETSA Utilities, email response, issue number AER.EU.17, *Summary of events covered by insurance*, 9 September 2009, p. 1.

proposed by ETSA Utilities are not efficient. Using a proportionate analysis, the AER has derived an estimate of a self insurance premium to cover the deductible for public liability.

For the reasons discussed and as a result of the AER’s analysis of the regulatory proposal, the AER is not satisfied that the self insurance premiums proposed in relation to liability risks reasonably reflect the opex criteria, including the opex objectives. The AER considers that its adjustment is the minimum adjustment necessary for this opex component to comply with the NER. In coming to this view the AER has had regard to the self insurance principles outlined in section H.2.1 and the opex factors. The AER’s draft decision is shown in Table H.3.

Table H.3: ETSA Utilities total self insurance for liability risks (\$m, 2009–10)

	2010–11	2011–12	2012–13	2013–14	2014–15	Total
ETSA Utilities	2.5000	2.5000	2.6000	2.6000	2.6000	12.800
AER adjustments	-2.4996	-2.4996	-2.5996	-2.5996	-2.5996	-12.800
Total self insurance	0.0004	0.0004	0.0004	0.0004	0.0004	0.002

Source: ETSA Utilities, *Self insurance expenditure*, excel spreadsheet, confidential.

Note: Totals may not add due to rounding.

H.2.5 Self insurance events – motor vehicle risks

ETSA Utilities advised that the motor vehicle risks category included self insurance premiums to cover both damage to ETSA Utilities own vehicles as well as damage to third party property for which ETSA Utilities is responsible.¹³⁷⁷ AON Global recommended an average premium of \$164 734 per annum in relation to ETSA Utilities’ motor vehicle risks.¹³⁷⁸ ETSA Utilities escalated this premium to derive its proposed total self insurance premium of \$1 million for the next regulatory control period.¹³⁷⁹

H.2.5.1 Attitude and capacity to self insure

The AER accepts the extract from the board minutes provided by ETSA Utilities as evidence of its attitude and capacity to self insure.¹³⁸⁰

H.2.5.2 Approaches to funding future losses

ETSA Utilities did not outline any arrangements for funding future losses, so the AER has assumed that any future losses incurred by ETSA Utilities will be funded from future income.

The AER considers that ETSA Utilities would be able to fund motor vehicle events from future income, as a motor vehicle risk event would not impact on the operation of its main income generating assets.

¹³⁷⁷ ETSA Utilities, email response, issue number AER.EU.17, 9 September 2009.

¹³⁷⁸ AON Global, *Self insurance risk quantification – ETSA Utilities*, p. 13, confidential.

¹³⁷⁹ ETSA Utilities, *Self insurance expenditure*, excel spreadsheet, confidential.

¹³⁸⁰ ETSA Utilities, *Extract from board minutes from 26th May 2008*, 10 July 2009, confidential.

H.2.5.3 Reporting and administration

The AER notes that ETSA Utilities did not include information on administrative arrangements for the management of self insurance in its proposal. The AER considers that self insurance should be reported as a contingent liability in accordance with AASB 137, as well as providing the information outlined in section H.2.1 of this draft decision.

H.2.5.4 Determining a premium and determining the efficient premium

The AER considers that this cost is a business as usual cost (costs are incurred on a regular basis and can be forecast with accuracy), and as such should not be included in self insurance.¹³⁸¹ Additionally, motor vehicle costs are not uncontrollable, with fleet management strategies and driver education programs all influencing the extent of motor vehicle event costs. Therefore the AER does not accept the proposed premium related to motor vehicle risks and concludes that the most appropriate premium for this category is \$0.

H.2.5.5 Summary

The AER considers that the most appropriate premium related to motor vehicle risks for ETSA Utilities is \$0 per annum because motor vehicle costs are a business as usual cost and are not uncontrollable.

For the reasons discussed and as a result of the AER's analysis of the regulatory proposal, the AER is not satisfied that the self insurance premiums proposed in relation to motor vehicle risks reasonably reflect the opex criteria, including the opex objectives. The AER considers that its adjustment is the minimum adjustment necessary for this opex component to comply with the NER. In coming to this view the AER has had regard to the self insurance principles outlined in section H.2.1 and the opex factors. The AER's draft decision is shown in Table H.4.

Table H.4: ETSA Utilities total self insurance for motor vehicle risks (\$m, 2009–10)

	2010–11	2011–12	2012–13	2013–14	2014–15	Total
ETSA Utilities	0.2	0.2	0.2	0.2	0.2	1.0
AER adjustments	-0.2	-0.2	-0.2	-0.2	-0.2	-1.0
Total self insurance	0	0	0	0	0	0

Source: ETSA Utilities, *Self insurance expenditure*, excel spreadsheet, confidential.

Note: Totals may not add due to rounding.

¹³⁸¹ The AER has considered AON Global, *Self insurance risk quantification – ETSA Utilities*, Appendix 3 – Attachment 3, where the graph shows that the average total number of event losses per year is approximately 190. Therefore, a motor vehicle risk event is expected to occur, on average, more than once every two days.

H.2.6 Self insurance event – Guaranteed Service Level compensation

AON Global stated that ETSA Utilities currently holds external insurance for ‘duration’¹³⁸² payments, with a \$■ million deductible, while self insuring for all ‘frequency’¹³⁸³ payments. ETSA Utilities proposed a self insurance premium for GSL payments up to the \$■ million deductible for duration payments, and for all frequency payments.¹³⁸⁴

AON Global recommended using an average premium of \$1.2 million per annum based on the 2010–11 GSL payment structure, in relation to ETSA Utilities’ GSL payment risks.¹³⁸⁵ ETSA Utilities escalated this premium to derive its proposed total self insurance premium of \$6.7 million for the next regulatory control period.¹³⁸⁶

H.2.6.1 Attitude and capacity to self insure

The AER accepts the extract from the board minutes provided by ETSA Utilities as evidence of its attitude and capacity to self insure.¹³⁸⁷

H.2.6.2 Approaches to funding future losses

ETSA Utilities did not propose any arrangements for funding future losses, so the AER has assumed that any future losses incurred by ETSA Utilities will be funded from future income.

The AER considers that ETSA Utilities would be able to fund the efficient level of GSL payments from future income, as the efficient level of GSL payments would not impact on the operation of its main income generating assets.

H.2.6.3 Reporting and administration

The AER notes that ETSA Utilities did not include any information on administrative arrangements for the management of self insurance in its proposal. The AER considers that self insurance should be reported as a contingent liability in accordance with AASB 137, as well as providing the information outlined in section H.2.1 of this draft decision.

H.2.6.4 Determining a premium and determining the efficient premium

The AER is cognisant of the provision in section 7A(2)(b) of the NEL which the AER must take into account when exercising discretion (under section 16 of the NEL) and which states:

¹³⁸² ETSA Utilities defines a duration payment as a payment made to customers who experience excessively long interruption to their supply. ETSA Utilities, *Guaranteed Service Levy Payments – Reliability*, October 2008, <<http://www.etsautilities.com.au/public/download.jsp?id=8136>>.

¹³⁸³ ETSA Utilities defines a frequency payment as a payment made to customers affected by ten or more interruptions in a regulatory year (1 July – 30 June). ETSA Utilities, *Guaranteed Service Levy Payments – Reliability*, October 2008.

¹³⁸⁴ AON Global, *Self insurance risk quantification - ETSA Utilities*, pp. 16–17, confidential.

¹³⁸⁵ AON Global, *Self insurance risk quantification - ETSA Utilities*, pp. 16–17, confidential.

¹³⁸⁶ ETSA Utilities, *Self insurance expenditure*, excel spreadsheet, confidential.

¹³⁸⁷ ETSA Utilities, *Extract from board minutes from 26th May 2008*, 10 July 2009, confidential.

A regulated network service provider should be provided with a reasonable opportunity to recover at least the efficient costs the operator incurs in-

- (a) providing direct control network services; and
- (b) complying with a regulatory obligation or requirement or making a regulatory payment.

The AER considers that GSL payments, under certain circumstances, may be considered regulatory payments in accordance with section 2E of the NEL. For example, in the circumstances where making a GSL payment for breach of a distribution service standard is more efficient than altering the network in order to comply with the distribution service standard, the GSL payment appears to satisfy paragraph (b) of section 2E of the NEL. Where a GSL payment is made for a breach of a service standard that occurs due to business mismanagement rather than efficient planning considerations, that payment is unlikely to satisfy the NEL definition of a regulatory payment.

The AER considers that GSL payments are paid when the network service provider fails in its duty to provide a reliable service. In essence, GSL payments are a penalty designed to encourage the network service provider to deliver a reliable service. The AER accepts that a prudent and efficient network service provider may incur GSL payments in order to meet efficient planning goals. However, the AER considers that providing a self insurance allowance for GSL payments above the efficient level would be inconsistent with the intent of the GSL scheme. The AER also recognises section 7A(3) of the NEL which indicates that network service providers should be given effective incentives to promote economic efficiency. GSL payments above the efficient level are costs that the AER considers should be incurred by the shareholders rather than the customer. To provide a self insurance allowance for GSL payments above the efficient level would effectively charge customers for inefficient GSL payments. The AER considers that any GSL payments in excess of the efficient level should be borne by ETSA Utilities' shareholders, rather than its customers.

Further, self insurance costs are costs which are deemed to be uncontrollable. While accepting that a prudent and efficient operator will face GSL payments, the AER considers that the extent to which a network service provider pays GSL payments above the efficient level is controllable. Additionally, the AER considers that GSL payments are a business as usual cost, in that they are ongoing costs that are paid on a regular basis. As such, the AER considers that any GSL payments are to be excluded from uncontrollable costs and the self insurance cost category.

H.2.6.5 Summary

The AER rejects ETSA Utilities proposed self insurance premium for GSL payments and considers that the most appropriate premium in regard to this category is \$0 for the following reasons:

- the AER considers that any GSL payments in excess of the efficient level should be borne by the shareholders rather than by the customer
- GSL payments are controllable, business as usual costs and should not be included in self insurance.

For the reasons discussed and as a result of the AER’s analysis of the regulatory proposal, the AER is not satisfied that the self insurance premiums proposed in relation to GSL compensation reasonably reflect the opex criteria, including the opex objectives. The AER considers that its adjustment is the minimum adjustment necessary for this opex component to comply with the NER. In coming to this view the AER has had regard to the self insurance principles outlined in section H.2.1 and the opex factors. The AER’s draft decision is shown in Table H.5.

Table H.5: ETSA Utilities total self insurance for GSL payments (\$m, 2009–10)

	2010–11	2011–12	2012–13	2013–14	2014–15	Total
ETSA Utilities	1.3	1.3	1.3	1.4	1.4	6.7
AER adjustments	-1.3	-1.3	-1.3	-1.4	-1.4	-6.7
Total self insurance	0	0	0	0	0	0

Source: ETSA Utilities, *Self insurance expenditure*, excel spreadsheet, confidential.

Note: Totals may not add due to rounding.

H.2.7 Self insurance event – underground damage and environmental liability

ETSA Utilities advised that this category is related to uninsured residual risks associated with the possibility of polluting the surrounding environment including leakage from underground fuel tanks, oil leaks from transformers and any gradual contamination.¹³⁸⁸

AON Global recommended an average premium of \$467 865 per annum in relation to ETSA Utilities’ underground damage and environmental liability risks.¹³⁸⁹ ETSA Utilities escalated this premium to derive its proposed total self insurance premium of \$3.0 million for the next regulatory control period.¹³⁹⁰

H.2.7.1 Attitude and capacity to self insure

The AER accepts the extract from the board minutes provided by ETSA Utilities as evidence of its attitude and capacity to self insure.¹³⁹¹

H.2.7.2 Approaches to funding future losses

ETSA Utilities did not outline any arrangements for funding future losses, so the AER has assumed that any future losses incurred by ETSA Utilities will be funded from future income.

Funding of liability claims does not have the associated problems that are inherent with internal funding of damaged or destroyed key assets. The AER considers that ETSA Utilities would be able to fund liability from future income, as a liability event would not impact on the operation of its main income generating assets.

¹³⁸⁸ ETSA Utilities, *Regulatory proposal*, 1 July 2009, attachment OX 164, Self insurance costs, p. 2.

¹³⁸⁹ AON Global, *Self insurance risk quantification – ETSA Utilities*, p. 18, confidential.

¹³⁹⁰ ETSA Utilities, *Self insurance expenditure*, excel spreadsheet, confidential.

¹³⁹¹ ETSA Utilities, *Extract from board minutes from 26th May 2008*, 10 July 2009, confidential.

H.2.7.3 Reporting and administration

The AER notes that ETSA Utilities did not include any information on administrative arrangements for the management of self insurance in its proposal. The AER considers that self insurance should be reported as a contingent liability in accordance with AASB 137, as well as providing the information outlined in section H.2.1 of this draft decision.

H.2.7.4 Determining a premium and determining the efficient premium

The AER considers that allowing for any underground damage and environmental liability self insurance costs reduces the incentive to the business to prevent environmental damage.

Further, ETSA Utilities has not provided any information about external insurance that it sought, or explained why external insurance for these risks cannot be obtained. The AER is unsure whether external insurance was sought and if so whether its unavailability is due to difficulty in predicting and measuring the risk, or insurance providers considered the potential losses to be too great or whether the premiums were too expensive for ETSA Utilities. Accordingly, the AER considers that self insurance for underground damage and environmental liability should not be allowed.

The AER is concerned about providing an allowance that may cover costs associated with illegal or unethical activity. The AER is also unsure of what the incurred cost for regulatory purposes would be in the event of any underground damage and environmental liability occurring. The AER understands that these costs would be likely to take the form of site rehabilitation costs and/or fines or penalties associated with a failure to meet statutory requirements. The AER considers that it is inappropriate to pass costs associated with fines or penalties through to the customer. Rather, it is more appropriate that the shareholders or owners bear any costs associated with fines and penalties.

In terms of site rehabilitation costs that may be incurred in relation to environmental and underground damage, the AER deems that an assessment would need to be undertaken to ascertain the responsible party. This may mean that contractors would be the parties legally obliged to undertake the rehabilitation activities, and thus incur the costs associated with those activities. ETSA Utilities has not outlined what recourse there may be to the contractor if a contractor did the initial work. The AER is thus uncertain as to who would actually bear the costs associated with clean up costs, and ETSA Utilities has not provided sufficient information for the AER to determine this.

ETSA Utilities' regulatory proposal includes self insurance premiums to cover losses that may also result from a failure to meet environmental obligations. The AER understands that ETSA Utilities may seek to minimise its risk arising from not meeting certain legal and regulatory obligations but may not always be able to mitigate these risks completely. However, the AER has concerns about providing any compensation such as through an opex allowance for self insurance that may encourage corporate governance practices and behaviours contrary to current regulatory or legal requirements.

If such occurrences are predictable and measurable (insurable), the AER considers that a prudent network service provider would seek to identify and manage risks through its project-specific or business-wide risk management processes to minimise its exposure and future losses through preventative actions.

The AER does not consider that AON Global’s assessment of underground damage satisfies the principles set out in H.2.1 above and does not reflect expenditure that would be incurred by a prudent network service provider acting efficiently.

H.2.7.5 Summary

The AER considers that the most appropriate premium in relation to underground damage and environmental liability is \$0 for the following reasons:

- the AER is concerned with providing any allowance associated with potentially illegal or unethical activity
- ETSA Utilities has provided no evidence that external insurance is unavailable and the AER cannot determine why it is unavailable
- the AER cannot determine the incurred cost for regulatory purposes
- the AER considers that it is inappropriate to pass fines and penalties through to customers.

For the reasons discussed and as a result of the AER’s analysis of the regulatory proposal, the AER is not satisfied that the self insurance premiums proposed in relation to underground damage and environmental liability reasonably reflect the opex criteria, including the opex objectives. The AER considers that its adjustment is the minimum adjustment necessary for this opex component to comply with the NER. In coming to this view the AER has had regard to the self insurance principles outlined in section H.2.1 and the opex factors. The AER’s draft decision is shown in Table H.6.

Table H.6: ETSA Utilities total self insurance for underground damage and environmental liability (\$m, 2009–10)

	2010–11	2011–12	2012–13	2013–14	2014–15	Total
ETSA Utilities	0.6	0.6	0.6	0.6	0.6	3.0
AER adjustments	-0.6	-0.6	-0.6	-0.6	-0.6	-3.0
Total self insurance	0	0	0	0	0	0

Source: ETSA Utilities, *Self insurance expenditure*, excel spreadsheet, confidential.

Note: Totals may not add due to rounding.

H.2.8 Self insurance event – Worker’s compensation

ETSA Utilities proposed an average self insurance premium of \$400 000 per annum.¹³⁹² ETSA Utilities escalated this premium to derive its proposed total self insurance premium of \$3.2 million for the next regulatory control period.¹³⁹³

H.2.8.1 Attitude and capacity to self insure

The AER accepts the extract from the board minutes provided by ETSA Utilities as evidence of its attitude and capacity to self insure.¹³⁹⁴

H.2.8.2 Approaches to funding future losses

ETSA Utilities did not outline any arrangements for funding future losses, so the AER has assumed that any future losses incurred by ETSA Utilities will be funded from future income.

The AER considers that ETSA Utilities would be able to fund workers compensation events from future income, as a worker’s compensation event would not impact on the operation of its main income generating assets.

H.2.8.3 Reporting and administration

The AER notes that ETSA Utilities did not include any information on administrative arrangements for the management of self insurance in its regulatory proposal. The AER considers that self insurance should be reported as a contingent liability in accordance with AASB 137, as well as providing the information outlined in section H.2.1 of this draft decision.

H.2.8.4 Determining a premium and determining the efficient premium

In order for a company to self insure for worker’s compensation, the firm must be registered with a respective state agency. In South Australia, that relevant agency is WorkCover SA. Utilities Management Pty Ltd, a wholly owned subsidiary of ETSA Utilities, is registered as a self insurer with WorkCover SA,¹³⁹⁵ and is listed as a member of Self Insurers of South Australia.¹³⁹⁶

The AER considers that worker’s compensation is an unavoidable risk for prudent network service providers. Additionally, through the utilisation of historical information, it is predictable and measurable and satisfies the principles set out in H.2.1 above. As such, the AER accepts ETSA Utilities’ proposed average premium of \$400 000 per annum.

H.2.8.5 Summary

The AER accepts ETSA Utilities’ proposed self insurance premium for worker’s compensation for the following reasons:

¹³⁹² AON Global, *Self insurance risk quantification – ETSA Utilities*, p. 19, confidential.

¹³⁹³ ETSA Utilities, *Self insurance expenditure*, excel spreadsheet, confidential.

¹³⁹⁴ ETSA Utilities, *Extract from board minutes from 26th May 2008*, 10 July 2009, confidential.

¹³⁹⁵ WorkCover SA, *Annual Report 2007–2008*, p. 68.

¹³⁹⁶ Self Insurers of South Australia, *SISA Membership: list of full members*, <<http://www.sisa.net.au/SISAMembership.cfm>>, accessed August 2009.

- ETSA Utilities subsidiary Utilities Management Pty Ltd is registered as a self insurer with the relevant state body
- the AER considers that worker's compensation is an unavoidable risk in the electricity distribution industry.

For the reasons discussed and as a result of the AER's analysis of the regulatory proposal, the AER is satisfied that the self insurance premiums proposed in relation to worker's compensation reasonably reflect the opex criteria, including the opex objectives. In coming to this view the AER has had regard to the self insurance principles outlined in section H.2.1 and the opex factors. The AER's draft decision is shown in table H.7Table H.7.

Table H.7: ETSA Utilities total self insurance for worker's compensation (\$m, 2009–10)

	2010–11	2011–12	2012–13	2013–14	2014–15	Total
ETSA Utilities	0.6	0.6	0.7	0.7	0.7	3.3
AER adjustments	–	–	–	–	–	–
Total self insurance	0.6	0.6	0.7	0.7	0.7	3.3

Source: ETSA Utilities, *Self insurance expenditure*, excel spreadsheet, confidential.

Note: Totals may not add due to rounding.

H.2.9 AER conclusion

For the reasons discussed in section H.2 and as a result of the AER's analysis, the AER is not satisfied that ETSA Utilities' proposed self insurance allowance reasonably reflect the opex criteria, including the opex objectives. The AER considers that its adjustments to ETSA Utilities' forecasts result in self insurance expenditures that reasonably reflect the opex criteria, including the opex objectives, and are the minimum adjustments necessary for this opex component to comply with the NER. In coming to this view the AER has had regard to the self insurance principles outlined in section H.2.1 and the opex factors.

The AER requested ETSA Utilities to remodel its self insurance opex forecast to reflect the AER's decisions set out here, in addition to the AER's decision on input cost escalation. Based on this modelling, ETSA Utilities provided an updated self insurance premium forecast of \$3.3 million.¹³⁹⁷

Table H.8 summarises ETSA Utilities' proposed self insurance allowance and the AER's draft decision, excluding the effects of real input cost escalation.

¹³⁹⁷ ETSA Utilities, email response to AER modelling request, 12 November 2009.

Table H.8: AER conclusion on self insurance allowance for ETSA Utilities (\$m, 2009–10)

	2010–11	2011–12	2012–13	2013–14	2014–15	Total
ETSA Utilities	6.9777	7.1489	7.3038	7.4624	7.6282	36.521
AER adjustments	–6.4099	–6.5385	–6.6528	–6.7718	–6.8967	–33.270
Total self insurance	0.5678	0.6104	0.6510	0.6906	0.7315	3.251

Note: Totals may not add due to rounding.

I. Benchmark debt raising costs

I.1 Introduction

This appendix deals with debt raising costs, which are incurred each time debt is rolled over, and may include underwriting fees, legal fees, company credit rating fees and other transaction costs. The AER has accepted that debt raising costs are a legitimate expense for which a DNSP should be provided an allowance.¹³⁹⁸

The AER concurrently assessed the regulatory proposals of three DNSPs:

- Energex and Ergon Energy (the Qld DNSPs)
- ETSA Utilities.

I.2 Regulatory requirements

Although these regulatory proposals are assessed under two separate decisions, the consideration of appropriate benchmark debt raising costs is a common matter.

The revenue and pricing principles set out that each of the DNSPs should be provided with the opportunity to recover at least its efficient costs.¹³⁹⁹ It is also pertinent that regard should be had to the potential for under or over investment, a matter that may be materially impacted by debt raising costs.¹⁴⁰⁰ The opex criteria require that the total of the forecast opex reasonably reflects the efficient costs and the costs that a prudent operator in the circumstances of the relevant DNSP would require.¹⁴⁰¹ Further, the forecast opex is assessed with regard to the benchmark opex that would be incurred by an efficient DNSP over the regulatory control period.¹⁴⁰²

The AER has jointly assessed the benchmark debt raising costs of all three DNSPs on this basis. In particular, where consultant reports have been submitted by one of the DNSPs, to the extent that the information is pertinent to all DNSPs the information has been jointly considered within this appendix.

For convenience, within this appendix references to the benchmark firm should be interpreted as a reference to a benchmark efficient DNSP that is a pure play regulated electricity network operating in Australia without parent ownership.

Where it has been necessary to refer to a draft decision for just one of the DNSPs, within this appendix the AER has identified the specific business when referencing

¹³⁹⁸ AER, *Decision, Powerlink Queensland transmission network revenue cap 2007–08 to 2011–12*, 14 June 2007, pp. 94–97; AER, *Final decision, SP AusNet transmission determination 2008–09 to 2013–14*, January 2008, pp. 148–150 and AER, *Final decision, ElectraNet transmission determination 2008–09 to 2013–14*, 11 April 2008, pp. 84–85.

¹³⁹⁹ For electricity, this means efficient costs associated with direct control network services and regulatory obligations; see NEL, section 7A.

¹⁴⁰⁰ NEL, section 7A(6).

¹⁴⁰¹ NER, clauses 6.5.6(c)(1) and 6.5.6(c)(2).

¹⁴⁰² NER, clause 6.5.6(e).

the draft decision, rather than referring to the generic term draft decision, as defined in the shortened forms.

Past AER considerations

In April 2009, the AER released final decisions (April 2009 final decisions) covering regulatory and revenue determinations for electricity distribution and transmission networks in NSW, ACT and Tasmania which included a common appendix dealing with benchmark debt and equity raising costs.¹⁴⁰³ The April 2009 appendix to the final decisions sets out the AER's analysis and considerations with regard to the efficient costs of raising capital prior to the commencement of the current processes.

For simplicity, references to the April 2009 final decisions in this appendix are made to the ACT final decision only.

I.3 Regulatory proposals

The DNSPs proposed that the cost of debt raising be benchmarked as a cost per year per dollar of allowed debt associated with their regulatory asset bases—that is, the gearing ratio times the regulatory asset base. The proposals were:

- the Qld DNSPs proposed an allowance of 15.5 basis points per annum (bppa), comprising 12.5 bppa for direct debt raising costs and 3.0 bppa for indirect raising costs¹⁴⁰⁴
- ETSA Utilities proposed an allowance of 23.2 bppa, comprising 12.0 bppa for direct debt raising costs and 11.2 bppa in additional debt raising costs associated with the 'completion method'.¹⁴⁰⁵

The DNSPs included various arguments in their regulatory proposals to support these debt raising cost benchmarks. Additionally, further consultant reports were submitted:

- the Qld DNSPs submitted a report by Synergies Economic Consulting (Synergies) that deals with debt and equity raising costs¹⁴⁰⁶
- ETSA Utilities submitted a report by CEG that deals with debt and equity raising costs¹⁴⁰⁷

¹⁴⁰³ AER, *Final decision, Australian Capital Territory distribution determination 2009–10 to 2013–14*, 28 April 2009, appendix H; AER, *Final decision, New South Wales distribution determination 2009–10 to 2013–14*, 28 April 2009, appendix N; AER, *Final decision, TransGrid transmission determination 2009–10 to 2013–14*, 28 April 2009; AER, appendix E; AER, *Final decision, Transend transmission determination 2009–10 to 2013–14*, 28 April 2009, appendix E.

¹⁴⁰⁴ Energex, *Regulatory proposal*, July 2009, section 12.7.4, p. 173. Ergon Energy, *Regulatory proposal*, July 2009, section 28.2.1, pp. 305–306.

¹⁴⁰⁵ ETSA Utilities, *Regulatory proposal*, July 2009, p. 155.

¹⁴⁰⁶ Synergies Economic Consulting, *Debt and equity raising costs: Report for Energex and Ergon Energy*, May 2009. Submitted as attachment 12.5 to the Energex regulatory proposal and attachment 534c to the Ergon Energy regulatory proposal.

¹⁴⁰⁷ CEG, *Debt and equity raising costs: A report for ETSA*, June 2009. Submitted as attachment E.17 to the ETSA Utilities regulatory proposal.

- ETSA Utilities submitted a separate confidential attachment dealing with the ‘completion method’.¹⁴⁰⁸

Submissions relevant to debt raising costs were received from:

- Energy Consumers Coalition of South Australia (ECCSA) on the ETSA Utilities proposal.¹⁴⁰⁹
- Energy Users Association of Australia (EUAA) on the Energex proposal.¹⁴¹⁰

The AER’s analysis of debt raising costs in this appendix covers:

- indirect debt raising costs
- direct debt raising costs.

Debt raising costs associated with the ‘completion method’ are specific to ETSA Utilities and are discussed in a separate confidential appendix to the ETSA Utilities draft decision.

I.4 Issues and AER considerations

I.4.1 Indirect debt raising costs

Regulatory proposals

The Qld DNSPs proposed an indirect debt raising cost of 3.0 bppa on the basis of the Synergies report.¹⁴¹¹ ETSA Utilities did not propose an indirect debt raising cost allowance.

AER considerations

The AER has previously considered the issue of indirect debt raising costs (also labelled as underpricing).¹⁴¹² The key issue was whether the basis for the debt risk premium (yields observed in the secondary market) accurately reflected the cost to the initial debt issuer. The AER considered that using fair yield curves to estimate the cost of debt for the benchmark regulated firm produced a best estimate that encapsulated any underpricing effect. Providing an indirect debt raising cost allowance based on this approach would systematically over compensate the service provider.¹⁴¹³

¹⁴⁰⁸ ETSA Utilities, *Regulatory proposal*, July 2009, confidential appendix F.14.

¹⁴⁰⁹ ECCSA, *Australian Energy Regulator, SA electricity distribution revenue reset: ETSA Utilities application, a response*, August 2009, p. 37.

¹⁴¹⁰ EUAA, *Submission to the AER on Energex and Ergon Energy regulatory proposals for the period 2010–2015*, 28 August 2009, p. 20.

¹⁴¹¹ Energex, *Regulatory proposal*, July 2009, p. 173, section 12.7.4. Ergon Energy, *Regulatory proposal*, July 2009, pp. 305–306, section 28.2.1.

¹⁴¹² AER, *Final decision, ACT DNSP*, 28 April 2009, appendix H; pp. 214–221.

¹⁴¹³ AER, *Final decision, TransGrid*, 28 April 2009, p. 137; AER, *Final decision, NSW DNSPs*, p 186; and AER, *Final decision, Transend*, 28 April 2009, p. 190.

If firms effectively issue at a higher yield than BBB+, for example due to underpricing the debt, the firms are effectively issuing higher yielding lower grade debt. The proposed underpricing premium is therefore inconsistent with the assumed BBB+ benchmark.

This was supported by the AER's consultant, Associate Professor Handley of the University of Melbourne, who stated:¹⁴¹⁴

In summary, assuming allowed revenues are determined using an appropriate estimate of the cost of debt, and noting that both the AER and CEG believe this to be the case, then it is my view that, underpricing should not be allowed as a cost of raising debt capital.

The AER found that despite assertions to the contrary, there was an absence of empirical evidence to support a claim for indirect debt raising costs. Further, there was no empirically demonstrated relationship between indirect and direct debt raising costs.¹⁴¹⁵ On this basis, the AER did not provide an allowance for indirect debt raising costs in its April 2009 final decisions.¹⁴¹⁶

Synergies defined indirect debt raising costs in a similar manner to the AER,¹⁴¹⁷ and observed the difficulties in quantifying indirect debt raising costs.¹⁴¹⁸ Synergies submitted that liquidity problems cause indirect costs—that is, it is difficult for the primary issuer of debt to ‘get away’ a large amount of debt all at once, so a discount (relative to the relevant secondary market rate) must be offered. Further, Synergies stated that the indirect cost of debt raising would be higher given current market conditions, both because there was less liquidity in the market at present, and because market appetite for risk was lower than usual. Synergies also stated that there was an additional indirect cost of raising debt—the impact of restrictive debt covenants that have been imposed on borrowers since the beginning of the GFC.

Synergies did not attempt any quantification of the indirect costs of debt raising. Rather, it cited a May 2008 report by CEG that recommended 3.0 bppa as a benchmark allowance.¹⁴¹⁹ Synergies included anecdotal examples of borrowers paying amendment fees and accepting more stringent debt covenants, and an anecdotal reference to the magnitude of debt raising costs:¹⁴²⁰

One market issuer we spoke to was of the view that while the difference can vary considerably, it can be as great as 100 basis points.

¹⁴¹⁴ Handley, J., *A note on the costs of raising debt and equity capital: Report prepared for the Australian Energy Regulator*, 12 April 2009, p. 17.

¹⁴¹⁵ AER, *Final decision, ACT DNSP*, 28 April 2009, appendix H; pp. 220–221.

¹⁴¹⁶ AER, *Final decision, ACT DNSP*, 28 April 2009, appendix H; AER, *Final decision, NSW DNSPs*, 28 April 2009, appendix N; AER, *Final decision, TransGrid*, 28 April 2009; AER, appendix E; AER, *Final decision, Transend*, 28 April 2009, appendix E.

¹⁴¹⁷ Synergies, *Debt and equity raising costs*, May 2009, p. 33, states: The difference between the primary market rate and the secondary market rate can be used to estimate indirect debt raising costs.

¹⁴¹⁸ Synergies, *Debt and equity raising costs*, May 2009, p. 33, states: The difference is not captured or reported by any financial data provider.

¹⁴¹⁹ Synergies, *Debt and equity raising costs*, May 2009, p. 34, citing CEG, *Nominal risk-free rate, debt risk premium and debt and equity raising costs for TransGrid*, May 2008.

¹⁴²⁰ Synergies, *Debt and equity raising costs*, May 2009, p. 33.

The AER considers that Synergies has not presented any new evidence to support the claim for indirect debt raising costs.

The AER has previously considered the CEG report,¹⁴²¹ and further updated reports from CEG on this issue.¹⁴²² The empirical evidence cited therein does not support a claim for indirect raising costs. In summary, the Datta, Datta and Patel paper find ‘underpricing’ that was statistically indistinguishable from zero.¹⁴²³ The Cai, Helwege and Warga report finds slight overpricing—that is, the indirect cost of debt raising is negative—on the relevant bonds (investment grade bonds that are not part of the initial offering of debt by a firm).¹⁴²⁴ The other academic paper referred to in the CEG report, a working paper by Kim, Palia and Saunders, presents no data on this issue.¹⁴²⁵ The AER notes that the most recent CEG report on debt and equity raising costs—submitted on behalf of ETSA Utilities after the April 2009 final decisions by the AER—makes no claim for indirect debt raising costs, and states:¹⁴²⁶

However, in the context of regulation under the NER, provided the interest costs are measured as the interest costs that an issuer would incur then this indirect cost will already be captured in the estimate of interest costs.

The AER considers that, separate from evaluating the plausibility of a liquidity-driven explanation for indirect debt raising costs, no weight can be given to any of Synergies’ assertions in the absence of empirical evidence. Similarly, the existence or impact of restrictive debt covenants on the benchmark firm cannot be ascertained from isolated anecdotes.¹⁴²⁷ Further, the reference by Synergies to a 100 basis point indirect debt raising cost (at issuance) does not support a claim for indirect raising costs, since it presents a maximum value separate from any discussion of the cost that might be considered applicable to the benchmark efficient firm.

AER conclusion on indirect debt raising costs

Consistent with its April 2009 final decisions, the AER considers that there is no evidence of indirect debt raising costs for the benchmark bond issue that is relevant to Energex, Ergon Energy or ETSA Utilities.

¹⁴²¹ AER, *Final decision, ACT DNSP*, 28 April 2009, appendix H; pp. 216–218.

¹⁴²² AER, *Final decision, ACT DNSP*, 28 April 2009, appendix H, pp. 214–220, which includes consideration of CEG, *Debt and equity raising costs: A response to the AER 2008 draft decisions for electricity distribution and transmission (EnergyAustralia version)*, January 2009; and the five variants of the May 2008 CEG report.

¹⁴²³ AER, *Final decision, ACT DNSP*, 28 April 2009, appendix H; p. 218; the source paper is Datta, S., Iskandar-Datta, M., and Patel, A., *The pricing of initial public offers of corporate straight debt*, *Journal of Finance*, vol. 52(1), March 1997, pp. 379–396.

¹⁴²⁴ AER, *Final decision, ACT DNSP*, 28 April 2009, appendix H; pp. 218–219; the source paper is Cai, N., Helwege, J. and Warga, A., *Underpricing in the corporate bond market*, *The Review of Financial Studies I*, vol. 20(5), 2007, pp. 2021–2046.

¹⁴²⁵ AER, *Final decision, ACT DNSP*, 28 April 2009, appendix H; pp. 218–219; the source paper is Kim, D., Palia, D., and Saunders, A., *The Long-Run Behaviour of Debt and Equity Underwriting Spreads*, Working Paper, January 2003.

¹⁴²⁶ CEG, *Debt and equity raising costs*, June 2009, paragraph 118, p. 30.

¹⁴²⁷ The AER notes that this issue is related to that presented in the ETSA Utilities ‘completion method’ confidential appendix, and therefore some of the discussion of that issue is relevant.

I.4.2 Direct debt raising costs

Regulatory proposals

The Qld DNSPs proposed a direct debt raising cost of 12.5 bppa on the basis of the Synergies report.¹⁴²⁸ ETSA Utilities proposed a direct debt raising cost of 12.0 bppa on the basis of the CEG report.¹⁴²⁹

AER considerations

In the April 2009 final decisions, the AER applied a methodology based on the 2004 Allen Consulting Group (ACG) report,¹⁴³⁰ updated to incorporate 2008 data. This methodology involved the calculation of the cost of a benchmark bond issue size (\$200 million), and the number of such bond issues required to rollover the benchmark debt share (60 per cent) of the regulatory asset base (RAB). The allowance for the benchmark bond issue was based on the direct costs of raising debt, such as underwriting fees, legal fees and credit rating fees.

Debt raising and opex forecasts

The AER notes the submission from the ECCSA regarding the interaction between debt raising costs and the increased opex proposed by ETSA Utilities. The AER considers that the application of its methodology ensures that the allowed debt raising costs do not inappropriately increase the total opex allowance.¹⁴³¹

Type of debt funding

The approach applied by the AER (based on the 2004 ACG report) benchmarks direct debt issuance costs on the basis of a firm issuing its own debt as Medium Term Notes (MTN). Synergies stated that this is an inappropriate benchmark:

The MTN market is only a subset of the corporate bond market and in our view it is considered inappropriate to solely rely on this market to establish a benchmark allowance for debt raising costs.¹⁴³²

Synergies' primary concern was not that MTN do not reflect the bond market more generally, but that the cost of issuing MTN does not reflect the cost of accessing bank debt. Synergies analysed firms listed on the Utilities Index in the United States and found that all firms had some bank debt, with an average 60 per cent of interest bearing debt held as syndicated or bank debt.¹⁴³³ Synergies therefore considered that the benchmark firm would also require this form of funding, and presented an indicative range of 30 to 40 bppa for the cost of accessing bank debt.¹⁴³⁴

¹⁴²⁸ Energex, *Regulatory proposal*, July 2009, section 12.7.4, p. 173. Ergon Energy, *Regulatory proposal*, July 2009, section 28.2.1, pp. 305–306.

¹⁴²⁹ ETSA Utilities, *Regulatory proposal*, July 2009, p. 155.

¹⁴³⁰ ACG, *Debt and equity raising transaction costs: Final report to the ACCC*, December 2004.

¹⁴³¹ ECCSA, *ETSA Utilities application, a response*, August 2009, p. 37.

¹⁴³² Synergies, *Debt and equity raising costs*, May 2009, p. 38.

¹⁴³³ Synergies, *Debt and equity raising costs*, May 2009, p. 35.

¹⁴³⁴ This range is derived from eight large US debt issues (in the absence of Australian data), although it is not clear if any mathematical operation (average or median) was applied. Synergies, *Debt and equity raising costs*, May 2009, pp. 35–36, table 10.

The AER considers that explicit consideration of the cost and prevalence of the range of alternative debt options was already undertaken by ACG in its 2004 report, which specifically considered project finance, term loans and revolving loans (all relevant to the more general ‘bank debt’ label applied by Synergies).¹⁴³⁵ ACG concluded that the benchmark debt raising cost should be based on the bond market since, as the cheapest source of debt, it would be accessed first by the benchmark firm.¹⁴³⁶ Indeed, Synergies accepted that this funding hierarchy would apply to the benchmark firm when it stated:¹⁴³⁷

Indeed, if firms are unable to issue their own debt they may need to access funds from the more expensive bank debt market.

The key question is whether it is possible for the benchmark firm to entirely fund its notional debt requirement through the cheapest source of debt—the bond market. ACG also investigated this question, looking at the amount of debt raised through bonds by specific Australian electricity and gas network businesses, and concluded:¹⁴³⁸

The case for applying a bond market benchmark for the debt margin and a bond market benchmark for debt raising costs does not rest on 100% of the notional debt component necessarily being raised in the bond market. However, these examples illustrate it is a useful approximation, since utilities could, if they wished to raise all their debt in the bond market.

Finally, the AER notes that ACG estimated the costs of accessing bank debt at 7.9 to 9.3 bppa, instead of the 30 to 40 bppa proposed by Synergies.¹⁴³⁹ The difference is explained by ACG dealing with a more relevant sample set (Australian rather than US data), excluding debt sourced for inappropriate projects (principally mergers and acquisition activity, which the benchmark firm does not undertake) and using an appropriate statistical methodology (mean/median rather than inspection). Of course, since the benchmark is based on a form of debt with a lower total cost (including both cost of issuance and the interest on the debt itself), this difference is largely moot. However, it does put in context any argument that bank debt needs to be separately modelled, as there is relatively little difference between the costs for access to bank debt and the issuance costs of MTN.

The AER considers that Synergies’ concerns on the appropriate debt form have been dealt with previously.¹⁴⁴⁰ The AER concludes that there is no reason to depart from its existing methodology, using the cost of issuing MTN as the benchmark for direct debt raising costs.

¹⁴³⁵ The AER clarifies that ‘cheapest debt’ here refers to the total cost of the debt, not just the debt issuance costs. ACG, *Debt and equity raising costs*, December 2004, pp. 28–45.

¹⁴³⁶ ACG, *Debt and equity raising transaction costs*, December 2004, pp. xiii–xix, 45.

¹⁴³⁷ Synergies, *Debt and equity raising costs*, May 2009, p. 38.

¹⁴³⁸ ACG, *Debt and equity raising costs*, December 2004, p. 37.

¹⁴³⁹ ACG, *Debt and equity raising costs*, December 2004, table 5.10, p. 43; Synergies, *Debt and equity raising costs*, May 2009, pp. 35–36.

¹⁴⁴⁰ ACG, *Debt and equity raising transaction costs*, December 2004, pp. 27–53.

Estimates from the QTC

Synergies stated that the administration charge levied by the Queensland Treasury Corporation (QTC) on government owned entities such as the Qld DNSPs for access to centrally-managed debt funding was a useful guide to the cost of raising debt.¹⁴⁴¹ Synergies argued that the level of this charge—approximately 10 bppa—sets a floor for the relevant direct debt raising cost, given that the QTC captures significant economies of scale and operates as a not-for-profit entity.

The AER notes that the conceptual benchmark operates without any parent support (either government or non-government), so the costs of debt issuance via the QTC are irrelevant to benchmark debt raising costs. Synergies acknowledged this, but contended that it is not unreasonable to assume that the 10 bppa allowance reflected the actual costs of debt issuance. The AER considers that for this indirect argument to hold, there would need to be quantification of the degree to which the QTC varies from the benchmark firm, including:

- Economies of scale and scope available to the QTC but not the benchmark firm, which would need to be added to the 10 bppa. The AER notes that the QTC classifies the savings it achieves for customers in this manner:¹⁴⁴²

On a positive note, QTC achieved quantifiable saving for customers and the state of \$263 million (2007–2008: \$164 million), principally related to our ability to add value through the management of borrowing margins.

That is, the interest rate payable on QTC-issued government-backed debt would be lower than that payable if the firm issued as a stand alone entity. In this way, firms such as the Qld DNSPs actually have access to funds at less than the benchmark debt risk premium applied as part of the regulated weighted average cost of capital (WACC). However, there is not a prior theoretical reason to assume that a government organisation pays lower debt *issuance* costs, as opposed to debt risk premiums; particularly in comparison with a relatively large electricity network service provider.

- Clarification of the profit margin included in the administration fee *when undertaking transactions relevant to the benchmark firm*, which would need to be subtracted from the 10 bppa. The AER notes that the QTC booked a \$43.2 million profit from capital market operations in 2008–09, so does not strictly speaking act entirely without profit.¹⁴⁴³ More critically, the allocation of costs within the QTC needs to be detailed, since it undertakes a range of debt funding while charging a flat administration fee. It is entirely plausible that large debt issuers (such as regulated electricity network service providers) are in fact cross-subsidising the smaller issuers to achieve a ‘no profit’ overall outcome.
- Quantification of the degree to which the government organisation underperforms against its private counterparts, which needs to be subtracted from the 10 bppa. There are sound economic reasons for believing that a government institution,

¹⁴⁴¹ Synergies, *Debt and equity raising costs*, May 2009, p. 42.

¹⁴⁴² Queensland Treasury Corporation, *Annual Report 2008–09*, p. 4.

¹⁴⁴³ Queensland Treasury Corporation, *Annual Report 2008–09*, p. 2.

constrained from offering market incentives to its management, may not be as efficient as the equivalent private sector organisation.

Given the lack of clarity on these adjustments, the AER considers that the QTC administration fee does not provide directly relevant evidence on the appropriate benchmark direct debt raising cost.

Status as a government owned entity

In its submission, the EUAA stated that the debt raising costs proposed by Energex seem unreasonable. The EUAA noted:¹⁴⁴⁴

Energex is owned by the Queensland Government, who arranges Energex's debt and provides Energex's equity. The AER should not allow any expenditure in this area unless there is clear demonstration that benefits will exceed costs.

The AER notes the point made by the EUAA regarding the reduction in debt raising costs for a government owned firm. Nonetheless, the debt raising allowance is not set based on the actual expenditure incurred by Energex (or any other specific DNSP). Consideration is given to the circumstances of the relevant DNSP,¹⁴⁴⁵ as well as the benchmark expenditure that would be incurred by an efficient DNSP.¹⁴⁴⁶ The AER also considers competitive neutrality principles for the treatment of government owned firms.¹⁴⁴⁷ The AER considers that an efficient firm may incur benchmark direct debt raising costs.

Estimates from academic research

There has been some consideration of the direct costs of raising debt in academic literature, and both consultant reports (by CEG and Synergies) referred to a paper by Lee, Lochhead, Ritter and Zhao.¹⁴⁴⁸ Synergies stated that the Lee et al. study supported a total up-front debt raising cost (including underwriting and other costs) of 2.19 per cent, based on the cost of issuing bonds between \$200 and \$500 million (US).¹⁴⁴⁹ The CEG stated that the Lee et al. study supported a total up-front debt raising cost (underwriting and other costs) of 1.47 per cent, based on the costs for utilities issuing bonds;¹⁴⁵⁰ or an up-front cost of 0.94 per cent based on the cost of issuing investment-grade bonds.¹⁴⁵¹

¹⁴⁴⁴ EUAA, *Submission to the AER*, August 2009, p. 20.

¹⁴⁴⁵ NER, clause 6.5.6(c)(2) and 6.5.7(c)(2).

¹⁴⁴⁶ NER, clause 6.5.6(e)(4) and 6.5.7(e)(4).

¹⁴⁴⁷ AER, *Final decision, ACT DNSP*, 28 April 2009, p. 235.

¹⁴⁴⁸ Lee, I., Lochhead, S., Ritter, J. and Zhao, Q., *The Costs of Raising Capital*, The Journal of Financial Research, Spring 1996, vol. 19(1), pp. 59–74.

¹⁴⁴⁹ The total up-front cost of issuing capital is stated here to avoid consideration of the time value of money, since Synergies and the CEG treat this issue differently. Synergies, *Debt and equity raising costs*, May 2009, p. 41; citing Lee et al., *The Costs of Raising Capital*, Spring 1996, p. 62, table 1.

¹⁴⁵⁰ The total up-front cost of issuing capital is stated here to avoid consideration of the time value of money, since Synergies and CEG treat this issue differently. CEG, *Debt and equity raising costs*, June 2009, p. 11. paragraphs 38–39; citing Lee et al., *The Costs of Raising Capital*, Spring 1996, p. 64, table 2.

¹⁴⁵¹ The total up-front cost of issuing capital is stated here to avoid consideration of the time value of money, since Synergies and CEG treat this issue differently. CEG, *Debt and equity raising costs*,

The AER has previously discussed the limitations of the Lee et al. study in the context of equity raising costs.¹⁴⁵² It is based on US firms raising capital (debt and equity) in the US market, which is several steps removed from the conditions of the benchmark firm, and is now more than fifteen years old.¹⁴⁵³ An additional concern specific to debt raising costs is the selection of bond types by Lee et al., with the inclusion of more complicated bond types such as serial and reset bonds (which are typically more complicated to issue), and the exclusion of shelf registered bond offerings (which now comprise a significant portion of the market).¹⁴⁵⁴

Further, there are difficulties applying the data categories presented by Lee et al. to the conditions of the benchmark firm. The figures quoted by the CEG (bonds issued by utilities, and separately investment-grade bonds) are more relevant than the overall figure presented by Synergies (which includes bonds issued by non-utilities, and bonds below investment grade). However, the most relevant data categorisation (for regulatory purposes) is not presented by Lee et al.—the debt costs for a firm that is *both* a utility and issuing investment grade debt. Although investment grade bonds cost less than non-investment grade to issue, and utilities pay less than non-utilities to issue bonds, it is not possible to draw an empirically supported inference on the cost of investment grade bonds issued by a utility, relative to either category in isolation.

The adjustment by Synergies for ‘sensible funding practices’, whereby tranche size is adjusted by the company to minimise debt raising costs, has some theoretical support.¹⁴⁵⁵ There are initial economies of scale as costs invariant to issue size are spread across the debt value, and some plausible expectation of diseconomies of scale as tranche size increases.¹⁴⁵⁶ However, under the ACG approach the benchmark debt tranche size is set to be the median of observed domestic bonds over a five year rolling window, and maintaining the ACG approach therefore prevents the implementation of a debt issuance model that selects the size of the debt issue to minimise costs. At present the two methods arrive at the same end result, with the observed median issue size of \$263 million (Australian) falling within the range of \$200 million to \$500 million (US) advocated by Synergies.¹⁴⁵⁷ Table I.1 shows the effect of selecting the Synergies tranche size on the two most relevant benchmarks from the Lee et al. study.

June 2009, p. 11. paragraph 40; citing Lee et al., *The Costs of Raising Capital*, Spring 1996, p. 66, table 3.

¹⁴⁵² AER, *Final decision, ACT DNSP*, 28 April 2009, p. 250.

¹⁴⁵³ Although published in 1996, the data is for the years 1990–1994. Lee et al., *The Costs of Raising Capital*, Spring 1996, p. 60.

¹⁴⁵⁴ Lee et al., *The Costs of Raising Capital*, Spring 1996, pp. 60–61.

¹⁴⁵⁵ Synergies, *Debt and equity raising costs*, May 2009, p. 41.

¹⁴⁵⁶ Lee et al., *The Costs of Raising Capital*, Spring 1996, pp. 66–67.

¹⁴⁵⁷ Details of the derivation of this median issue size are discussed below in this appendix.

Table I.1: Effect of bond size on direct debt costs in Lee et al. study

Lee et al. study	Total proceeds from bonds (\$US million)	Sample size	Gross spread (% of total proceeds)	Other costs (% of total proceeds)	Total costs (% of total proceeds)
Investment Grade bonds (BBB– and up); includes bonds issued by utilities and non–utilities	0–9999 (no restrictions)	578	0.58	0.36	0.94
	200–500	60	0.50	0.43	0.93
Bonds issued by utilities; includes investment grade and non–investment grade bonds	0–9999 (no restrictions)	135	1.04	0.43	1.47
	200–500	16	1.00	0.40	1.40

Source: AER analysis of Lee, I., Lochhead, S., Ritter, J. and Zhao, Q., *The Costs of Raising Capital*, The Journal of Financial Research, Spring 1996, vol. 19(1), p. 64 (table 2) and p. 66 (table 3).

The AER notes that the selection of a \$200 to \$500 million (US) issue size slightly reduces the cost to a utility of raising debt, but has no material effect on the cost of issuing investment grade bonds.

Given the data limitations of the Lee et al. study, the AER considers that it is not relevant for the purposes of determining the benchmark debt raising cost for an Australian regulated utility issuing investment grade debt under prevailing market conditions.

Inclusion of corporate treasury costs

In its original report, ACG detailed six different types of direct raising costs expected to be incurred by a firm issuing MTN: underwriting fees, legal and roadshow expenses, company credit rating fees, issue credit rating fees, registry fees and paying fees.¹⁴⁵⁸ Synergies separately summarised the applicable cost categories used by ACG, and stated:¹⁴⁵⁹

It was not evident that these costs included the (substantial) costs associated with establishing and running a treasury operation.... If these costs have not been included, this estimate will understate the costs of a firm issuing its own debt.

Synergies described the ‘corporate treasury’ functions as being the ongoing monitoring and management of the bond issue, including the appropriate systems to manage risk, allow settlement and payments (for example, Austraclear, Euroclear), and provide financial market information (for example, Bloomberg, Reuters). Synergies did not present any quantification of these treasury operation costs, nor any analysis of whether these costs are included within forecast opex.¹⁴⁶⁰

¹⁴⁵⁸ ACG, *Debt and equity raising costs*, December 2004, pp. 51–52; see also the description for domestic bond issues on pp. 37–38.

¹⁴⁵⁹ Synergies, *Debt and equity raising costs*, May 2009, p. 41.

¹⁴⁶⁰ Synergies, *Debt and equity raising costs*, May 2009, pp. 37–39.

The AER observes that ACG does not separately identify a cost category relating to treasury operation. It is not clear if this is because ACG:

- considered that the functions were already included in other cost categories
- considered that there was not a need for these specific activities
- considered that these functions, while required, did not constitute a material expense sufficient to require identification
- failed to consider the need for these functions at all.

Obviously, only the fourth of these options would constitute a valid reason for the addition of another cost category to the ACG methodology.

The AER notes the exhaustive nature of the ACG review, which included an extensive brief:¹⁴⁶¹

The first requirement was to gather comprehensive information about institutional and other aspects of the capital issuance process (both debt and equity) by Australian companies, with particular reference to infrastructure companies.

ACG analysed the entire process of capital raising, reviewed academic research, investigated regulatory practice and interviewed market participants; including bankers, investment bankers, market analysts and stockbrokers.¹⁴⁶² Given the depth and breadth of the ACG review, the AER does not consider it likely that ACG failed to consider the need for these functions. While no definitive statement can be made by the AER about which of the first three options is correct, in each case the benchmark efficient firm would not be under-compensated. Further, the AER considers that there is a need for rigorous examination in this area to avoid double counting, given that similar functions are already assumed to be part of general operational expenses (particularly information technology costs, including the provision of financial market information and front/back office monitoring systems).

The AER considers that the breakdown of cost categories by ACG provides the most appropriate framework for determination of direct debt raising costs.

Sample selection for the ACG methodology

CEG stated that the selection of bonds in the AER's 2008 update of the ACG methodology was flawed, on three grounds:

- Requirement for a five year rolling window.¹⁴⁶³ The ACG methodology included this statement:¹⁴⁶⁴

The median rolling 5 year gross underwriting fee is calculated for each tenor group on the basis of the adjusted bppa fees.

¹⁴⁶¹ ACG, *Debt and equity raising costs*, December 2004, p. 1.

¹⁴⁶² ACG, *Debt and equity raising costs*, December 2004, p. vi

¹⁴⁶³ CEG, *Debt and equity raising costs*, June 2009, p. 7, paragraph 24.

¹⁴⁶⁴ ACG, *Debt and equity raising costs*, December 2004, p. 49.

CEG located bonds older than five years (at the time of the update) in the AER data set. Hence, the AER update included bonds that should have been excluded.

- Bloomberg filtering criteria. The ACG methodology included this statement:¹⁴⁶⁵

The data base is all Australian companies (excluding GBEs and banks) issuing bonds (excluding convertible bonds) with gross underwriting fees reported by Bloomberg.

By applying this filter to Bloomberg, CEG located additional bonds that were not listed by the AER update. Hence, the AER update excluded bonds that it should have included.

- Exclusion of ‘non–live’ bonds. CEG noted that two bonds listed by the AER had matured. Hence, the AER update included bonds that it should have excluded.

Excluding the older bonds (by applying the five year rolling window) reduces the AER sample set from 34 bonds to 11; excluding the two expired bonds lowers it further to 9, but the 21 additional bonds (found by CEG using Bloomberg) increase the data set to 30 bonds.¹⁴⁶⁶ CEG stated that this data set, rather than the AER data set, was the appropriate basis for an assessment of the benchmark direct debt underwriting costs based on the ACG methodology. Table I.2 shows the effect of this change on the total upfront gross underwriting spread.¹⁴⁶⁷

Table I.2: Total gross underwriting spread (up front)

Data set	Tenor group	Number of bonds	Gross underwriting costs (% of total proceeds)	
			Mean	Median
AER data set	5 year	17	0.28	0.30
	10 year	17	0.45	0.40
	Combined	34	0.37	0.36
CEG data set	5 year	19	1.60	1.38
	10 year	11	0.89	0.45
	Combined	30	1.34	0.82

Source: CEG, *Debt and equity raising costs*, June 2009, p. 35–36, table 8; AER analysis of Bloomberg.

¹⁴⁶⁵ CEG, *Debt and equity raising costs*, June 2009, p. 7, paragraph 24; citing ACG, *Debt and equity raising costs*, December 2004, p. 49.

¹⁴⁶⁶ The resulting CEG data set is appended to the CEG report; note that paragraph 134 (p. 34) states there were 23 bond issues not reported by the AER, but the CEG table shows only 21 such bonds. CEG, *Debt and equity raising costs*, June 2009, p. 34–37, appendix A.

¹⁴⁶⁷ Figures are presented in this manner to separate issues regarding the sample set construction from issues related to the time value of money, which are discussed below.

As can be seen from table I.2, the change to the data set makes a large difference to the cost of raising debt, lifting the median gross underwriting spread for the full sample by half a percentage point, from 0.36 to 0.82 per cent of the total proceeds of the debt issue.¹⁴⁶⁸ The AER notes the CEG data set has a higher cost of debt issuance for five year tenors than for ten year tenors.

The AER confirms that it continues to implement the ACG approach, including the selection of bonds in accordance with the ACG criteria specified in the 2004 report. However, the AER does not mechanically apply the selection procedure without regard to the underlying characteristics of each individual bond. That is, the AER checks the bonds to ensure that they meet the requirements expressed in the ACG report, including that the bond is:

- issued by an Australian company that is not a bank, finance company, insurer or government entity¹⁴⁶⁹
- straight debt, excluding all combined debt/equity issues, convertible bonds and other hybrid securities¹⁴⁷⁰
- reported with a valid gross underwriting fee, excluding any bond where the fee given by Bloomberg is does not match the relevant debt offer documentation and/or annual report.¹⁴⁷¹

Further, the AER has searched for the specific additional bonds identified by CEG, but is unable to locate a number of the new bonds listed by CEG, as shown in table I.3.

Table I.3: Bonds identified by CEG but not located by the AER

Bonds	Type	Amount (\$ million)	Announcement date	Maturity date
Toyota Finance Australia	Euro MTN	300	20/4/2006	9/5/2011
Leighton Finance	Euro-dollar	110	9/5/2006	16/5/2011
Myer Group Finance Ltd	Australian	255	1/8/2006	15/3/2013
Toyota Finance Australia	Euro MTN	200	15/5/2007	31/5/2010
Toyota Finance Australia	Euro MTN	250	5/3/2008	19/3/2012
Toyota Finance Australia	Euro MTN	100	8/7/2008	28/7/2011

Source: CEG, *Debt and equity raising costs*, June 2009, p. 35–36, table 7.

¹⁴⁶⁸ The median is preferable to the mean for these small skewed samples.

¹⁴⁶⁹ As per the database description (step 1) at ACG, *Debt and equity raising costs*, December 2004, p. 49.

¹⁴⁷⁰ As per the separation of convertible debt at ACG, *Debt and equity raising costs*, December 2004, p. 46–47.

¹⁴⁷¹ As per the methodology at ACG, *Debt and equity raising costs*, December 2004, p. 49.

The AER has attempted to determine the reason for the discrepancy between CEG's results and its own investigations. Correspondence with Bloomberg has been unable to resolve the main cause of the discrepancy, though it has proved helpful in clarifying the status of individual bonds. One possible explanation is that the additional bonds may not be listed in the official LEAG tables (which detail underwriting costs) presented by Bloomberg. Although a particular table presentation is not relevant for the purposes of establishing a debt raising cost benchmark, the criteria for inclusion of bonds in the LEAG tables align with the ACG criteria.

One example deals with the Toyota Finance Australia Limited (TFA) bonds listed in table I.3. Bloomberg indicated that there are significant 'country of risk' issues with these bonds—that is, they are excluded from the LEAG tables because although there is a notional Australian company involved (TFA), the true substance of the bonds reflects an international issuer.¹⁴⁷² TFA is a wholly owned subsidiary of Toyota Financial Services Corporation, which itself is a subsidiary of Toyota Motor Corporation.¹⁴⁷³ Both parents are Japanese companies, and Bloomberg considered that the TFA bonds actually reflect the global financing activities of the entire organisation, not specifically the Australian subsidiary company. The AER considers that the documentation for more recent Toyota debt issues formalises this international arrangement.¹⁴⁷⁴ The AER notes that international issuers are excluded by the ACG criteria, so in this case the bonds should not be included in the data set.

Further, the AER understands that bonds without recent trading data may not be reported by Bloomberg. Therefore, if bonds are relatively illiquid, it may be that they are presented by Bloomberg at one date and not another, dependent upon the trading pattern of the bond.

Nonetheless, the AER considers it inappropriate to include these bonds without validation of their issuance costs and term, or a fuller understanding of the reason they do not appear in Bloomberg during the AER investigation process.

On a related issue, the AER considers that there are concerns with the inclusion of bonds issued by Fortescue Metals Group (FMG) Finance in the data set. These additional bonds, as reported by CEG, are listed in table I.4.

¹⁴⁷² The AER notes the LEAG eligibility criteria principally focus on comparing the performance of underwriters such as the total number of deals executed by them rather than comparing the characteristics of bonds. In this context, country of risk does not refer to sovereign risk in respect of the issuer's domicile but rather which national cohort of underwriters are the appropriate competitors for executing the deal.

¹⁴⁷³ Toyota Motor Corporation, *Consolidated Financial Summary, April 1, 2006 through March 31, 2007*, May 2007 (English translation from the original Japanese-language document).

¹⁴⁷⁴ Toyota Motor Finance (Netherlands) BV, Toyota Credit Canada Inc, Toyota Finance Australia Limited and Toyota Motor Credit Corporation, *Supplementary prospectus: Euro medium term note programme*, 19 December 2008.

Table I.4: FMG bonds identified by CEG, but excluded by the AER

Bonds	Type	Amount (\$ million)	Announcement date	Maturity date
FMG Finance Ltd	Euro-dollar	250	11/8/2006	1/9/2011
FMG Finance Ltd	Private placement	250	11/8/2006	1/9/2011
FMG Finance Ltd	Private placement	315	11/8/2006	1/9/2013
FMG Finance Ltd	Euro non-dollar	315	11/8/2006	1/9/2013
FMG Finance Ltd	Euro-dollar	320	11/8/2006	1/9/2013
FMG Finance Ltd	Private placement	320	11/8/2006	1/9/2013
FMG Finance Ltd	Euro-dollar	1080	11/8/2006	1/9/2016
FMG Finance Ltd	Private placement	1080	11/8/2006	1/9/2016

Source: CEG, *Debt and equity raising costs*, June 2009, p. 35–36, table 7; AER analysis of Bloomberg.

As shown in table I.4, CEG included eight bonds issued by FMG Finance on 11 August 2006. Inspection of the prospectus for this bond issuance reveals that key details of this capital raising are incorrect as reported by CEG (based on the Bloomberg data service).¹⁴⁷⁵ There were four types of senior secured notes issued, but each is reported twice by CEG, and in one case the amount raised misreports Euros as US dollars.¹⁴⁷⁶ More fundamentally, the debt issuance occurs in conjunction with a \$US300 million equity issuance (and associated \$100 million placement of unsecured subordinated notes).¹⁴⁷⁷ The AER notes that the ACG methodology is based on straight debt transactions not combined equity and debt raising costs. An underwriting spread of 2.77 per cent is quoted by CEG (based on Bloomberg) for all eight bonds. This figure includes the costs of issuing equity and debt, as well as legal and other fees that do not come under the underwriting spread in the ACG methodology.¹⁴⁷⁸ Further, the aggregate nature of this single-figure reporting renders it impossible to account for the time value of money (as will be discussed later in this appendix) since the term of the bonds range between five and ten years.

¹⁴⁷⁵ FMG Finance Pty Ltd, *Offering memorandum: Senior secured notes*, 11 August 2006; lodged with the ASX on 14 August 2006.

¹⁴⁷⁶ The AER notes that CEG include a presentation of data with repeated issues excluded; i.e. where they remove five of the erroneously recorded FMG bonds from the Bloomberg data set. It is not clear why CEG chose to present this calculation, but the AER considers that duplication may have occurred because of the issuance procedure adopted by Citigroup, see FMG Finance, *Offering memorandum*, August 2006, pp. 2, 19.

¹⁴⁷⁷ FMG Finance, *Offering memorandum*, August 2006.

¹⁴⁷⁸ The financing related costs reported in the prospectus include stamp duty, financial advisory, legal and underwriting associated with the Leucadia transactions, the offering of the Senior secured notes and the operating leases; see FMG Finance, *Offering memorandum*, August 2006, p. 40 and following.

The AER considers that the eight FMG Finance bonds fail to meet the ACG criteria for being straight debt issuance and reporting valid gross underwriting fees. As such, the AER considers that none of these bonds should be included in the data set.

This leaves seven bonds that the AER has added to its data set, listed in table I.5.

Table I.5: Bonds identified by CEG and added to the AER dataset

Bonds	Type	Amount (\$ million)	Announcement date	Maturity date
FBG Finance Ltd	Private placement	700	21/6/2005	15/6/2015
FBG Finance Ltd	Private placement	300	21/6/2005	15/6/2035
Telstra Corp Ltd	Euro MTN	250	3/9/2008	9/10/2012
BHP Billiton Fin USA Ltd	Global	1500	18/3/2009	1/4/2014
BHP Billiton Fin USA Ltd	Global	1750	18/3/2009	1/4/2019
Rio Tinto Fin USA Ltd	Global	2000	14/4/2009	1/5/2014
Rio Tinto Fin USA	Global	1500	14/4/2009	1/5/2019

Source: CEG, *Debt and equity raising costs*, June 2009, p. 35–36, table 7; AER analysis of Bloomberg.

CEG included two bonds issued by Fosters Brewing Group (FBG) Finance on 21 June 2005, as shown in table I.5. Although these bonds meet the criteria for inclusion, the AER notes that one has a tenor of 30 years, and so is of relatively little value when estimating the issuance costs of a MTN with a tenor of between five and ten years. The AER notes that the longest bond previously accepted into the ACG data set was 20 years, so a consistency case could be made for the exclusion of this bond. However, since the ACG methodology does not clearly specify an upper limit for the length of term of a MTN, the AER considers that on balance both these bonds should be included.

CEG also includes five bonds that have been issued since the most recent AER update of the ACG methodology (in mid 2008). This includes bonds issued by Telstra (3 September 2008), BHP Billiton (two bonds on 18 March 2009) and Rio Tinto (two bonds on 14 April 2009). These five bonds have been included in the current data set.

Finally, there are two bonds that were in the original AER data set, but were excluded by CEG. These are shown in table I.6.

Table I.6: Bonds excluded by CEG but remaining in the AER data set

Bonds	Type	Amount (\$ million)	Announcement date	Maturity date
Telstra Corp Ltd	Euro MTN	334	16/3/2005	1/4/2013
BHP Billiton Fin USA Ltd	US domestic	926	26/3/2007	29/3/2009

Source: CEG, *Debt and equity raising costs*, June 2009, p. 37, table 8; Bloomberg.

CEG excluded a bond issued by BHP Billiton on 26 March 2007 because it had a maturity of two years and had therefore already matured at the time of its assessment. The AER observes that the ACG methodology uses a five year rolling window, but that this does not necessarily exclude bonds issued within this window that have already reached maturity. The AER considers that the ACG methodology is not primarily concerned with the inclusion of ‘live’ bonds, since bonds with a tenor longer than five years are excluded from the rolling window once five years have passed, despite the fact that they have not yet matured. Accordingly, the AER considers that consistent with the ACG methodology, this bond should be retained in the data set until the announcement date reaches five years from the sampling date.

CEG excluded an additional bond issued by Telstra on 16 March 2005, which was included in the AER data set. The AER can find no reason why this bond has been excluded, and has clarified with Bloomberg that the bond is correctly reported. The AER considers that it meets the ACG criteria and has not removed it from the data set.

The effect of the changes to the data set, including the exclusion of bonds outside the five year window, the inclusion of bonds identified by CEG and the addition of data up to April 2009 is shown in table I.7.

Table I.7: Total gross underwriting spread (up front)

Data set	Tenor group	Number of bonds	Gross underwriting costs (% of total proceeds)	
			Mean	Median
April 2009 data set	5 year	17	0.28	0.30
	10 year	17	0.45	0.40
	Combined	34	0.37	0.36
Revised data set	5 year	8	0.37	0.35
	10 year	8	0.40	0.45
	Combined	16	0.39	0.36

Source: AER analysis of Bloomberg data.

The AER observes that there is little overall impact on the pattern of debt raising costs after the update. For bonds with a tenor around five years, both the mean (from 0.28 to 0.37 per cent) and median (0.30 to 0.35 per cent) have increased slightly. For bonds with a tenor around ten years, the mean has decreased slightly (from 0.45 to 0.40 per cent) but the median has increased slightly (from 0.40 to 0.45 per cent). For the overall group, the mean has increased (from 0.37 to 0.39 per cent) but the median remains unchanged (at 0.36 per cent).

The AER considers that the revised data set is the most appropriate proxy for estimating the gross underwriting spread in respect of a benchmark direct debt raising cost.

Inflation

In its report, CEG stated that the current debt issuance methodology adopted by the AER systematically under compensates service providers because it fails to take into consideration inflation.¹⁴⁷⁹ CEG observed that the non-underwriting direct costs used by the AER to estimate the direct cost of debt were the same figures prepared by ACG in 2004, and considered that these costs should be increased for inflation.¹⁴⁸⁰ The AER had previously argued that there was no need to inflate these direct costs because the benchmark was expressed as a percentage; and although the costs would increase with inflation (the numerator) so too would the total debt raised (the denominator) such that the benchmark percentage is left unchanged by inflation.¹⁴⁸¹ In its latest report, CEG acknowledged this logic, but noted that the AER increased the benchmark debt issue size from \$175 million (as determined by ACG in 2004) to \$200 million (based on updated data). CEG calculated that this increased the denominator for each debt issue by 14.2 per cent without a corresponding increase in the numerator (nominal costs per issue), in effect deflating the benchmark debt raising costs.¹⁴⁸² On this basis, CEG stated that the non-underwriting costs should be indexed by 11.0 per cent, based on the increase in the financial and insurance services price index between 2004 and 2009.¹⁴⁸³

The AER considers that care should be taken not to confuse the total debt raised (which is indexed every year as the RAB increases) with the debt issue size (which was increased once, from \$175 million to \$200 million). Issue size is not the relevant denominator for all debt raising costs; in fact most of the benchmark costs are unaffected by the size of the bond issue. For example, consider the cost of company credit rating, which is incurred as a fixed cost per annum. Increasing the issue size (but holding the RAB constant) results in the credit rating being spread across fewer bond issues, increasing the cost per bond issue. However, each bond issue is now larger, exactly offsetting the increased costs such that the costs per dollar of total debt raised remain the same.

It is only those specific costs that are set *as a fixed cost per bond issue* that are actually deflated in the manner described by CEG. Specifically, this is the legal/roadshow fee and the registry fee. The AER has reflected on the increase in the debt issue size to \$200 million and notes that the update occurred as a result of the strict application of the ACG methodology. The ACG methodology determines the benchmark bond issue size on the basis of the median domestic bond size observed using a rolling five year window, and the update of bonds (in 2006) resulted in the median moving upward.¹⁴⁸⁴ This was not an explicit adjustment for inflation; but it cannot be inferred that inflation played no role in the median moving upward. However, given that the ACG methodology made no allowance for similar updates of fixed costs, and that leads to a deflation effect, the AER has decided to refine its approach based on the ACG methodology. The AER considers that the most appropriate resolution is to increase the relevant cost components from the ACG

¹⁴⁷⁹ CEG, *Debt and equity raising costs*, June 2009, paragraph 33, pp. 9–10.

¹⁴⁸⁰ CEG, *Debt and equity raising costs*, June 2009, paragraph 37, p. 10.

¹⁴⁸¹ AER, *Final decision, ACT DNSP*, 28 April 2009, p. 231.

¹⁴⁸² CEG, *Debt and equity raising costs*, June 2009, paragraphs 35–36, p. 10.

¹⁴⁸³ CEG, *Debt and equity raising costs*, June 2009, paragraph 37, p. 10.

¹⁴⁸⁴ ACG, *Debt and equity raising costs*, December 2004, p. 45.

methodology (legal/roadshow fees and registry fees) to ensure that the DNSPs are not under-compensated.

The AER has contacted Standard and Poor's to update credit rating fees. Standard and Poor's indicated:¹⁴⁸⁵

Whilst we use our standard fees as a guide in setting fees, there are many factors that are taken into consideration such as ownership structure, size and complexity of the entity etc.

The standard initial issuer credit rating fee for an Australian corporate is set at A\$70,000. Thereafter, analytical surveillance is maintained and a surveillance fee, currently set at A\$50,000 is levied on the anniversary of the initial rating date. Standard & Poor's considers the characteristics of each individual entity when setting fees, and arrangements can and do vary from the standard fees.

The current standard credit rating fee for a long term (maturity over 12 month) corporate bond is 4 basis points.

The AER notes that all benchmark firms are ongoing debt issuers, so the benchmark company credit rating fee should be set at \$50 000 per annum. Additionally, the AER will update the issue credit rating fee from 3.5 basis points to 4 basis points.

The AER also attempted to update the legal/roadshow fees and registry fees by contacting relevant organisations. However, responses were sparse and there was no clear way to ensure an authoritative answer. As a result, the AER has increased these values by the 15.1 per cent consumer price index change between September 2004 and September 2009.¹⁴⁸⁶ The AER considers it more appropriate to use this general inflation measure instead of the more specific financial and insurance services price index as proposed by CEG.¹⁴⁸⁷ The AER has rounded values where appropriate, and applied a materiality threshold to the paying fees.

The median domestic bond issue size has also been updated, based on the ACG methodology.¹⁴⁸⁸ This involves a five-year rolling window of Bloomberg-reported domestic MTN, filtered to include infrastructure companies.¹⁴⁸⁹ This update increases the median from \$200 million to \$263 million. The AER notes that this is a conservative estimate, since bonds issued on the same day but with different tenors have been included separately. It is entirely plausible that these bonds are issued jointly, effectively constituting one larger bond issue.

The resulting updates to the ACG values are summarised in table I.8.

¹⁴⁸⁵ Standard and Poor's, email re: Credit rating information, 30 October 2009.

¹⁴⁸⁶ This is calculated as the change in CPI (weighted average of eight capital cities across all groups) from September 2004 to September 2009; see www.abs.gov.au.

¹⁴⁸⁷ The AER notes that the financial and insurance services index is a recent addition and has exhibited high volatility; see CEG, *Debt and equity raising costs*, June 2009, paragraph 37, p. 11.

¹⁴⁸⁸ ACG, *Debt and equity raising costs*, December 2004, pp. 39, 49–50, 52.

¹⁴⁸⁹ The Australian infrastructure companies with bonds currently included in the data set are Alinta Network Holdings, Australia Pacific Airports Melbourne, Brisbane Airport Corporation, DBNGP Finance, Energy Partnership Gas, Envestra, ETSA Utilities Finance, Origin Energy, Santos Finance, Sydney Airport Finance and Westralia Airports.

Table I.8: Updated values for the ACG debt raising methodology

Category	Previous value and basis	Update method	New value and basis
Legal and roadshow	\$100 000 up front per issue (range \$80 000 to \$100 000 per annum)	CPI	\$115 000 up front per issue
Company credit rating	\$50 000 per annum (range \$30 000 to \$50 000 per annum)	Issuer information	\$50 000 per annum (ongoing issuers)
Issue credit rating	3.5 basis points up front per issue	Issuer information	4 basis points up front per issue
Registry fees	\$3 000 up front per issue	CPI	\$3 500 up front per issue
Paying fees	\$4/\$1million per annum	Below materiality threshold	\$4/\$1million per annum
Median bond size	\$200 million	Rolling 5 year window	\$263 million

Source: ACG, *Debt and equity raising costs*, December 2004; Standard and Poor's, email re: Credit rating information, 30 October 2009; Bloomberg; AER analysis.

The AER notes that several features of the debt raising cost methodology provide the DNSPs with at least an efficient benchmark cost. Where ACG presented a range, the AER has been conservative and applied the upper boundary of this range. For the updated credit rating fees, combining a current estimate of fixed costs with a median bond issue size based on the last five years of data will maintain compensation at the upper end of the efficient cost range. In effect, this combines an up to date numerator with a denominator deflated by two and a half years of inflation. However, the AER considers that the overall effect of this estimation will be small, and is acceptable in order to ensure that the efficient service provider is provided the opportunity to recover at least the efficient costs of providing standard control services.

Amortisation

In its report, CEG stated that the current debt issuance methodology adopted by the AER systematically under compensates service providers because it fails to take into consideration the time value of money when there is delayed recovery of an upfront payment.¹⁴⁹⁰

The AER, following the ACG methodology and consistent with previous determinations, divided total debt issuance costs by the debt maturity to obtain an annual allowance in its most recent regulatory determination.¹⁴⁹¹ In applying this methodology, the AER rejected arguments from CEG on the need for amortisation.¹⁴⁹² Although the AER observed that it was theoretically correct to adjust

¹⁴⁹⁰ CEG, *Debt and equity raising costs*, June 2009, pp. 13–14.

¹⁴⁹¹ Alternatively, this can be conceptualised as amortisation where the discount rate is set at zero. AER, *Final decision, ACT DNSP*, 28 April 2009, pp. 230–231.

¹⁴⁹² Further, the amortisation issue was not presented in any of the initial regulatory proposals and, when presented as part of the NSPs' revised proposals, did not occur in response to a matter

for the time value of money when upfront costs were repaid over time, it stated that:¹⁴⁹³

The amortised cost of ten year debt issuance costs would provide a lower allowance than the simple division of five year debt issuance costs.

That is, the AER noted the limitations of the ACG approach (simple division of five year debt issuance costs), but as the service provider was recovering at least its efficient costs there was no requirement to add further complexity in this area.

In its latest report, CEG stated that simple division did not produce the best estimate of debt raising costs taking account of the time value of money.¹⁴⁹⁴ To demonstrate the scale of impact, CEG provided an illustrative example where discounting of cash flows increases the annual cost of raising debt by fifty per cent.¹⁴⁹⁵ Further, CEG recalculated the figures used by the AER in the April 2009 final decisions (using a discount rate of 9.6 per cent, based on an indicative nominal vanilla WACC) and concluded that:¹⁴⁹⁶

The AER's contention that using simple division is 'conservative' relative to amortising underwriting costs over 10 years is incorrect. I consider that given the significant differences in outcomes between simple averaging and amortisation, and the superiority of the latter method, it is not reasonable to rely upon simple averaging to estimate direct debt raising costs.

The AER considers that CEG has not accurately stated the AER's position in its April 2009 final decisions. The AER explicitly acknowledged its preference for discounting the time value of money as a general rule.¹⁴⁹⁷ The AER's statement that the established methodology (simple division of five year costs) produces a better outcome for the business than the alternative (amortisation of ten year costs) was made on the basis of the conditions relevant to the businesses at the time. The amortisation calculation is clearly dependent on the discount rate selected, and CEG arrives at a higher value under the amortisation approach as a direct result of selecting a high discount rate (9.6 per cent). The AER notes that the nominal vanilla WACC applied in the April 2009 final decisions was approximately 8.8 per cent.¹⁴⁹⁸

CEG justified the selection of a nominal discount rate as follows:¹⁴⁹⁹

The nominal cost of capital is appropriate for spreading underwriting costs over time. The nominal rate should be applied because the underlying calculation seeks to find a constant nominal stream of payments over the term of the bond that is equivalent in present value to the upfront underwriting costs.

addressed in the draft decision. The AER was not required to consider such issues, but chose to undertake a review of the NSP's proposed variation on that occasion.

¹⁴⁹³ AER, *Final decision, ACT DNSP*, 28 April 2009, p. 230.

¹⁴⁹⁴ CEG, *Debt and equity raising costs*, June 2009, p. 5.

¹⁴⁹⁵ CEG, *Debt and equity raising costs*, June 2009, p. 5, paragraph 17.

¹⁴⁹⁶ CEG, *Debt and equity raising costs*, June 2009, p. 6, paragraph 19.

¹⁴⁹⁷ AER, *Final decision, ACT DNSP*, 28 April 2009.

¹⁴⁹⁸ The final nominal vanilla WACCs were in the range 8.78 to 8.83 per cent. One example is AER, *Final decision, ACT DNSP*, 28 April 2009, p. xxi.

¹⁴⁹⁹ CEG, *Debt and equity raising costs*, June 2009, p. 5, paragraph 18.

The AER notes that the choice of discount rate determines whether the amortised 10 year debt raising costs are higher or lower than the simple division of five year costs. The median gross underwriting fees (based on revised data set) are now higher for both five year tenor bonds (35 basis points) and ten year tenor bonds (45 basis points) than those adopted in the April 2009 final decisions. Table I.9 shows the effect, relative to the simple division of five year costs, of discounting the 10 year upfront costs at:

- 9.60 per cent (based on the CEG report figure)
- 8.96 per cent
- 8.79 per cent (based on the ActewAGL April 2009 final decision).

Table I.9: Effect of discount rate on the current bond sample set

Data set	Tenor group	Discounting behaviour	Median gross underwriting costs (basis points)	Basis points per annum (bppa)
	5 year	Simple division	35	7.0
Revised data set	10 year	Discount at 9.60%	45	7.2
	10 year	Discount at 8.96%	45	7.0
	10 year	Discount at 8.79%	45	6.9

Source: AER analysis of Bloomberg data.

The AER observes that, given the current values for upfront underwriting costs, the break even point occurs at 8.96 per cent. That is, if the nominal vanilla WACC is less than 8.96 per cent, the ACG approach will provide sufficient funds. For comparison, the nominal vanilla WACCs in the DNSPs' regulatory proposals are between 9.49 and 9.52 per cent. If market conditions remain such that the nominal vanilla WACC is above 8.96 per cent at the time of the final decision, then the ACG simple division approach will under compensate the service provider relative to the amortisation approach. Additionally, if the amounts for upfront gross underwriting change across time (particularly if the cost for the five year tenor group decreases, or the cost for the ten year tenor group increases) this could also lead to under compensation.

The AER considers that, although the ACG approach is simple and relatively accurate, it has been shown that could under compensate the service provider in certain circumstances.

Having considered the issues raised and the operation of the PTRM which multiplies the benchmark debt raising cost allowance in basis points per annum by the notional nominal debt amount each year, the AER has amortised the upfront costs of debt raising costs over ten years at the nominal vanilla WACC relevant to each business for this draft decision. This refined approach is to be used for future regulatory decisions requiring benchmark debt raising cost allowances.

For cost categories under the ACG approach other than underwriting spread, amortisation is required if the cost is incurred as a one off at the commencement of

the regulatory control period, but not for those costs incurred on an annual basis. This means that legal and roadshow fees, issue credit rating and registry fees will all need to be amortised at the relevant discount rate.

Finally, a decision must be made on the appropriate bond length for amortisation. The debt risk premium is set on a 10 year bond, so first order consistency would require that the benchmark debt raising costs be amortised over 10 years to match the term of this bond.

The AER noted in the WACC review:¹⁵⁰⁰

On average the benchmark efficient energy network business refinances its debt portfolio every 10 years, implying that the current allowed debt-raising costs (which assume a five-year refinancing period) are excessive.

Synergies noted this statement, and stated:¹⁵⁰¹

However, these estimates [debt raising costs] have always been applied within the context of a ten year risk-free rate.

That is, the ACG methodology sets the debt raising cost allowance based upon a bond with five year tenor even while explicitly recognising that the risk-free rate and debt risk premium are determined based on a ten year term.¹⁵⁰² On this basis, Synergies argued that there are no grounds to move away from the five year tenor for the purposes of debt raising costs.¹⁵⁰³

The AER considers that this argument overlooks that the ACG recommendation of a 'conservative' five year tenor was explicitly linked to the simple division of upfront costs (for example the adoption of zero cost of capital which ignores time value of money).¹⁵⁰⁴ Since the CEG report demonstrated that the ACG methodology in this particular area does not produce an acceptable outcome (for example, there exists a potential for under compensation), it would be inappropriate for the AER to maintain the five year assumption. Accordingly, the AER adopts a ten year term for debt raising cost purposes, consistent with the ten year term for a benchmark bond. To allow the maximum collection of data, each bond in the ACG ten year tenor group (which includes bonds of between eight and twelve years tenor) will be amortised on its particular term to produce a cost estimate in basis points per annum, before aggregation of the data to take the median value.

AER conclusion on direct debt raising costs

After these adjustments to the selection of bonds, the indexing of deflated fixed costs, and the inclusion of amortisation (based on a nominal vanilla WACC of 10.04 per cent), the indicative direct debt raising costs are shown in table I.10. The appropriate WACC (to be incorporated in the amortisation calculation) will be

¹⁵⁰⁰ AER, *Final decision, Electricity transmission and distribution network service providers, Review of the weighted average cost of capital (WACC) parameters*, May 2009, p. 167.

¹⁵⁰¹ Synergies, *Debt and equity raising costs*, May 2009, p. 40.

¹⁵⁰² ACG, *Debt and equity raising costs*, December 2004, pp. 49–50.

¹⁵⁰³ Synergies, *Debt and equity raising costs*, May 2009, p. 40.

¹⁵⁰⁴ ACG, *Debt and equity raising costs*, December 2004, p. 49.

updated for the final decision (in keeping with the averaging period adopted for each of the DNSPs).

Table I.10: Indicative direct debt raising costs with a nominal vanilla WACC of 10.04 per cent

Fee	Explanation	1 Issue	3 Issues	7 Issues	17 Issues	18 Issues
Amount Raised	Multiples of median MTN (\$263m)	\$263m	\$789m	\$1841m	\$4471m	\$4734m
1. Gross underwriting fee	Median gross underwriting spread, upfront per issue	7.34	7.34	7.34	7.34	7.34
2. Legal and roadshow	\$115k upfront per issue	0.71	0.71	0.71	0.71	0.71
3. Company credit rating	\$50k per annum	1.90	0.63	0.27	0.11	0.11
4. Issue credit rating	4 basis points up front per issue	0.65	0.65	0.65	0.65	0.65
5. Registry fees	\$3.5k up front per issue	0.13	0.13	0.13	0.13	0.13
6. Paying fees	\$4/\$1million per annum	0.01	0.01	0.01	0.01	0.01
Total	Basis points per annum	10.7	9.5	9.1	9.0	9.0
Previous value (2008 update)	Number of \$200m issues	1 issue	4 issues	9 issues	22 issues	24 issues
	Basis points per annum	10.4	8.5	8.1	8.0	8.0

Source: ACG, Bloomberg, AER analysis.

Note: The nominal vanilla WACC of 10.04 per cent is used to produce the indicative table because it is the average of the value for the ETSA Utilities draft decision (10.02 per cent) and the value for the Qld DNSPs draft decision (10.06 per cent). For each business, the calculation should be carried out with the relevant nominal vanilla WACC.

I.5 AER conclusion

The AER has considered the arguments put forward by the DNSPs on benchmark debt raising costs, including consultant reports and all relevant submissions.

The AER considers that there is no basis for an allowance for the indirect costs of debt raising. If indirect costs do in fact occur in practice, the current methodology of providing an allowance for the cost of debt would include compensation as part of the debt yield. Providing a separate compensation would result in double counting and be inconsistent with the regulatory framework.

The AER considers that MTN issuance costs are the appropriate proxy for direct debt raising costs incurred by the benchmark firm (based on the ACG methodology). The AER considers that the ACG methodology for assessing the total direct costs of debt (including underwriting spreads and other transactions costs) produces the best estimate possible, principally because none of the proposed alternative methodologies closely match the circumstances of the benchmark firm. The AER has updated its

selection of bonds from the Bloomberg data service to fully align with the ACG methodology.

The AER considers that simple division of up-front costs (as per the ACG methodology) could result in under compensation for the benchmark firm under certain circumstances. Accordingly, the AER refines the ACG methodology to allow for the amortisation of fixed up-front costs at the appropriate discount rate. Further, the AER has accounted for inflation effects on the individual components of debt raising costs.

The direct debt raising cost allowance for each firm will be dependent on the number of standard sized debt issues required by each DNSP (based on the debt value of the RAB), and the nominal vanilla WACC applying to each DNSP (to be incorporated in the amortisation calculation). The allowance, expressed in bppa as an input to the PTRM, is applied to the debt portion of each DNSPs' RAB for each year of the next regulatory control period to determine the benchmark debt raising costs included in the opex forecast.

J. Benchmark equity raising costs

J.1 Introduction

Equity raising costs, such as legal fees, marketing costs and other transactions costs, are incurred in raising new equity capital. These are upfront expenses, with little or no ongoing costs over the life of the equity. While the majority of the equity a firm will raise is typically obtained at its inception, there may be points in the life of a firm—for example, during capital expansions—where it chooses additional external equity funding (instead of debt or internal funding) as a source of capital, and accordingly may incur equity raising costs.

The AER has accepted that equity raising costs for new issuance are a legitimate cost for a benchmark efficient firm only where external equity funding is the least cost option available.¹⁵⁰⁵ A DNSP should only be provided an allowance for equity raising costs where cheaper sources of funding—for example, retained earnings—are insufficient, subject to the gearing ratio and other assumptions about financing decisions being consistent with regulatory benchmarks.

The AER concurrently assessed the regulatory proposals of three DNSPs:

- Energex and Ergon Energy (the Qld DNSPs)
- ETSA Utilities.

J.2 Regulatory requirements

Although these regulatory proposals are assessed under two separate decisions, the consideration of appropriate benchmark equity raising costs is a common matter.

The revenue and pricing principles set out that each DNSP should be provided with a reasonable opportunity to recover at least its efficient costs.¹⁵⁰⁶ It is also pertinent that regard should be had to the potential for under or over investment, a matter that may be materially impacted by equity raising costs.¹⁵⁰⁷ The opex criteria (or capex criteria as the case may be) require that the total of the forecast opex (or capex) reasonably reflects the efficient costs and the costs that a prudent operator in the circumstances of the relevant DNSP would require.¹⁵⁰⁸ Further, the forecast opex (or capex as the case may be) is assessed with regard to the benchmark opex (or capex) that would be incurred by an efficient DNSP over the regulatory control period.¹⁵⁰⁹

¹⁵⁰⁵ AER, *Decision, Powerlink Queensland transmission network revenue cap 2007–08 to 2011–12*, 14 June 2007, p. 100; AER, *Final decision, SP AusNet transmission determination 2008–09 to 2013–14*, January 2008, p. 144 and AER, *Final decision, ElectraNet transmission determination 2008–09 to 2013–14*, 11 April 2008, p. 88.

¹⁵⁰⁶ For electricity, this means efficient costs associated with direct control network services and regulatory obligations; see NEL, section 7A.

¹⁵⁰⁷ NEL, section 7A(6).

¹⁵⁰⁸ NER, clauses 6.5.6(c)(1), 6.5.6(c)(2), 6.5.7(c)(1) and 6.5.7(c)(2).

¹⁵⁰⁹ NER, clause 6.5.6(e)(4) and clause 6.5.7(e)(4).

The AER has jointly assessed the benchmark equity raising costs of all three DNSPs on this basis. In particular, where consultant reports have been submitted by one of the DNSPs, to the extent that the information is pertinent to all DNSPs the information has been jointly considered within this appendix.

For convenience, within this appendix references to the benchmark firm should be interpreted as a reference to a benchmark efficient DNSP that is a pure play regulated electricity network operating in Australia without parent ownership.

Where it has been necessary to refer to a draft decision for just one of the DNSPs, within this appendix the AER has identified the specific business when referencing the draft decision, rather than referring to the generic term draft decision, as defined in the shortened forms.

Past AER considerations

In April 2009, the AER released final decisions (April 2009 final decisions) covering regulatory and revenue determinations for electricity distribution and transmission networks in NSW, ACT and Tasmania which included a common appendix dealing with benchmark debt and equity raising costs. The final decisions set out the AER's analysis and considerations with regard to the efficient costs of raising capital prior to the commencement of the current processes.¹⁵¹⁰

For simplicity, references to the April 2009 final decisions in this appendix are made to the ACT final decision only.

J.3 Regulatory proposals

The three DNSPs based their proposals on the methodology used by the AER.¹⁵¹¹ This identifies a hierarchy of three methods for equity raising, with differing equity raising costs and availability for each method:

- First, firms use retained earnings as a source of equity. The amount of equity raised in this manner is capped at the amount of available internal funds, determined by benchmark cash flow calculations. Note that retained earnings are dependent upon the dividend policy of the benchmark firm, which should be consistent with the assumed value of imputation credits.¹⁵¹²
- Second, firms use dividend reinvestment plans. The amount of equity raised in this manner is capped at 30 per cent of the value of outgoing dividends. Note that this too is related to the dividend policy for the firm.
- Third, firms use seasoned equity offerings (SEOs), encompassing both rights issues and placements. Although the AER considers the benchmark firm primarily

¹⁵¹⁰ AER, *Final decision, Australian Capital Territory distribution determination 2009–10 to 2013–14*, 28 April 2009, appendix H; AER, *Final decision, New South Wales distribution determination 2009–10 to 2013–14*, 28 April 2009, appendix N; AER, *Final decision, TransGrid transmission determination 2009–10 to 2013–14*, 28 April 2009; AER, appendix E; AER, *Final decision, Transend transmission determination 2009–10 to 2013–14*, 28 April 2009, appendix E.

¹⁵¹¹ See: AER, *Final decision, NSW DNSPs*, 28 April 2009, pp. 194 (table 8.18), 579–587.

¹⁵¹² AER, *Final decision, ACT DNSP*, 28 April 2009, pp. 251–257.

uses rights issues, the DNSPs consider a different balance between rights issues and placements is appropriate. The benchmark firm obtains all the remaining equity required via this method.

Each method was benchmarked on a per unit cost basis (that is, costs were set as a percentage of the total equity raised via that method). The proposals were:

- The Qld DNSPs proposed a unit cost for:¹⁵¹³
 - retained earnings of 0 per cent of the equity raised via this method¹⁵¹⁴
 - dividend reinvestment plans of 2 per cent of the equity raised via this method¹⁵¹⁵
 - SEOs (considered primarily as placements) of 7.8 per cent of the equity raised via this method. This figure comprises 4.5 per cent for direct equity raising costs, and 3.3 per cent for indirect equity raising costs.¹⁵¹⁶
- ETSA Utilities proposed a unit cost for:¹⁵¹⁷
 - retained earnings of 0 per cent of the equity raised via this method
 - dividend reinvestment plans of 1 per cent of the equity raised via this method
 - SEOs (considered as placements and rights issues) of 7 per cent of the equity raised via this method. This figure comprises 4 per cent for direct equity raising costs, and 3 per cent for indirect equity raising costs.

The DNSPs included various arguments in their regulatory proposals to support these debt raising cost benchmarks. Additionally, consultant reports were submitted:

- the Qld DNSPs submitted a report by Synergies Economic Consulting (Synergies) that deals with debt and equity raising costs¹⁵¹⁸
- ETSA Utilities submitted a report by CEG that deals with debt and equity raising costs.¹⁵¹⁹

¹⁵¹³ The AER considers that Energex implicitly adopted this methodology, since no detail was presented in its regulatory proposal on the unit costs, although Energex explicitly endorsed the Synergies report. Aspects of the Energex methodology could be deduced from the accompanying spreadsheets, but not all calculations were transparent. Energex, *Regulatory proposal*, July 2009, section 12.7.6, p. 174. Ergon Energy, *Regulatory proposal*, 1 July 2009, section 28.2.1, pp. 306–308.

¹⁵¹⁴ Ergon Energy, *Regulatory proposal*, July 2009, section 28.2.2.1, p. 307.

¹⁵¹⁵ Ergon Energy, *Regulatory proposal*, July 2009, section 28.2.2.4, p. 307.

¹⁵¹⁶ Ergon Energy, *Regulatory proposal*, July 2009, section 28.2.2.3, p. 307.

¹⁵¹⁷ ETSA Utilities, *Regulatory proposal*, 1 July 2009, p. 139.

¹⁵¹⁸ Synergies, *Debt and equity raising costs: Report for Energex and Ergon Energy*, May 2009. Submitted as attachment 12.5 to the Energex regulatory proposal and attachment 534c to the Ergon Energy regulatory proposal.

¹⁵¹⁹ CEG, *Debt and equity raising costs: A report for ETSA*, June 2009. Submitted as attachment E.17 to the ETSA Utilities regulatory proposal.

J.4 Submissions

Submissions relevant to equity raising costs were received from:

- Energy Consumers Coalition of South Australia (ECCSA) on the ETSA Utilities regulatory proposal¹⁵²⁰
- Energy Users Association of Australia (EUAA) on the Energex regulatory proposal.¹⁵²¹

J.5 Issues and AER considerations

The AER's analysis of equity raising costs in this appendix covers:

- selection of equity raising method
- indirect equity raising costs
- direct equity raising costs
- benchmark cash flow analysis—implementation of the equity raising cost allowance.

J.5.1 Selection of equity raising method

Regulatory proposals

All the DNSPs based their proposals on the methodology used by the AER in its April 2009 final decisions.¹⁵²² This identifies a sequence of equity raising methods for use by the benchmark firm, with the use of retained earnings and dividend reinvestment plans, and finally use of a SEO. The key point of disagreement with the AER methodology was the format of the SEO:

- Ergon Energy, on the basis of the Synergies report, proposed that the format of the SEO should be based on the observed use of equity raising methods in the Australian market. This meant that placements were the predominant format, with some consideration of rights issues.¹⁵²³
- Energex did not specifically address the selection of an equity raising method, but adopted the recommendations of Synergies (as already detailed for Ergon Energy).¹⁵²⁴

¹⁵²⁰ ECCSA, *Australian Energy Regulator, SA electricity distribution revenue reset: ETSA Utilities application, a response*, August 2009, p. 27.

¹⁵²¹ EUAA, *Submission to the AER on Energex and Ergon Energy regulatory proposals for the period 2010–2015*, 28 August 2009, p. 20.

¹⁵²² AER, *Final decision, NSW DNSPs*, 28 April 2009, pp. 194 (table 8.18), 579–587.

¹⁵²³ Ergon Energy, *Regulatory proposal*, July 2009, section 28.2.1, pp. 305–306; and Synergies, *Debt and equity raising costs*, May 2009, pp. 14–20.

¹⁵²⁴ Energex, *Regulatory proposal*, July 2009, section 12.7.6, p. 174; and Synergies, *Debt and equity raising costs*, May 2009, pp. 14–20.

- ETSA Utilities, based on the report by CEG, proposed that the format of the SEO should be a placement, although it did include some rights issues as anecdotal evidence.¹⁵²⁵

AER considerations

In previous decisions the AER considered the type of equity raising undertaken by the benchmark firm.¹⁵²⁶ The current methodology includes explicit modelling of the use of dividend reinvestment plans, with additional external equity requirements based on rights issues (although some consideration is given to placements).¹⁵²⁷

Synergies observed equity financing preferences in the Australian market to inform the choice of equity raising type by the benchmark firm.¹⁵²⁸ Synergies stated that the preferred method in the Australian market is a share placement, and that therefore the benchmark firm's practice should be based on the issue of a placement to obtain external equity, on several grounds:

- It is inappropriate for the AER to merge rights issues and dividend reinvestment plans to form a 'rights based equity' category. This union ignores substantial differences between the two types of equity.¹⁵²⁹
- Once 'rights based equity' is disaggregated, placements remain the predominant form of equity raising. This is based on Australian Securities Exchange (ASX) market data from 1999–00 to 2006–07.¹⁵³⁰
- This ASX data set is preferable to the AER's previous data on this issue as it is more recent and is from a more reliable source.¹⁵³¹

Similarly, CEG also stated that ASX data supports adopting placements over rights issues for use by the benchmark firm.¹⁵³² CEG observed that in 2006–07 and 2007–08, placements were more than double rights issues (by volume). On the basis of a study by Brown and Chan,¹⁵³³ CEG stated that the level of rights issues is artificially high, since there are government regulations imposing conditions on placements. CEG considered that in the absence of these artificial restrictions, companies would show even greater preference for placements over rights issues.¹⁵³⁴

In addition to market wide analysis, the AER has previously undertaken specific analysis of equity raisings by Australian utilities.¹⁵³⁵ In particular, this analysis looked

¹⁵²⁵ ETSA Utilities, *Regulatory proposal*, July 2009, p. 139; and CEG, *Debt and equity raising costs*, June 2009, pp. 23–29.

¹⁵²⁶ AER, *Final decision, ACT DNSP*, 28 April 2009, appendix H, pp. 235–251.

¹⁵²⁷ AER, *Final decision, ACT DNSP*, 28 April 2009, table 9.14, p. 79.

¹⁵²⁸ Synergies, *Debt and equity raising costs*, May 2009, section 3.1.1, p. 14–17.

¹⁵²⁹ Synergies, *Debt and equity raising costs*, May 2009, p. 15.

¹⁵³⁰ Synergies, *Debt and equity raising costs*, May 2009, table 2, p. 17.

¹⁵³¹ Synergies, *Debt and equity raising costs*, May 2009, p. 17.

¹⁵³² CEG, *Debt and equity raising costs*, June 2009, p. 25.

¹⁵³³ Brown, R. and Chan, H., *Rights issues versus placements in Australia: Regulation or choice?*, *Company and Securities Law Journal*, 2004, vol. 22, pp. 301–312.

¹⁵³⁴ CEG, *Debt and equity raising costs*, June 2009, paragraph 96, p. 25.

¹⁵³⁵ AER, *Final decision, ACT DNSP*, 28 April 2009, appendix H, table H.5, p. 242.

at the purpose of the equity raising, and found clear patterns in which type of equity raising was used for a given purpose. Synergies stated that this research was flawed because:¹⁵³⁶

- the data does not support the idea that rights issues are equivalent to dividend reinvestment plans, since rights issues are used exclusively for mergers and acquisitions, but dividend reinvestment plans are used exclusively for internal expansion and growth
- the analysis includes data from 2007–08, which should be excluded as anomalous
- no weight can be given to this data since it has not been open to independent scrutiny and is not transparent.

Ergon Energy also stated that it did not consider this data to be reliable.¹⁵³⁷

Synergies concluded that the proportion of equity capital raised via dividend reinvestment plans should be set at 30 per cent, and noted that the AER implemented this approximate policy despite its flawed reasoning.¹⁵³⁸

The AER considers that the market average cannot be automatically applied to the benchmark firm. As it stated in the April 2009 final decisions:¹⁵³⁹

The AER considers that, even if there was conclusive evidence that a particular method of equity raising was adopted by the majority of the market, this would not necessarily require the benchmark firm to adopt this method. In particular, since the characteristics of the benchmark firm differ markedly from the market average, it is not necessary to automatically accept the average market method as appropriate.

In this case, there is no conceptual or empirical reason presented by Synergies on why the benchmark firm would utilise types of equity raising in proportions corresponding to the market average use of each method. In its April 2009 final decision, the AER observed market average practice in order to inform its decision on the type of equity raising, not to bind it to the average.¹⁵⁴⁰ The analysis showed that rights issues, placements and dividend reinvestment plans were three types of equity raising that were large enough to provide the amount of funding required and conceptually compatible with the situation of the benchmark firm.

The AER notes that Synergies argued that the data for 2007–08 should be excluded on the basis of a large increase (1186 per cent) in dividend reinvestment plans. The AER notes that the Australian Financial Markets Association (AFMA) has since released an updated report, which includes data from 2008–09 as well as substantial revisions to previous years' data (including 2007–08 data). This data is presented in table J.1

¹⁵³⁶ Synergies, *Debt and equity raising costs*, May 2009, p. 19.

¹⁵³⁷ Ergon Energy, *Regulatory proposal*, July 2009, p. 307.

¹⁵³⁸ Synergies, *Debt and equity raising costs*, May 2009, pp. 19–20.

¹⁵³⁹ AER, *Final decision, ACT DNSP*, 28 April 2009, appendix H, p. 241.

¹⁵⁴⁰ The AER notes that clause 6.5.6(c) of the NER refers to the 'benchmark' operating expenditure that would be incurred by an "efficient" DNSP, not the average costs.

Table J.1: New capital raising for cash, (\$, million)

Survey year	Rights issues	Placements	Dividend reinvestment plans	Total
2004–05	3 242	7 896	7 343	18 481
2005–06	2 468	12 817	7 321	22 606
2006–07	13 001	19 789	8 994	41 784
2007–08	12 449	20 920	11 563	44 932
2008–09	28 506	38 235	15 010	81 750
Total	59 666	99 657	50 231	209 554
Percent of total raised 2004–09	28.5	47.6	24.0	

Source: Australian Financial Markets Association, *2009 Financial Markets Report*, p. 58.

The AER considers that the broad pattern of equity issuance has not changed; in that rights issues and dividend reinvestment plans provide more equity (by volume) than placements in recent years. The AER notes that there is no longer a large anomalous increase in dividend reinvestment plans for 2007–08 (which has been revised from \$115 623 million to \$11 563 million) and considers that data from this financial year can be included without risk to the validity of the sample.

The AER notes that the labelling of ‘rights based equity’ occurred in a specific context. In its November 2008 draft decisions, the AER explained the mechanism by which underpricing rights issues did not result in a wealth transfer from old to new shareholders.¹⁵⁴¹ CEG responded by pointing out that placements were more common than rights issues,¹⁵⁴² and argued that the AER should be bound by ‘what firms actually do’.¹⁵⁴³ The AER considered that since the mechanism by which rights issues avoid wealth transfer is shared with dividend reinvestment plans, the comparison between placements and rights issues should more properly be between placements and both rights issues and dividend reinvestment plans, jointly labelled as rights based equity.¹⁵⁴⁴ Hence, the union was appropriate in the context of a discussion on indirect costs and wealth transfer between investors.

The AER clarifies that it does not consider rights issues and dividend reinvestment plans to be equivalent in all aspects. This is self-evident from the AER methodology

¹⁵⁴¹ AER, *Draft decision, New South Wales distribution determination 2009–10 to 2013–14*, 21 November 2008, pp. 190–192.

¹⁵⁴² CEG, *Debt and equity raising costs: A response to the AER 2008 draft decisions for electricity distribution and transmission (EnergyAustralia version)*, January 2009, paragraphs 44, 50–56, pp. 14–15, 18–20.

¹⁵⁴³ CEG, *Debt and equity raising costs: A response to the AER 2008 draft decisions for electricity distribution and transmission (EnergyAustralia version)*, January 2009, section 2.4.5, p. 19.

¹⁵⁴⁴ AER, *Final decision, ACT DNSP*, 28 April 2009, appendix H, pp. 240–243.

applying the cash flow analysis for equity raising costs,¹⁵⁴⁵ which implements dividend reinvestment plans at a separate point of the analysis (with a separate unit cost percentage) to the implementation of rights issues (as part of the external SEO unit cost).

With this background, it is then important to consider the AER's detailed analysis of the equity raising types by purpose.

As has been stated above, the AER does not consider that rights issues and dividend reinvestment plans are identical in all aspects. Hence Synergies' concern about this matter is not warranted because rights issues and dividend reinvestment plans are appropriately considered by the AER.¹⁵⁴⁶

The AER also considers the data from 2007–08 should be included. The existence of an error in Synergies' data set does not invalidate analysis based on an entirely separate data source. In other words, 2007–08 was not an anomalous year for equity raisings such that 2007–08 should be excluded from all analysis of equity raising methods. There was simply a one-off data error, which in any case been corrected by the data provider (with the revised figure included in this document).

Synergies stated:¹⁵⁴⁷

...the AER has not published the precise sources of its data, nor the assumptions that underpin it, nor is it made clear whether this data has been independently verified.

The AER concurs with Synergies that information presented as part of the regulatory process should be clear and transparent. This includes accurate references to any primary data source cited, and full description of any statistical analysis undertaken. The AER considers that this aspect is particularly important for a regulatory proposal in order for the AER to verify the appropriateness of the proposed allowance.

The AER considers that the particular table in question was well referenced in the AER's April 2009 final decisions.¹⁵⁴⁸ The AER disclosed the full list of companies considered, the date range and the source documents. This compares favourably with, for example, Synergies' analysis of the underpricing of initial public offerings (IPOs),¹⁵⁴⁹ which did not present the relevant date range, names of the firms involved, or a description of the criteria for how they were selected. Similarly, when Synergies analysed the direct costs of IPOs and SEOs,¹⁵⁵⁰ they did not provide the date range, selection criteria and the names of the firms in their capital-intensive subset. The AER notes that Ergon Energy's concern over transparency of data used by the AER is inconsistent with the presentation of its own consultant report.

¹⁵⁴⁵ The AER notes that CEG makes this same point; CEG, *Debt and equity raising costs*, June 2009, paragraph 97, p. 25

¹⁵⁴⁶ Further, the AER observes that Synergies appears to have misunderstood the application of dividend reinvestment plans under the AER cash flow analysis to derive benchmark equity raising costs. This point is addressed later in the appendix.

¹⁵⁴⁷ Synergies, *Debt and equity raising costs*, May 2009, p. 19.

¹⁵⁴⁸ AER, *Final decision, ACT DNSP*, table H.5, footnote 661, p. 242.

¹⁵⁴⁹ Synergies, *Debt and equity raising costs*, May 2009, p. 23.

¹⁵⁵⁰ Synergies, *Debt and equity raising costs*, May 2009, pp. 27–28.

Consistent with its April 2009 final decisions, the AER considers that the data analysing equity raising by purpose is the most relevant evidence available for determining the equity raising method for the benchmark firm. The data is set out in table J.2.

Table J.2: Equity raised by Australian utility firms 1997–2008 (\$, million)

Purpose of SEO	Mergers and acquisitions	Unidentified purpose	Internal expansion	Total
Placements				
Private placement	2482	431	66	2979
Share placement plan	306	115	54	475
Total placements	2788	546	120	3454
Rights based equity				
Dividend reinvestment plan	–	–	1453	1453
Rights issue	1577	600	–	2177
Total rights based equity	1577	600	1453	3630
Employee shares	–	94	–	94
Total	4365	1240	1573	7178

Source: AER, *Final decision, ACT DNSP*, 28 April 2009, table H.5, p. 242. Sample included all equity raising activities between 1997 and 2008 for the following firms: AGL, AGL Energy, Alinta, Babcock and Brown Power, DUET, Envestra, Origin and Spark Infrastructure. Data was collected from Bloomberg, annual reports, company releases and ASX announcements. Initial public offerings were excluded.

The AER further clarifies that the starting point for the data presented in table J.2 was accessing Bloomberg statistics on the value of equity raised by each company each year. The AER then examined each company’s annual report, for each year in the sample, which generally contained a clear statement on the purpose of that year’s equity raising activities. Where this was not sufficient to identify the purpose of the additional equity, the AER obtained individual ASX notices (and associated press releases) to further clarify the purpose. If, at this point, it was not able to clearly categorise the purpose as either internal expansion or merger/acquisition, the figure was assigned to the unidentified purpose category.

Table J.2 shows that dividend reinvestment plans are the predominant source of new equity for Australian utilities for the purposes of internal expansion.¹⁵⁵¹ This is consistent with the current AER cash flow methodology for equity raising, which

¹⁵⁵¹ The AER notes that table J.2 does not show that ‘rights issues are used solely for mergers and acquisitions’, as stated by Synergies. Around \$600 million of rights issues remain unidentified and it seems implausible to state that none of this reflects internal expansion. See Synergies, *Debt and equity raising costs*, May 2009, p. 19.

assigns a higher priority to dividend reinvestment plans than either rights issues or placements. That is, the benchmark firm uses all equity available from a dividend reinvestment plan before turning to an external SEO.

The AER notes that this is not equivalent to determining that a particular percentage of the total equity required should be raised via dividend reinvestment plans.¹⁵⁵² In this regard, it appears Synergies has misunderstood the application of the current AER methodology when it states:¹⁵⁵³

In any case, we note that in its conclusions, the AER appears to rely on Handley's observations in relation the [sic] proportion of equity that is to be raised by the DRP, which is 30%.

The AER methodology caps the amount of equity available from dividend reinvestment plans at 30 per cent of the total dividends paid out by the firm. This may result in all equity being sourced via retained earnings and dividend reinvestment plans. To the extent that there is an extremely large equity raising requirement, it may be that the dividend reinvestment plan provides less than five per cent of the total amount, with the remaining required equity being sourced from SEOs (rights issues and placements).

AER conclusion on selection of equity raising method

The AER has considered the material presented by the DNSPs and their consultants on the relevance of various equity raising methods for the benchmark firm. The AER concludes that:

- the benchmark firm should not necessarily adopt the equity raising method used by the majority of the market, as the benchmark firm differs markedly from the average market firm
- the use of retained earnings in preference to all other sources of equity has been accepted by all DNSPs
- the most relevant analysis of equity raising methods—conducted by the AER on Australian utility firms raising equity for internal expansion—supports the use of dividend reinvestment plans before either rights issues or placements
- external SEO type may be either a rights issue or placement, dependent on whichever is least cost.

On this basis, the AER considers that the methodology implemented by the AER in its April 2009 final decisions remains appropriate for estimating benchmark equity raising costs.

¹⁵⁵² For instance, if a given DNSP requires \$100 million in equity over the regulatory period, deciding that 30 percent (or any other set percentage) must come from dividend reinvestment plans.

¹⁵⁵³ Synergies, *Debt and equity raising costs*, May 2009, pp. 19–20.

J.5.2 Indirect equity raising costs

Regulatory proposals

The three DNSPs proposed that the allowance for equity raising costs should include indirect costs:

- Ergon Energy, based on the Synergies report, proposed an indirect cost only for SEOs—modelled specifically for a placement issue—of 3.3 per cent of the total amount of equity raised via this method.¹⁵⁵⁴
- Energex did not specifically address the identification of indirect costs, but adopted the recommendations of Synergies (similar to Ergon Energy).¹⁵⁵⁵
- ETSA Utilities, based on the CEG report, proposed an indirect cost only for SEOs, of 3 per cent of the total amount of equity raised via this method.¹⁵⁵⁶

Although no other indirect costs were proposed, several other statements were made by the DNSPs and their consultants regarding the existence of further indirect costs.

Ergon Energy stated that there were strong grounds for inclusion of indirect costs associated with the use of retained earnings, principally because it interfered with payout of dividends.¹⁵⁵⁷ However, Ergon Energy noted that it was difficult to establish a reasonable estimate of such costs, and so did not propose an indirect cost associated with the use of retained earnings.

Synergies stated that there were indirect costs for a rights issue.¹⁵⁵⁸

However, there is still an indirect cost imposed upon shareholders and that is the requirement to change the existing investment mix. Shareholders have a mix of cash and shares. A rights issue forces a shareholder to substitute cash for shares and to increase equity as a proportion of their overall investment.

However, Synergies stated that there was no robust way to estimate these indirect costs, and neither of the Qld DNSPs proposed an indirect cost associated with rights issues, instead modelling their SEO costs—direct and indirect—purely on placements.

CEG considered the allowance provided for dividend reinvestment plans and stated:¹⁵⁵⁹

However, it [the 1 per cent allowance for dividend reinvestment plans] does not appear to include indirect costs associated with the DRP being issued at a discount. In my view the AER should also estimate the indirect cost of any

¹⁵⁵⁴ Ergon Energy, *Regulatory proposal*, July 2009, p. 307; Synergies, *Debt and equity raising costs*, May 2009, pp. 25–26.

¹⁵⁵⁵ Energex, *Regulatory proposal*, July 2009, section 12.7.6, p. 174; Synergies, *Debt and equity raising costs*, May 2009, pp. 20–26.

¹⁵⁵⁶ ETSA Utilities, *Regulatory proposal*, July 2009, p. 139; CEG, *Debt and equity raising costs*, June 2009, section 3.2.2, pp. 27–28.

¹⁵⁵⁷ Ergon Energy, *Regulatory proposal*, July 2009, section 28.2.2.1, p. 307.

¹⁵⁵⁸ Synergies, *Debt and equity raising costs*, May 2009, p. 24.

¹⁵⁵⁹ CEG, *Debt and equity raising costs*, June 2009, paragraph 115, p. 29.

dilution in the shares of the majority of shareholders who do not participate in DRPs.

However, no evidence is presented by CEG on this matter, and ETSA Utilities makes no reference to any indirect costs of a dividend reinvestment plan.

AER considerations

Relationship between indirect and direct costs

A key argument of both CEG and Synergies is the equivalence of indirect and direct costs. CEG stated:¹⁵⁶⁰

CEG has previously submitted to the AER on the need for direct and indirect costs to both be estimated and for these costs to be jointly estimated in a consistent manner. As a matter of economics, these costs are equivalent and these can be easily demonstrated.

CEG goes on to give examples of how both indirect and direct costs are incurred by a firm seeking to raise new equity. The relationship between indirect and direct costs is further described by Synergies:¹⁵⁶¹

In this regard, underpricing and underwriting are inextricably linked. The greater underpricing, the lower the direct costs associated with an equity issue. The greater the direct costs associated with the issue, the lower the indirect costs.

CEG made a similar statement:¹⁵⁶²

The higher the indirect costs (lower the price) the lower will be the direct costs of marketing the capital. By contrast, the lower the indirect cost (higher the price) the higher will be the direct costs.

In economic terms, CEG and Synergies claimed that indirect costs and direct costs are substitutes, that is an increase in one leads to a decrease in the other. Alternatively, it may be conceived that a given total cost of raising capital can be split in any proportion of indirect and direct costs. Given that the AER has already indicated that direct equity raising costs are a legitimate cost for the benchmark firm, this leads to the conclusion that AER should also allow indirect costs since any indirect cost could be replaced by a direct cost of exactly the same amount.

The AER considers that for such a logic chain to hold, there must be an observed and interdependent relationship—where each may exactly substitute for the other—between indirect and direct costs. The AER notes that no empirical evidence has been submitted to demonstrate the inextricable link between indirect and direct equity raising costs.

¹⁵⁶⁰ CEG, *Debt and equity raising costs*, June 2009, paragraph 44, p. 13.

¹⁵⁶¹ Both the following statements on the substitutability of indirect and direct costs were made with regard to equity raising costs. The AER discussed similar statements made in the context of debt raising costs in AER, *Final decision, ACT DNSP*, 28 April 2009, appendix H, pp. 214–221. Synergies, *Debt and equity raising costs*, May 2009, p. 20.

¹⁵⁶² CEG, *Debt and equity raising costs*, June 2009, p. 14.

Synergies does not provide any evidence on this matter. CEG included two statements that could be construed to provide such a link.

First, CEG implied that such evidence existed when it stated:¹⁵⁶³

Moreover, there has been a documented trend towards greater reliance on indirect costs¹⁹ and less reliance on direct costs²⁰ to sell new equity issues.

¹⁹ Altinkılıç [sic], O. and Hansen, R., (2003) “Discounting and underpricing in seasoned equity offerings [sic]”, *Journal of Financial Economics*, vol. 69, issue 2, pp.285–323.

²⁰ Saunders, A., Palia, D. and Kim, D., (2003) “The Long-Run Behavior of Debt and Equity Underwriting Spreads”, NYU, Stern School of Business, Finance Working Paper No. FIN-03-004.

The AER considers that the two papers cited by CEG, considered separately, do not support the statement that indirect and direct costs are interdependent substitutes. The Altinkılıç and Hansen paper does not report or investigate direct equity raising costs, and so makes no statement about the relationship between indirect and direct costs.¹⁵⁶⁴ The Kim, Palia and Saunders working paper does look at the relationship between indirect and direct costs in SEOs, but reports that the two are positively related.¹⁵⁶⁵ In other words, higher direct costs are associated with higher indirect costs, and lower direct costs are associated with lower indirect costs—the opposite relationship to that asserted by Synergies and CEG.¹⁵⁶⁶

The AER also observes that when the Kim, Palia and Saunders working paper was accepted for publication, all data and analysis related to indirect costs (underpricing) were removed.¹⁵⁶⁷ The AER therefore considers that limited weight should be given to any of the results on this issue from the working paper. Nevertheless, if anything, the working paper can only be interpreted as arguing against the idea that direct and indirect costs are substitutes.

Further, the AER considers that the two papers cited by CEG, when considered jointly, do not support the statement that indirect and direct costs are interdependent substitutes. The Altinkılıç and Hansen paper documents that underpricing in the 1990s is larger than underpricing in the 1980s.¹⁵⁶⁸ The Kim, Palia and Saunders working paper presents evidence that the direct costs in the 1990s are lower than either the 1970s or 1980s (though the 1970s and 1980s cannot be distinguished from each other

¹⁵⁶³ CEG, *Debt and equity raising costs*, June 2009, paragraph 50, p. 14

¹⁵⁶⁴ Altinkılıç, O. and Hansen, R., *Discounting and underpricing in seasoned equity offers*, *Journal of Financial Economics*, 2003, vol. 69, pp. 285–323. Discussion of 1980s underpricing occurs on pp. 304–305.

¹⁵⁶⁵ Kim, D., Palia, D. and Saunders, A., *The long-run behaviour of debt and equity underwriting spreads*, Working paper, 2003, pp. 22–24.

¹⁵⁶⁶ The Kim, Palia and Saunders working paper also investigates this tradeoff in initial public offerings (IPOs) but finds no statistically meaningful relationship; see Kim, Palia and Saunders, *Debt and equity underwriting spreads*, 2003, pp. 23.

¹⁵⁶⁷ Kim, D., Palia, D., and Saunders, A., *The impact of commercial banks on underwriting spreads: Evidence from three decades*, *Journal of Financial and Quantitative Analysis*, December 2008, vol. 43(4), pp. 975–1000.

¹⁵⁶⁸ Altinkılıç and Hansen, *Discounting and underpricing*, 2003, table 3 (pp. 298–299), pp. 304–306.

statistically).¹⁵⁶⁹ However, it would be methodologically inappropriate to attempt to unite the results from two independent studies and assert that the increased indirect costs (in the Altinkilic paper) are replacing the decreased direct costs (in the Kim, Palia and Saunders working paper).

CEG also stated:¹⁵⁷⁰

In addition to these studies there is a recent 2007 paper by Bortolotti, Megginson and Smart which examines underwriting and underpricing costs in both the US and Europe. The authors note the trend for increasing underpricing costs and the interrelationship of this with underwriting costs (noting that prior to the 1990's underpricing was much less common in SEOs).

The AER considers that CEG appears to have misrepresented the findings of Bortolotti et al. on the ‘interrelationship’ of underpricing and underwriting costs. Bortolotti et al. did not present data on underwriting or underpricing costs over time. The authors were concerned with the growth in the total value of accelerated transactions over time, but all analysis of underwriting and underpricing occurs at an aggregate level over their entire sample period (1991–2004).¹⁵⁷¹ Bortolotti et al. stated in passing that underwriting spreads have fallen over time; but they did so by reference to the Kim, Palia and Saunders working paper (without presenting any original analysis).¹⁵⁷² Bortolotti et al. noted that other researchers (including Altinkilic and Hansen) found increasing underpricing over time—but did not investigate this themselves.¹⁵⁷³

Bortolotti et al. did not conduct a statistical analysis that examines the relationship between underwriting and underpricing across their full sample.¹⁵⁷⁴ The authors looked at the costs of accelerated transactions in comparison to more traditional SEO types, which provided some oblique evidence on the relationship between direct and indirect costs. For their European and rest-of-world subsets, indirect and direct costs were cheaper for accelerated transactions than for traditional SEOs.¹⁵⁷⁵ That is, accelerated transactions have both lower direct costs and lower indirect costs—again, the opposite relationship to that asserted by CEG and Synergies. The USA sample showed accelerated transactions that have higher direct costs and lower indirect costs,

¹⁵⁶⁹ Kim, Palia and Saunders, *Debt and equity underwriting spreads*, 2003, pp. 10–11, and table 3 (p. 37).

¹⁵⁷⁰ CEG, *Debt and equity raising costs*, June 2009, paragraph 108, p. 14; the source paper is Bortolotti, B., Megginson, W., and Smart, B., *The rise of accelerated seasoned equity underwritings*, *Journal of Applied Corporate Finance*, Summer 2008, vol. 20(3), pp. 35–57.

¹⁵⁷¹ Bortolotti, Megginson and Smart, *Accelerated seasoned equity underwritings*, 2008, pp. 37–43, particularly figure 1 (p. 38) and table 2 (p. 43).

¹⁵⁷² Bortolotti, Megginson and Smart, *Accelerated seasoned equity underwritings*, 2008, footnote 35, p. 49.

¹⁵⁷³ Bortolotti, Megginson and Smart, *Accelerated seasoned equity underwritings*, 2008, footnote 41, p. 49.

¹⁵⁷⁴ The AER notes that Bortolotti *separately* undertook regression analysis on the impact of accelerated transactions on underpricing and underwriting. See Bortolotti, Megginson and Smart, *Accelerated seasoned equity underwritings*, 2008, table 7, p. 50.

¹⁵⁷⁵ Bortolotti, Megginson and Smart, *Accelerated seasoned equity underwritings*, 2008, table 5 (p. 46) and table 6 (p. 47).

but this effect is so small that when all data is aggregated, the global conclusion is that indirect and direct costs vary in the same direction.¹⁵⁷⁶

In summary, the AER considers the empirical evidence presented by CEG:

- does not present a robust investigation of the relationship between underwriting and underpricing
- presents several pieces of tangential evidence that, on balance, suggest indirect and direct costs are not substitutes.

The AER considers that while indirect costs (underpricing) are observed during the issuance of equity capital, there is no evidence that this is substituting for direct costs as posited by CEG and Synergies.

The AER considers that indirect equity costs have not been justified by demonstrating their equivalence with direct equity raising costs.

Regulatory framework and indirect costs

The AER has not allowed indirect costs (often labelled as ‘underpricing’) in the previous regulatory determinations.¹⁵⁷⁷ The foremost reason underpinning the AER’s rejection of indirect costs is that the compensation for such costs is inconsistent with the current regulatory framework. As stated in the November 2008 draft decisions:¹⁵⁷⁸

Even if underpricing for equity raising does occur, the AER considers that:

- no compensation is required for such costs because it would be inconsistent with the benchmark regulatory framework applied to determine the weighted average cost of capital (WACC)

There are two aspects of the regulatory framework which are particularly relevant to the assessment of current proposals for indirect costs:

- the framework requires consideration of outcomes for the benchmark firm, not individual shareholders
- the framework requires consistent definitions for all components.

The AER considers that a misapplication of one (or both) of these two points underlies each of the arguments made by CEG for compensation of indirect costs. It is important therefore to revisit the regulatory framework and understand what it does (and does not) state on these issues.

Firm outcomes not individual shareholder outcomes

The AER stated in its April 2009 final decisions:¹⁵⁷⁹

¹⁵⁷⁶ Bortolotti, Megginson and Smart, *Accelerated seasoned equity underwritings*, 2008, table 3 (p. 44), and table 4 (p. 45).

¹⁵⁷⁷ AER, *Final decision, ACT DNSP*, 28 April 2009, appendix H.

¹⁵⁷⁸ AER, *Draft decision, NSW DNSPs*, 21 November 2009, p. 190.

¹⁵⁷⁹ AER, *Final decision, ACT DNSP*, 28 April 2009, appendix H, p. 234.

The regulatory framework does not encapsulate personal transaction costs, including the final income tax paid by personal investors, or the rate of return given to any individual capital provider (as opposed to investors in aggregate).

The AER's consultant, Associate Professor Handley of the University of Melbourne, expressed the essence of this argument as follows:¹⁵⁸⁰

...the key difficulty with the NSP's claim for compensation for underpricing costs is that it would be inconsistent with the current regulatory framework. This conclusion applies irrespective of the magnitude of the underpricing and irrespective of the extent to which existing shareholders participate in the issue. The fundamental problem with the NSP's argument is a failure to recognise an important implication of the fact that underpricing costs associated with raising equity capital are incurred at the shareholder level rather than the firm level i.e. although underpricing is a cost to shareholders it is not a cost to the firm.

That is, the NEL and NER are concerned with the determination of the appropriate revenue for the firm as a whole. Components of total revenue relevant to the discussion of indirect costs include opex and return on capital, and the NER includes specific reference on how these are set for the firm.

Since the benchmark firm is owned by its shareholders, any return to equity capital can be viewed as the return provided to shareholders in aggregate. There are therefore times where it is appropriate to discuss the return to shareholders. However, there is no requirement to have regard for any particular individual shareholder, or a particular subset of shareholders.

Consistent definitions

The requirement for consistency was described by Associate Professor Handley as follows:¹⁵⁸¹

The regulatory framework requires the determination of allowed revenues to the regulated firm to be undertaken on ... an after company tax, before personal tax, after underpricing costs but before other personal (transactions) costs basis. The consistency principle therefore requires that regulatory cash flows be defined on a similar basis. In other words, cash flows should be after company tax, before personal tax, after underpricing costs but before other personal (transactions) costs.

That is, there is a need for first-order consistency between the various components of the model used to determine the appropriate revenue for the DNSP:

- the specification of formulae
- the delineation of cash flows
- the estimation of parameter values.

¹⁵⁸⁰ Handley, *Raising debt and equity*, 12 April 2009, p. 10.

¹⁵⁸¹ Handley, J., *A note on the costs of raising debt and equity capital: Report prepared for the Australian Energy Regulator*, 12 April 2009, p. 10.

Finally, Associate Professor Handley also noted:¹⁵⁸²

It is important to note that not making an explicit adjustment to the cash flows for underpricing or other personal transactions costs does not mean that these costs are either ignored or assumed not to exist. Rather, underpricing and other costs are already implicitly taken into account by investors in determining the required rate of return.

Disregarding the consistency principle leads to double counting and systematic over estimation of the efficient costs. Consider the market risk premium (MRP), a parameter that is estimated as a proxy using observed (market) share prices in the presence of underpricing. That is, every time a firm sells new equity at a discount, the (market) share price reduces to reflect the dilution effect on existing shares. This reduces the capital gain (or increases the capital loss) received by the shareholders, and therefore reduces aggregate return. As such, the return to equity based on this MRP implicitly includes the (indirect) cost, and reflects the required return to equity in the presence of underpricing. It would be inconsistent with this parameter estimation to provide a separate allowance (in the cash flows) for underpricing.

The interpretation of clause 6.5.3 of the NER

CEG discussed the interpretation of clause 6.5.3 of the NER. The AER considers that this illustrates the misapplication of the two principles above—benchmark firm outcomes not individual shareholder outcomes, and consistent definitions of all components—by CEG, and therefore will address this matter.

As background, the AER made the following statement in its April 2009 final decisions, with footnote as shown:¹⁵⁸³

The AER considers that separate compensation for investor level transaction costs, including investor level taxes is inconsistent with the regulatory framework. The regulatory framework specifies that investor returns are post company tax and pre-investor tax.⁶³¹

⁶³¹ The AER notes that this is why imputation credits are deducted from the regulatory building blocks when determining total allowed revenue for the business; to the extent that they will be redeemed, they are not company taxes but pre-payment of personal taxes.

The AER notes that this statement on imputation credits encompasses both a firm-centred view of taxation, and consistency between the various components of the calculation of taxation. CEG cited this paragraph (with footnote) and stated:¹⁵⁸⁴

In my view, this position is internally inconsistent and attempts to make a false economic distinction between costs being borne by ‘the company’ and costs borne by ‘the shareholders’ in order to argue that only the former should be compensated.

That is, CEG explicitly disagreed with the idea that the regulatory framework is concerned with the firm, not individual shareholders. CEG further explained:¹⁵⁸⁵

¹⁵⁸² Handley, *Raising debt and equity capital*, 12 April 2009, p. 11.

¹⁵⁸³ AER, *Final decision, ACT DNSP*, 28 April 2009, appendix H, p. 236. Note that CEG quotes from the NSW DNSP version.

¹⁵⁸⁴ CEG, *Debt and equity raising costs*, June 2009, paragraph 64, p. 18.

This provision in the NER [6.5.3] explicitly and specifically requires the AER to consider the returns to individual shareholders – which is precisely the opposite of what the AER claims the regulatory framework requires.

The AER considers that CEG has not correctly interpreted clause 6.5.3 of the NER. The AER notes that this clause refers to the DNSP (as a whole), and is entirely focused on the cost of taxation to the entity. The task facing the AER is to determine the return for the regulated business. It is correct that this involves consideration of the return to shareholders (in aggregate) as part of the gamma (imputation credits) parameter, but this does not change the nature of the AER's task. As stated above, there are times where it is appropriate to discuss the return to shareholders (in aggregate). However, there is no requirement to have regard for any particular individual shareholder, or a particular subset of shareholders.

CEG stated:¹⁵⁸⁶

While AER is arguing that the NER compensates only for costs borne by the firm and not costs borne by shareholders (such as indirect equity raising costs), what the NER actually requires is that the compensation that firms receive for corporations tax, a cost borne in its entirety by the firm, be offset by the benefit accrued to shareholders through the value of imputation credits. That is, the NER require that a benefit which is accrued by shareholders from the firm be deducted from the firm's allowed revenue. It is unclear why the AER believes that a cost incurred by shareholders on behalf of the firm should not similarly be added to the firm's allowed revenue.

The AER considers that these statements reflect the incorrect selection of the individual shareholder (instead of the benchmark firm) as the point of concern for the regulatory framework. Although imputation credits are 'a benefit which is accrued by shareholders', they can equally be viewed as a benefit generated by the firm. Assessment of shareholder characteristics (in aggregate) occurs during the estimation of gamma (the assumed utilisation of imputation credits), but it occurs only to the extent necessary to value the benefit generated by the firm. Adopting the CEG terminology, the AER considers that a cost borne by the firm (taxation payments made to the Australian Tax Office) is offset against a benefit generated in its entirety by the firm (the assumed utilisation of imputation credits). This is consistent with a regulatory framework that focuses on the benchmark firm, not individual shareholders.¹⁵⁸⁷

¹⁵⁸⁵ CEG, *Debt and equity raising costs*, June 2009, paragraph 67, p. 18.

¹⁵⁸⁶ CEG, *Debt and equity raising costs*, June 2009, paragraph 70, p. 19.

¹⁵⁸⁷ The consideration of the value of imputation credits does not mean that the regulatory framework has shifted its concern to the rate of return required by individual shareholders. Consider the case of two shareholders: When a low income shareholder (low marginal tax rate) receives a franked dividend from the benchmark firm, this shareholder will receive the entire amount rebated back by the Australian Tax Office. When a high income shareholder (high marginal tax rate) receives a franked dividend from the benchmark firm, this shareholder will still be required to pay additional tax on the dividend (since its marginal personal income tax rate is higher than the corporate tax rate). Clearly, the two individual shareholders are receiving a different (post-personal-tax) rate of return on their shareholding. Deducting the value of the franking credit from the company taxation allowance does not involve consideration of the rate of return to either shareholder.

Transaction costs

The AER observes that there are transaction costs when engaging in any equity raisings—for example, brokerage, search costs, bank fees.¹⁵⁸⁸ CEG stated:¹⁵⁸⁹

A new shareholder requires compensation for the cost of engaging in the equity raising (e.g. liquidating other assets) and the costs of gathering and analysing information on the equity raising.

The AER notes that liquidating other assets involves several types of transaction costs—for example, time spent managing the liquidation, broker fees, tax on any crystallised capital gain. Search costs (that is, the costs of gathering and analysing information) are a textbook example of transaction costs.

The AER has previously recognised that transaction costs occur and that they are not part of the direct cost of equity raising.¹⁵⁹⁰ However, the AER does not consider that the existence of these costs requires compensation to be provided. As stated previously:¹⁵⁹¹

... the AER considers it inappropriate to determine that such transactions are 'extra' or 'forced' transactions—that would accordingly require compensation—without considering the pattern of transaction costs that an investor in the market ordinarily incurs.

Every investor in the market incurs transaction costs when managing their equity portfolio. Although the magnitude of these aggregate transaction costs is not known, the aggregate compensation received across the market is readily identified. It is the return on the market portfolio—the risk-free rate plus the MRP. In this context, the AER considers that CEG is correct to state:¹⁵⁹²

If the shareholders do not expect to be compensated for the total costs that they bear then they will not supply equity capital in the first place.

The MRP (and the risk-free rate) are observed based on investor behaviour in the market where transaction costs exist (this holds true for both projections of the MRP from historical data and forward looking MRP projections based on the dividend growth model. No explicit adjustment is made to the MRP to reflect the transaction costs incurred, but they are nonetheless present when the MRP is estimated.¹⁵⁹³ Investors, with an expectation of incurring transaction costs, supply equity capital at this rate of return. It is theoretically and empirically sound to conclude that such an estimate of the MRP therefore provides appropriate compensation for the average

¹⁵⁸⁸ AER, *Final decision, ACT DNSP*, 28 April 2009, appendix H, p. 237.

¹⁵⁸⁹ The AER notes that this text comes from the section labelled 'wealth transfers' (section 3.1.2.1) by CEG, but it conceptually belongs with the discussion of transaction costs as detailed in the text. CEG, *Debt and equity raising costs*, June 2009, paragraph 58, p. 16.

¹⁵⁹⁰ AER, *Draft decision, NSW DNSPs*, 21 November 2009, p. 190; AER, *Final decision, ACT DNSP*, 28 April 2009, appendix H, pp. 236–238.

¹⁵⁹¹ AER, *Final decision, ACT DNSP*, 28 April 2009, appendix H, p. 2.37.

¹⁵⁹² CEG, *Debt and equity raising costs*, June 2009, paragraph 64, p. 18.

¹⁵⁹³ The AER clarifies that this is the intended meaning of 'The market risk premium is estimated on a market portfolio that is exclusive of the transaction costs involved in maintaining that portfolio.' AER, *Final decision, ACT DNSP*, 28 April 2009, appendix H, p. 236.

level of transaction costs in the market. The treatment of transaction costs is consistent with the estimation of the rate of return.

The key question then becomes whether or not investors in the benchmark firm have transaction costs that differ from the market average, and whether the equity raising strategy of the benchmark firm will alter the transaction costs for the investor. This point was made in the April 2009 final decisions:¹⁵⁹⁴

The AER considers that to demonstrate the need for an allowance on this issue, empirical evidence is required that shows that the transaction costs incurred by providing equity to the benchmark firm exceed those incurred by the market on average. Such evidence would demonstrate that regulated firms incur higher equity raising costs than the market on average, for which the market risk premium is estimated. No such evidence has been provided.

The AER set out strong conceptual grounds for considering that an investor in the benchmark firm will in fact have lower transaction costs than the market average investor (even after allowing for the equity raising strategy of the firm).¹⁵⁹⁵ Further, no empirical evidence has been presented that supports higher transaction costs for these investors relative to the market average.

In contrast to the AER's considerations on this matter, CEG chose to label the AER position as 'costs borne by shareholders must be ignored'.¹⁵⁹⁶ CEG further characterised the AER argument as:¹⁵⁹⁷

In summary, the AER appears to be arguing that the AER compensates investors only for the costs that are incurred by the firm and not for the costs that they personally incur on behalf of the firm.

Adopting the CEG terminology, the AER does not consider that these costs are incurred on behalf of the firm. Rather, they are incurred by each individual investor on their own behalf. Further, the AER considers that each investor is compensated for the costs they incur on their own behalf, through the market risk premium applied in the capital asset pricing model (CAPM), which implicitly includes compensation for the market average transaction costs. The AER considers this is already a conservative estimate, since the investor in the benchmark firm is likely to have below average transaction costs relative to the market.

Wealth transfer

Wealth transfer was described by Associate Professor Handley as:¹⁵⁹⁸

If a firm raises capital by issuing shares at a discount to the current market price then there is a transfer of wealth from the owners of the existing shares to the owners of the new shares i.e. underpricing represents the transfer of wealth (claim on the existing assets of the firm) from the owners of the existing shares to the owners of the new shares.

¹⁵⁹⁴ AER, *Final decision, ACT DNSP*, 28 April 2009, appendix H, p. 237.

¹⁵⁹⁵ AER, *Final decision, ACT DNSP*, 28 April 2009, appendix H, pp. 236–238.

¹⁵⁹⁶ CEG, *Debt and equity raising costs*, June 2009, section 3.1.2.2, p. 17.

¹⁵⁹⁷ CEG, *Debt and equity raising costs*, June 2009, section 3.1.2.2, paragraph 63, p. 18.

¹⁵⁹⁸ Handley, *Raising debt and equity*, 12 April 2009, p. 6.

Both CEG and Synergies agreed that if the old and new shareholders were identical, no wealth transfer occurs.¹⁵⁹⁹ However, they stated that for sales to new investors, the wealth transfer represents a real cost.¹⁶⁰⁰

The AER considers that this perspective is incorrect because it does not consider shareholders in aggregate. The transfer is within the group of shareholders, so there can be no net loss or gain in aggregate. For each shareholder worse off as a result of a wealth transfer, there is a shareholder better off by the exact same amount. The AER notes that the DNSPs (and their consultants) do not justify the selective identification of those shareholders who are worse off while ignoring those who are better off.

This is best understood with regard to the specific arguments made by CEG:¹⁶⁰¹

In my view the AER's stance simply cannot be true. The regulatory framework must be designed to compensate shareholders for all efficiently incurred costs – whether the cost involves the company writing a cheque to a third party for \$10m or selling shares to a third party at a \$10m discount to the market price. Both reduce the value of the shares held by the shareholder by \$10m.

The AER notes that CEG referred to 'shareholders' (plural) in the second sentence of the above paragraph, and that this may be read as referring to shareholders in aggregate. The AER considers that, if read this way, the statement is correct: the regulatory framework is designed to compensate shareholders (in aggregate) for efficiently incurred costs (in aggregate). However, the 'shareholders' could also be construed to mean a number of shareholders each considered individually. This appears to be CEG's interpretation, since it is the only reading that makes sense of the change to the singular 'shareholder' in the final sentence.¹⁶⁰²

Both reduce the value of the shares held by the shareholder by \$10m.

This statement may be true in the context of an individual (existing) shareholder. It is demonstrably false in the context of shareholders *in aggregate*. Prior to the issuance of the new shares, let the value of the existing shares be X and the amount of capital that will be injected Y . After the discounted issuance of new equity, the value of the new and existing shares (in aggregate) will be $(X+Y)$. That is, the total value is unchanged, even though the distribution of that wealth may vary. By contrast, writing a cheque to a third party reduces the total wealth of shareholders (in aggregate), thus demonstrating the difference between direct and indirect costs.

The AER considers that CEG has not properly taken account of the relevant perspective of the shareholders in aggregate. In every transaction between two investors, there is a winner and a loser. Both are shareholders; in aggregate, they will receive the required return.

¹⁵⁹⁹ CEG, *Debt and equity raising costs*, June 2009, paragraph 55, p. 16; and Synergies, *Debt and equity raising costs*, May 2009, p. 20.

¹⁶⁰⁰ CEG, *Debt and equity raising costs*, June 2009, paragraph 55, p. 16; and Synergies, *Debt and equity raising costs*, May 2009, p. 24.

¹⁶⁰¹ CEG, *Debt and equity raising costs*, June 2009, paragraph 65, p. 18.

¹⁶⁰² CEG, *Debt and equity raising costs*, June 2009, paragraph 65, p. 18.

The AER notes that even if this wealth transfer required compensation—for clarity, the AER considers it does not—the introduction of an indirect cost allowance by a regulator does not address the inequality. This was explained by the AER in its April 2009 final decisions.¹⁶⁰³ However, CEG specifically considered that the AER was wrong to state:¹⁶⁰⁴

...the outside investors who took up new shares would also be overcompensated, since they experience no dilution effect (they had no shares to begin with) but still share in the underpricing allowance (paid to the firm as a whole).

CEG stated that this constituted an error of financial logic, and noted:¹⁶⁰⁵

The price new shareholders are willing to pay for the new equity will include the expected value of all future cash-flows from that equity. If the AER commits to pay for underpricing costs associated with an equity raising then, as the AER correctly points out, new shareholders will receive higher cash-flows per share purchased. However, what the AER logic fails to appreciate is that they will pay more for their shares as a consequence of such a decision. The net beneficiaries of the decision will be the existing shareholders who are selling them the issue – ie the beneficiaries will be precisely the shareholders who bear the costs.

The AER considers that this statement relies on an unreasonable assumption, involves an error of (mathematical) logic and is internally inconsistent.

The statement by CEG presupposes that the decision by the AER to allow for underpricing is not known in advance by the existing shareholders; since if they were aware of the allowance beforehand their price per share evaluation would itself adjust, with no change to the absolute underpricing level. Given that the AER issues publicly available regulatory determinations for a five year period, this is clearly an untenable assumption.

The AER also considers the logical endpoint of the underpricing allowance is not that the net beneficiaries are the existing shareholders. This is best understood with a brief mathematical exposition.

Define the following variables:

- u total underpricing (and therefore total value of the underpricing allowance)
- m number of existing shares
- n number of newly issued shares

Wealth transfer as a result of the new share issue:

¹⁶⁰³ AER, *Final decision, ACT DNSP*, 28 April 2009, appendix H, pp. 238–239.

¹⁶⁰⁴ AER, *Final decision, ACT DNSP*, 28 April 2009, appendix H, p. 239; cited by CEG, *Debt and equity raising costs*, June 2009, paragraph 60, p. 17.

¹⁶⁰⁵ CEG, *Debt and equity raising costs*, June 2009, paragraph 61, p. 17.

Existing shares change by $-\frac{u}{m}$

New shares change by $\frac{u}{n}$

Total change is $m\left(-\frac{u}{m}\right) + n\left(\frac{u}{n}\right) = (-u + u) = 0$ (no net change)

The underpricing allowance, paid to the firm, is of value to all shares:

All shares change by $\frac{u}{m+n}$

The combined effect of the wealth transfer and underpricing allowance:

Existing shares change by $\left(\frac{u}{m+n} - \frac{u}{m}\right)$

New shares changes by $\left(\frac{u}{m+n} + \frac{u}{n}\right)$

Therefore the total effect on shares in aggregate is:

$m\left(\frac{u}{m+n} - \frac{u}{m}\right) + n\left(\frac{u}{m+n} + \frac{u}{n}\right) = u$ (underpricing allowance is aggregate gain)

From the perspective of existing shares:

$\frac{u}{m+n} < \frac{u}{m} \Rightarrow \left(\frac{u}{m+n} - \frac{u}{m}\right) < 0 \Rightarrow -ve$ (existing shares lose value)

From the perspective of new shares, two outcomes are possible.

If the value of the underpricing allowance per share was not included in the price paid:

$\left(\frac{u}{m+n} + \frac{u}{n}\right) \Rightarrow +ve$ (new shares gain value)

If the value of the underpricing allowance per share was included in the price paid:

$\left(\frac{u}{m+n} + \frac{u}{n}\right) - \frac{u}{m+n} \Rightarrow \frac{u}{n} \Rightarrow +ve$ (new shares gain value)

Even if the new shareholders are willing to raise their per-share evaluation by the full value of the underpricing allowance to them, the difference will never be recovered. New shareholders remain net beneficiaries, existing shareholders who do not take up new shares remain net losers; and existing shareholders who do take up new shares

are indeterminate.¹⁶⁰⁶ The allowance proposed by CEG cannot eliminate the problem that it is designed to address.

The AER also notes it is internally inconsistent for CEG to attempt to apply a net present value (NPV) calculation to the underpricing allowance, without considering the NPV of the other components of the transaction. Prior to this point, underpricing has been defined by CEG with regard to the market price of the share. A consistent application of NPV assessment would show that the underpricing does not require compensation.

Consider a company that has a current (market) share price of \$10. The potential new investor undertakes an analysis of the NPV of the future cash flows of the business and arrives at a value of \$9 per share, which is the asking price for new equity. The new investors' assessment may be either correct or incorrect.

If the assessment of a \$9 per share NPV for all future cash flows is accurate, then the current market share price is overvalued. Selling new equity at \$9 does not present a loss to the company, since it will gain \$9 in new capital in exchange for a claim on future cash flows worth \$9 per share. Although there may be a wealth transfer away from existing shareholders on paper, this does not reflect any actual variation in the NPV of future cash flows accruing to the existing shareholder.

Since the market share price after the equity raising will fall, these existing shareholders have lost the opportunity for a windfall gain by selling the share (worth \$9) at \$10 on the secondary market. However, the regulatory framework is not concerned with providing such an opportunity for windfall gain. Further, any sale at this price would be a windfall loss to the shareholder who buys on the share market at \$10—in aggregate, there is no net gain to shareholders. In summary, the AER considers that if the NPV of the share is below the market share price, the underpricing does not represent a cost to the shareholders in aggregate, and requires no compensation. This occurs even in the absence of an indirect cost allowance.

The AER observes that there is a large body of academic evidence supporting the idea that firms issue shares when equity prices are overvalued.¹⁶⁰⁷ Accordingly, the scenario where the NPV of future cash flows is below the market price could plausibly account for the underpricing observed by CEG and Synergies.

¹⁶⁰⁶ Existing shareholders who do take up new shares will be either net beneficiaries or net donors dependent upon the relative proportions of existing and new shares. The case of these participating shareholders is addressed in more detail later in the appendix.

¹⁶⁰⁷ Myers, S. C. and Majluf, N. S., *Corporate financing and investment decisions when firms have information that investors do not have*, Journal of Financial Economics, 1984, vol. 13(2), pp. 187–221; Karpoff, J. M. and Lee, D., *Insider Trading Before New Issue Announcements*, Financial Management, Spring 1991, vol. 20(1); Spiess, K. D. and Affleck-Graves, J., *Underperformance in long-run stock returns following seasoned equity offerings*, Journal of Financial Economics, 1995, vol. 38(3), pp. 243–267; Bayless, M. and Chaplinsky, S. J., *Is There A Window of Opportunity for Seasoned Equity Issuance?*, Journal of Finance, March 1996, vol. 51(1); Jindra, J., *Seasoned Equity Offerings, Overvaluation, and Timing*, 2000; and Brown, P., Gallery, G. and Goei, O., *Does market misvaluation help explain share market long-run underperformance following a seasoned equity issue?*, Accounting and Finance, 2006, vol. 46, pp. 191–219.

Alternatively, consider the scenario where the \$9 per share NPV is inaccurate, and the market share price of \$10 accurately reflects the NPV of future cash flows. If the new investor purchases the share at \$9 then a wealth transfer occurs. The new investor gains more than \$9 per share in NPV, and there is an offsetting loss for existing shareholders.¹⁶⁰⁸ However, there is no change in the aggregate NPV of free cash flows, and therefore no loss to shareholders in aggregate that requires compensation.

If an indirect cost allowance is provided by the regulator, this will affect the NPV both before and after the new shares are issued.¹⁶⁰⁹ The wealth transfer cannot be eliminated, since the allowance raises both the NPV of the prospective investor and the true NPV of the company. In summary, the AER considers that if new investors' calculation of NPV is below the true NPV of the share, although a wealth transfer occurs, the underpricing does not represent a cost to the shareholders in aggregate, and requires no compensation. Further, adding an indirect cost allowance does not eliminate the wealth transfer.

The AER considers that the key question then becomes why the prospective investor arrived at a lower NPV than the true NPV of free cash flows. There are important theoretical information asymmetry considerations here, since the potential investor must obtain information about the timing and certainty of the firm's future cash flows.¹⁶¹⁰ This is why the regulator makes allowance for direct equity raising costs, ensuring that the firm can communicate (via prospectus or other avenues) its current financial status. However, information asymmetry is vastly reduced for the regulated firm, given that the regulator sets out the cash flows for the business in advance, and that these are publicly available. The only remaining reason for arriving at a lower NPV is the adoption of a higher discount rate. The AER notes that this is at odds with the adoption of the CAPM, which requires that all investors have the same risk profile and require the same return to equity.

In a related matter, CEG stated that the AER had inappropriately used the word 'benefit'.¹⁶¹¹

Whether or not new shareholders 'benefit' from this payment is irrelevant – just as it is irrelevant whether the printing firm used by the firm to print its prospectuses 'benefits' from being paid to perform this task. Both new investors and the printing firm benefit in some sense from the payments that they receive.

The AER considers that examining the statement in context makes clear how the word 'benefit' should be read:¹⁶¹²

The AER considers that under such a scenario, two sources of overcompensation would likely result. Original shareholders who bought new shares would be overcompensated, since the dilution effect would already be

¹⁶⁰⁸ The exact balance of gain and loss per share will depend on the proportion of new shares to existing shares, and the proportion of existing shareholders who take up new shares.

¹⁶⁰⁹ Absent the CEG assumption that the regulator can surprise the business and provide an allowance it had not indicated it would provide.

¹⁶¹⁰ For example, see Eckbo, B. E. and Masulis, R. W., *Adverse selection and the rights offer paradox*, *Journal of Financial Economics*, 1992, vol. 32, pp. 293–332.

¹⁶¹¹ CEG, *Debt and equity raising costs*, June 2009, paragraph 58, p. 16.

¹⁶¹² AER, *Final decision, ACT DNSP*, 28 April 2009, appendix H, p. 239.

offset by the new shares they purchased, and they would also receive the benefit of the proposed underpricing allowance. Additionally, outside investors who took up new shares would also be overcompensated...

The full paragraph reveals that the benefit is the payment received by the shareholder (or printer, to use the CEG example). There is overcompensation because payment made to the entity is of greater value than the item exchanged for the payment (the capital contribution of the shareholder, or the prospectus from the printer).

With this understanding, the printing example put by CEG can be recast to correctly illustrate the conundrum. Consider two printers, who can produce identical prospectuses (required for the equity raising) but quote differing prices: one quotes \$1 million, the other \$2 million. The AER considers that providing an allowance to the regulated firm to pay the latter printer \$2 million would be overcompensation, since the efficient cost of printing the prospectus is \$1 million. The NER requires the level of opex to reasonably reflect the efficient costs,¹⁶¹³ so (in this case) the AER would not set direct equity raising costs above \$1 million.

In the context of potential investors, offering a higher price for the new equity equates to requiring a lower return on capital. Clearly, if there are two investors, with the same risk profile, offering to provide equity to the benchmark firm, but one requires a lower return on capital than the other, the AER considers that the efficient return on capital is the lower of the two. This is the correct context for interpretation of ‘overcompensation’—where the capital provider receives a greater return on capital (payment) than the true worth of the capital (the item exchanged for the payment).

Participating shareholders

The AER observes that both CEG and Synergies perpetuate an error—that no existing shareholders participate in placements—that was addressed in the April 2009 final decisions:¹⁶¹⁴

Associate Professor Handley observed that CEG and Carlton assume that no existing shareholders participate in their benchmark firm placements and stated this was an unrealistic assumption. The AER concurs with Associate Professor Handley’s view. The AER considers that it is more plausible to infer that placements are regularly taken up by a mix of old and new shareholders.

The AER considers that, for any capital raising, there are three categories of shareholders:

- new shareholders, who did not previously own the shares but take up the new equity offer
- non-participating shareholders, who hold existing shares but do not take up the new equity offer

¹⁶¹³ NER, clause 6.5.6(c)(1).

¹⁶¹⁴ AER, *Final decision, ACT DNSP*, 28 April 2009, appendix H, p. 239; source document is Handley, *Raising debt and equity*, 12 April 2009, p. 6.

- participating shareholders, who hold existing shares and in addition take up the new equity offer.

Participating shareholders both pay out the wealth transfer (as existing shareholders) and receive the wealth transfer (as new shareholders), so there is no indirect cost, even at an individual shareholder level.¹⁶¹⁵ This is of course, the reason why the underpricing discount is irrelevant for a non–renounceable rights offer, since all shareholders are participating shareholders.¹⁶¹⁶

CEG and Synergies failed to account for the existence of participating shareholders in an equity raising.¹⁶¹⁷ Any market observed measure of underpricing needs to be adjusted for the proportion of that placement taken up by participating shareholders. CEG and Synergies, without presenting any empirical evidence on the matter, assume that there are zero participating shareholders, in spite of the strong conceptual argument that this will not be the case. Each of the presented estimates of indirect costs therefore systematically overestimates the true extent of the wealth transfer.

CEG’s arguments also fail on a longitudinal analysis of shareholder returns. Consider an investor who currently holds no shares of the benchmark firm but intends to do so by taking part in the next capital raising by the firm. According to the CEG perspective, at the next capital raising the investor must be paid (via underpricing) by the existing shareholders to take up the share and become a new shareholder. At subsequent capital raisings, this shareholder is now an existing shareholder, and must pay (via underpricing) other prospective investors to become new shareholders. This continues until the existing shareholder decides they no longer want to hold shares of the benchmark firm and sells out.

At each capital raising, the exact loss or gain to a particular shareholder depends on the extent of underpricing, the relative proportion of shares offered to new shareholders, and whether they themselves take part in providing new capital. The aggregate amount paid (via underpricing) to new shareholders must be paid (via underpricing) by existing shareholders. Further, every existing shareholder was initially a new shareholder—so this is a zero sum game. Identification of a subset of shareholders who are net losers from the underpricing transfers necessarily involves the identification of a complementary subset of shareholders who are net winners. Any claim for an increased return on capital to compensate the net losers should be consequent on a claim to reduce the return on capital to those who are net winners from underpricing.

CEG stated that the AER’s position:¹⁶¹⁸

¹⁶¹⁵ The AER notes that the exact impact of underpricing depends on the proportion of new shares taken up by the participating shareholder relative to the proportion of new shares issued by the firm as a whole. Nonetheless, this does not affect the core of this argument.

¹⁶¹⁶ This point is specifically acknowledged by CEG. CEG, *Debt and equity raising costs*, June 2009, paragraph 55, p. 16.

¹⁶¹⁷ CEG, *Debt and equity raising costs*, June 2009, paragraphs 79–80, p. 21

¹⁶¹⁸ CEG, *Debt and equity raising costs*, June 2009, p. 23–28; Synergies, *Debt and equity raising costs*, May 2009, pp. 21–26.

...is untenable can be shown by reflecting upon a hypothetical efficient regulated business which is considering raising equity in two ways:

- method 1 involves direct [sic] costs (cheques written by the company) of \$5m and indirect costs borne by shareholders of \$5m; or
- method 2 involves direct costs of \$1m and indirect costs borne by shareholders of \$12m.

Clearly, method 1 is most efficient with the lowest total cost (\$10m). Method 2, with \$13m in total costs is higher cost. However, method 2 has the lowest direct costs. How would the AER and Professor Handley suggest that the NER requires the firm to be compensated?

The question appears difficult to answer only because of the incorrect phrasing of the problem. Following the reasoning above, the indirect component must consist of personal transaction costs (for this example, set at \$1 million) and wealth transfer between groups of shareholders. A correct description of the problem then becomes:

- Method one involves:
 - \$5 million in direct costs
 - \$1 million in indirect costs, reflecting personal transaction costs of shareholders
 - \$4 million in indirect costs that reflects transfers from one group of shareholders to another group of shareholders.
- Method two involves:
 - \$1 million in direct costs
 - \$1 million in indirect costs, reflecting personal transaction costs of shareholders
 - \$11 million in indirect costs, reflecting transfers from one group of shareholders to another group of shareholders.

The AER therefore considers that the NER requires the efficient equity raising cost be \$1 million, using method two. The shareholders will recover their personal transaction costs via the return on equity, since this is consistent with the estimation of the MRP as an input to the CAPM. The transfer represents no net cost to the business, or to shareholders in aggregate, and requires no compensation at the firm level. Further, to the extent that shareholders appear in both transfer groups—that is, they are existing shareholders who participate in the capital raising—there is no net cost on the individual shareholder level. Finally, to the extent that repeated capital raisings occur across time, the transfer groups will have identical membership—since all new shareholders become existing shareholders—and there will be no net cost on the individual shareholder level.

AER conclusion on indirect equity raising costs

The AER has considered the material presented by the DNSPs and their consultants on the inclusion of indirect equity raising costs. The AER concludes that:

- there is no evidence to support the claim that indirect costs require compensation simply because of their relationship with direct costs
- the DNSPs (and their consultants) have not correctly interpreted the regulatory framework with regard to:
 - the consideration of consistent formulae, cash flows and parameters
 - the consideration of the benchmark firm outcome, not individual shareholder outcomes
- an indirect cost allowance for personal transaction costs is not consistent with a cost of equity estimated in the presence of personal transaction costs. That is, compensation for personal transaction costs is already included in the market risk premium and therefore the cost of equity
- an indirect cost allowance for wealth transfer is not consistent with consideration of the benchmark firm outcome (as opposed to individual shareholder outcomes) since there is no loss of wealth in aggregate. Further, the indirect cost allowance would not eliminate the existence of wealth transfers in any case.

Having regard to the benchmark expenditure that would be incurred by an efficient DNSP, and other opex factors (or capex factors as the case may be), the AER considers that the proposed indirect equity raising costs do not reasonably reflect efficient costs of achieving the opex objectives (or capex objectives as the case may be) and the costs that a prudent operator in the circumstances of the relevant DNSP would require to achieve the objectives.¹⁶¹⁹ There is therefore no reasonable basis for provision of such an allowance.

J.5.3 Direct equity raising costs

Regulatory proposals

The Qld DNSPs proposed direct costs for:¹⁶²⁰

- dividend reinvestment plans of 2 per cent of the equity raised via this method
- SEOs of 4.5 per cent of equity raised via this method.

ETSA Utilities proposed direct costs for:¹⁶²¹

¹⁶¹⁹ NER, clause 6.5.6(c), 6.5.6(e), 6.5.7(c) and 6.5.7(e).

¹⁶²⁰ Energex did not explicitly adopt these unit costs, but simply endorsed the Synergies report which contained them. Energex, *Regulatory proposal*, July 2009, p. 174. Ergon Energy, *Regulatory proposal*, July 2009, p. 307.

¹⁶²¹ ETSA Utilities, *Regulatory proposal*, July 2009, p. 139.

- dividend reinvestment plans of 1 per cent of the equity raised via this method
- SEOs of 4 per cent of equity raised via this method.

AER considerations

Retained earnings

The AER notes that the DNSPs have adopted the AER's approach for the cash flow analysis, which does not include any direct cost associated with the use of retained earnings to fund the equity requirements of the benchmark firm.

Consistent with its April 2009 final decisions,¹⁶²² the AER accepts this aspect of the DNSPs' proposals and considers that there is no direct cost to be applied in the use of retained earnings.

Status as a government owned entity

In its submission, the EUAA stated that the equity raising costs proposed by Energex seem unreasonable. The EUAA noted:¹⁶²³

Energex is owned by the Queensland Government, who arranges Energex's debt and provides Energex's equity. The AER should not allow any expenditure in this area unless there is clear demonstration that benefits will exceed costs.

The AER notes the equity raising allowance is not set based on the actual expenditure incurred by Energex (or any other specific DNSP). Consideration is given to the circumstances of the relevant DNSP,¹⁶²⁴ as well as the benchmark expenditure that would be incurred by an efficient DNSP.¹⁶²⁵ The AER also considers competitive neutrality principles for the treatment of government owned firms.¹⁶²⁶ The AER considers that an efficient firm may incur benchmark direct equity raising costs.

Dividend reinvestment plans

Synergies submitted that Associate Professor Handley referred to the [direct] costs of dividend reinvestment plans being between zero and 2.5 per cent.¹⁶²⁷ The AER notes the lower bound of this range was based on a 2004 ACG report, which estimated that underwriting costs for dividend reinvestment plans were likely to be zero.¹⁶²⁸ The upper bound of this range was based on a report prepared by Tony Carlton, which claimed underwriting costs for dividend reinvestment plans were being charged at 2.5 per cent.¹⁶²⁹ However, Associate Professor Handley stated in his report that

¹⁶²² AER, *Final decision: ACT DNSP*, 28 April 2009, pp. 247–250.

¹⁶²³ EUAA, *Submission to the AER*, August 2009, p. 20.

¹⁶²⁴ NER, clause 6.5.6(c)(2) and 6.5.7(c)(2).

¹⁶²⁵ NER, clause 6.5.6(e)(4) and 6.5.7(e)(4).

¹⁶²⁶ AER, *Final decision, ACT DNSP*, 28 April 2009, p. 235.

¹⁶²⁷ Synergies, *Debt and Equity Raising Costs*, May 2009, p. 29.

¹⁶²⁸ Handley, *Raising debt and equity*, 12 April 2009, pp. 26–27.

¹⁶²⁹ Handley, *Raising debt and equity*, 12 April 2009, pp. 27–28. Source paper is Carlton, T., *Indirect costs of equity and debt raising: Report prepared for Energy Australia*, 12 January 2009.

Carlton's claim that underwriting fees of 2.5 per cent were being charged should be investigated further.¹⁶³⁰

The AER noted in its April 2009 final decisions that Carlton's claim in respect of underwriting costs being charged at 2.5 per cent only applied to the equity raised from underwriters. The AER also noted that in the one example provided by Carlton as evidence that underwriting fees were being charged at 2.5 per cent, only about half the equity raised from dividend reinvestment was from underwriters and the rest was from existing shareholders.¹⁶³¹ Therefore, Carlton's estimate of the direct costs of raising equity from dividend reinvestment should only be about half of 2.5 per cent of total funds raised through dividend reinvestment plans.

Synergies submitted that based on its analysis of the costs incurred by ConnectEast, RiverCity Motorway Group, Brisconnections and David Jones in recent dividend reinvestment plans, the costs associated with dividend reinvestments are between 2 and 2.5 per cent. Synergies has not provided details of its analysis or the data it used to arrive at this estimate of the direct costs of raising equity through dividend reinvestment plans.

However, Synergies' estimate of dividend reinvestment plan costs appears to apply the cost of underwriting fees measured as a percentage of each share underwritten, to the total equity raised through dividend reinvestment plans. As discussed above, the AER considers that the percentage of shares actually taken up by underwriters should be taken into account when estimating the direct cost of raising equity through dividend reinvestment plans. Furthermore, the AER notes that if the total direct costs of dividend reinvestment plans were applied to the total equity raised through dividend reinvestment, the examples provided by Synergies would support an estimate of around 1 per cent.¹⁶³²

In particular, the AER notes that in relation to ConnectEast, the total direct costs of two recent dividend reinvestment plans as a percentage of total equity raised were between 1.2 and 1.4 per cent of total equity raised. In relation to RiverCity Motorway Group, the corresponding figure is approximately 0.6 per cent.

Synergies also submitted that non-renounceable rights issues are very similar to dividend reinvestment plans. Based on this assumption, Synergies analysed the underwriting costs of non-renounceable rights issues by six different companies, including three energy companies.¹⁶³³ Synergies submitted that this analysis supports an estimate of 2 per cent for underwriting costs associated with dividend reinvestment plans.

¹⁶³⁰ Handley, *Raising debt and equity*, 12 April 2009, p. 28, footnote 62.

¹⁶³¹ See for example AER, *Final decision, ACT DNSP*, 28 April 2009, p. 257; AER, *Final decision, NSW DNSPs*, 28 April 2009, p. 585.

¹⁶³² Where total direct costs are measured as total underwriter fees.

¹⁶³³ The AER notes that Synergies report states that this analysis was conducted on DRPs, but the AER has assumed that this is a typographical error and the analysis was actually conducted on non-renounceable rights issues, see Synergies, *Debt and equity raising costs*, May 2009, p. 30.

The AER does not consider it appropriate to use the direct costs of non–renounceable rights issues to estimate the direct costs of dividend reinvestment plans.¹⁶³⁴ Although non–renounceable rights issues may have similar characteristics to dividend reinvestment plans from an individual shareholder’s perspective, the direct costs are not identical from the firm’s perspective.

The AER considers that, from the firm’s perspective, the direct costs of non–renounceable rights issues are likely to be more similar to the direct costs of renounceable rights issues than the direct costs of dividend reinvestment plans.¹⁶³⁵ Therefore, a distinction should not be made between non–renounceable and renounceable rights issues when estimating the direct costs of rights issues generally. Based on this assessment, the AER has considered the direct costs of rights issues (incorporating both renounceable and non–renounceable) along with the direct costs of other SEOs to estimate the equity raising costs allowance, which is discussed below.

In its April 2009 final decisions, the AER analysed the costs of raising equity using a sample of five dividend reinvestment plans by three Australian energy network businesses.¹⁶³⁶ Based on this analysis the AER estimated a median direct cost of raising equity of 0.75 per cent of the total equity raised through dividend reinvestment plans. The AER considered that a conservative estimate of 1 per cent was appropriate.¹⁶³⁷

The AER considers that it is appropriate to limit the sample to energy network businesses or firms with similar characteristics to a regulated business (that is, stable cash flows). However, given the small sample size, in order to achieve a more statistically robust estimate the AER has also estimated the direct costs of dividend reinvestment plans using a sample of 20 ASX listed Australian firms, as shown in table J.3. Based on the larger sample the median direct cost of raising equity through dividend reinvestment plans is 0.54 per cent.

¹⁶³⁴ As noted by Synergies in its report ‘merging data on DRPs (dividend reinvestment plans) and rights issues should be undertaken with extreme caution.’ See Synergies, *Debt and equity raising costs*, May 2009, p. 30 and CEG, *Debt and equity raising costs*, June 2009, p. 15.

¹⁶³⁵ For example, the two forms of rights issue will be implemented in a similar manner, but dividend reinvestment plans are implemented in a different manner.

¹⁶³⁶ AER, *Final decision, ACT DNSP*, 28 April 2009, p. 258 and AER, *Final decision, NSW DNSPs*, 28 April 2009, p. 585.

¹⁶³⁷ AER, *Final decision, ACT DNSP*, 28 April 2009, p. 258 and AER, *Final decision, NSW DNSPs*, 28 April 2009, p. 585

Table J.3: Firms included in AER analysis of direct costs of dividend reinvestment plans (2007–08 and 2008–09)

AGL Energy Ltd	Templeton Global
Macquarie Office Trust	Essa Australia
Rivercity Motorway Group	Whitefield Ltd
Goodman Fielder.	Nomad Modular Building
Ramsay Health Care	APN European Retail Property Group
Energy Developments	Mirrabooka Investments Ltd
Cedar Woods Property	CVC Ltd
AMCIL Ltd	Tag Pacific Ltd
Ausdrill Ltd	Australian Leaders Fund
Ironbark Capital Ltd	Oaks Hotels & Resorts Ltd.

Source: AER analysis of Bloomberg, annual reports.

Note: The AER identified candidate firms using equity raising figures from Bloomberg, then consulted the company's annual reports for the last two years to identify direct equity issuance costs associated with dividend reinvestment plans.

Based on the analysis above, which suggests a median direct cost in the range of 0.54 to 0.75 per cent, the AER considers that 1 per cent remains a conservative estimate. Therefore, consistent with its previous decisions, the AER considers that 1 per cent is an appropriate estimate of the direct costs of raising equity through dividend reinvestment plans for the purposes of this draft decision.

Seasoned equity offerings—academic estimates

CEG stated that the direct cost of equity raising should be set with regard to the estimates in a paper by Lee, Lochhead, Ritter and Zhou.¹⁶³⁸ Lee et al. investigated the costs of raising capital in the USA between 1990 and 1994, and reported an average gross spread for utility companies of 4.01 per cent.¹⁶³⁹ Lee et al. also reported an average gross spread for non–utilities of 5.57 per cent, which CEG noted is broadly consistent with the estimate of Kim, Palia and Saunders of 5.01 per cent for the same category.¹⁶⁴⁰ To the base underwriting spread for utilities, Lee et al. added 0.91 per cent for other direct costs, to estimate a total direct equity raising costs of 4.92 per cent.¹⁶⁴¹

¹⁶³⁸ CEG, *Debt and equity raising costs*, June 2009, paragraph 90, p. 23; citing Lee, I., Lochhead, S., Ritter, J. and Zhao, Q., *The Costs of Raising Capital*, *The Journal of Financial Research*, Spring 1996, vol. 19(1), pp. 59–74.

¹⁶³⁹ Lee et al., *The Costs of Raising Capital*, Spring 1996, table 2, p. 64.

¹⁶⁴⁰ CEG, *Debt and equity raising costs*, June 2009, paragraph 92, p. 24. Source data is from Lee et al., *The Costs of Raising Capital*, Spring 1996, table 2, p. 64; and Kim, Palia and Saunders, *Debt and equity underwriting spreads*, 2003, pp. 9, 34 (table 1).

¹⁶⁴¹ Lee et al., *The Costs of Raising Capital*, Spring 1996, table 2, p. 64.

CEG also noted that a more conservative estimate based on the Lee et al. study would be to exclude small equity raisings (those below US\$20 million), which brings the total direct equity raising costs down to 4.06 per cent (comprising 3.60 per cent underwriting spread and 0.46 per cent for other direct costs).¹⁶⁴²

The AER observes that the Lee et al. paper showed that direct equity costs, as percentage of total equity raised, decreased as the equity raising size increased.¹⁶⁴³ A more conservative estimate from the same paper would be to only include equity raisings larger than US\$100 million, which would further lower the direct equity raising costs to 3.07 per cent (2.89 per cent for underwriting spread, and 0.18 per cent for other direct costs).¹⁶⁴⁴ The AER notes that this would be a more appropriate equity issue size for Energex, Ergon Energy and ETSA Utilities and that the benchmark firm has some ability to aggregate its equity raising activities within the regulatory control period to minimise costs. Further, the AER observes that if CEG considered the Saunders et al. estimate (5.57 per cent) to be ‘broadly consistent’ with the Lee et al. estimate for the same category (5.01 per cent) then it should similarly find the Lee et al. estimate of 3.07 per cent (based on a more appropriate equity issue size) was ‘broadly consistent’ with the AER’s estimate of 2.75 per cent.¹⁶⁴⁵

The AER considers that the circumstances of firms studied in the Lee et al. paper do not closely match the circumstances of the benchmark firm. Aside from the concerns with country source of data (US firms instead of Australian firms) and age of the results (now more than 15 years old), the Lee et al. study excludes all rights issues, which is considered to be the principal means of raising external equity for the benchmark firm. The AER has previously set out this issue and cautioned reliance on the Lee et al. study.¹⁶⁴⁶

CEG also stated that the costs of raising equity in the US are lower than the costs of raising equity in Australia—so even if firms in the US are not a perfect match for the benchmark firm, the Lee et al. estimates based on US data provide a lower bound estimate for the Australian costs.¹⁶⁴⁷ The AER considers that, although it may be plausible that the costs of raising equity are lower in the US, this does not imply that the costs of equity for every category of firm and every type of equity raising will be lower.¹⁶⁴⁸

¹⁶⁴² CEG, *Debt and equity raising costs*, June 2009, paragraph 90, p. 23; citing Lee et al., *The Costs of Raising Capital*, Spring 1996, table 2, p. 64.

¹⁶⁴³ Lee et al., *The Costs of Raising Capital*, Spring 1996, pp. 63–64.

¹⁶⁴⁴ AER analysis of Lee et al., *The Costs of Raising Capital*, Spring 1996, table 2, p. 64.

¹⁶⁴⁵ There is 11.2 per cent difference between the Saunders et al. and Lee et al. estimates for gross underwriting costs for non–utilities, and 11.6 per cent difference between the AER (April 2009) and the Lee et al. estimates for total underwriting costs for utilities raising over \$100 million.

¹⁶⁴⁶ AER, *Final decision, ACT DNSP*, April 2009, p. 250.

¹⁶⁴⁷ CEG, *Debt and equity raising costs*, June 2009, paragraphs 93–95, pp. 24–25.

¹⁶⁴⁸ The AER notes that the only paper cited by CEG that deals with international comparison of equity costs is that by Bortolotti, Megginson and Smart. This deals with global capital flows at a very high level, such that it is difficult to make any comparison with the circumstances of the benchmark firm. For example, it makes no attempt to assess the cost of capital for utilities or regulated firms, and aggregates all placements and rights issues. See Bortolotti, Megginson and Smart, *Accelerated seasoned equity underwritings*, 2008.

CEG stated that the exclusion of rights issues is not an issue because placements are the more common form of equity raising in the Australian market.¹⁶⁴⁹ The AER considers that CEG is assuming that the market average will automatically define the situation of the benchmark firm, and that this error has been addressed in section J.5.1 of this draft decision. Further, the most relevant evidence on equity raising activities by Australian utilities in the circumstances of the benchmark firm indicates that rights issues are the predominant form of equity raising.

Accordingly, the AER considers that the estimate of direct raising costs from the Lee et al. study can not be relied on to determine the benchmark direct cost of equity raising.

Seasoned equity offerings—updated analysis

Synergies submitted that, based on its analysis of 87 Australian and 75 US equity issues, it has estimated direct equity raising costs to be 4.5 per cent of total capital raised.¹⁶⁵⁰

The AER has previously considered equity raising costs data from the US in its April 2009 final decisions.¹⁶⁵¹ It considers that data from the US equity market is of limited relevance in estimating the direct costs of raising equity in Australia for the benchmark firm. Consistent with its previous decisions, the AER considers that data from the Australian equity market provides a more reliable basis for estimating direct equity raising costs for the purposes of this draft decision. Therefore, only data from the Australian equity market should be used to determine the benchmark equity raising costs allowance.

In addition to incorporating US equity issues, Synergies' estimate of direct equity raising costs included the costs from IPOs and SEOs.¹⁶⁵² The AER notes that IPO costs represent the cost of establishing a new firm, whereas SEOs represent the costs of raising additional equity capital and therefore is more appropriate in the context of establishing benchmark equity raising costs associated with capital expenditure.

The purpose for which regulated firms need to raise additional equity capital is to fund new capital expenditure, subsequent to the establishment of the initial regulatory asset base. Therefore the AER considers that the equity raising costs allowance should be based on an estimate of the costs of raising additional equity capital (SEO costs), not the costs of establishing a new firm (IPO costs). This is consistent with previous advice from ACG, which recommended that the costs of raising equity for the purpose of funding new investment should be estimated using the transactions costs of SEOs.¹⁶⁵³

The AER also notes that the direct costs of IPOs are likely to be significantly higher than the direct costs of SEOs. In 2004 ACG advised that although the fee structure of SEOs mirrors that of IPOs, the tasks involved with SEOs are likely to be much less

¹⁶⁴⁹ CEG, *Debt and equity raising costs*, June 2009, paragraphs 96–97, p. 25.

¹⁶⁵⁰ Synergies, *Debt and equity raising costs*, May 2009, pp. 27–29

¹⁶⁵¹ AER, *Final decision, ACT DNSP*, 28 April 2009, p. 250.

¹⁶⁵² Synergies, *Debt and equity raising costs*, May 2009, p. 27

¹⁶⁵³ ACG, *Debt and equity raising costs*, December 2004, p. xii.

complex.¹⁶⁵⁴ ACG advised that direct costs related to SEOs are likely to be much lower than direct costs related to IPOs.¹⁶⁵⁵

For the reasons outlined above, the AER does not consider that Synergies' estimate of the direct costs of raising equity was arrived at on a reasonable basis due to the inclusion of inappropriate data (US equity issues as well as costs of IPOs).

CEG submitted that direct equity raising costs are 3 per cent of the total amount raised.¹⁶⁵⁶ This is based on a report by Lee et al. and recent equity raisings by three existing Australian utilities—Envestra, DUET and SP AusNet. As discussed above, the AER does not consider that the Lee et al. report provides a reliable basis for estimating direct equity raising costs for the purposes of this draft decision. Further, although the selection of three recent equity raisings by Australian utilities provides anecdotal evidence of equity raising costs, this does not form a robust data set from which to establish a benchmark allowance.

The AER is not satisfied that the estimates of direct equity raising costs submitted by Synergies and CEG are reasonable. The AER considers that the methodology it used in the April 2009 final decisions remains the best approach for estimating direct equity raising costs.¹⁶⁵⁷ This methodology is based on that recommended by ACG in its 2004 report prepared for the ACCC¹⁶⁵⁸ and uses the costs of SEOs issued by Australian firms to estimate direct equity raising costs.

In its April 2009 final decisions the AER estimated the direct costs of raising equity to be 2.75 per cent.¹⁶⁵⁹ The AER has updated this estimate using the latest available data on 30 SEOs issued by Australian firms between 2007 and 2009.

The AER notes that the recommended methodology in the 2004 ACG report was to use a sample of Australian companies with stable cash flows to estimate the direct equity raising costs for regulated businesses. However, the AER considers that while it is preferable to analyse only those companies with similar characteristics to a regulated firm (for example, stable cash flows), this would result in a very small sample size using the available data—such as the three firms referred to by CEG.

To achieve a more statistically robust basis for estimating direct equity raising costs the AER broadened its sample to 30 Australian firms that have issued SEOs recently. The AER considers that a sample of 30 firms provides a more statistically robust basis for estimating equity raising costs and also likely to provide a conservative estimate. Based on this updated sample, the AER estimates a median cost of 3 per cent for direct equity raising costs.

¹⁶⁵⁴ ACG, *Debt and equity raising costs*, December 2004, p. 65.

¹⁶⁵⁵ ACG, *Debt and equity raising costs*, December 2004, p. 65.

¹⁶⁵⁶ CEG, *Debt and equity raising costs*, June 2009, p. 26.

¹⁶⁵⁷ AER, *Final decision, ACT DNSP*, 28 April 2009, pp. 251, 261.

¹⁶⁵⁸ ACG, *Debt and equity raising costs*, December 2004.

¹⁶⁵⁹ AER, *Final decision, ACT DNSP*, 28 April 2009, p. 261 and AER, *Final decision, NSW DNSPs*, 28 April 2009, p. 588.

AER conclusion on direct equity raising costs

The AER has considered the material presented by the DNSPs and their consultants on the best estimate of direct equity raising costs. The AER concludes that:

- based on the AER's analysis of recent dividend reinvestment plans in Australia, the best estimate of direct costs of raising equity through dividend reinvestment plans is 1 per cent
- the available academic estimates of direct equity raising costs for SEOs involve a differing context to the circumstances of the benchmark firm (in country, time period, firm type) and therefore do not provide a relevant estimate
- based on the AER's analysis of recent SEOs in Australia, the best estimate of direct equity raising costs for SEOs is 3 per cent of the equity raised via this method.

On this basis, the AER considers that the use of these unit costs represent the best estimate of direct equity raising costs for the benchmark firm. These unit costs should be used in the context of the AER's methodology from the April 2009 final decisions, which is based on benchmark cash flow analysis to determine the amount of retained earnings and the magnitude of the dividend reinvestment plan.

J.5.4 Benchmark cash flow analysis—implementation of the equity raising cost allowance

As discussed above, the DNSPs have adopted the benchmark cash flow analysis—as determined by the AER in its April 2009 final decisions—in order to determine the amount of equity raising required. In summary, the analysis calculated the amount of retained earnings (taking account of dividend reinvestment plans), which was deducted from the equity portion of forecast capex.

The AER has undertaken an assessment of the benchmark cash flows calculated in the PTRM by the DNSPs to model the equity raising cost allowance and considers some adjustments (as well as the adjustments to unit costs for dividend reinvestment plans and SEOs as set out in this appendix) are required. The details of the adjustments specific to each DNSP are set out in chapter 8 of the draft decisions.

Equity raising and capex forecasts

The AER notes the submission from the ECCSA regarding the interaction between approved capex and equity raising costs for ETSA Utilities. The AER considers that the application of its methodology ensures that the allowed equity raising costs reflect the approved forecast capex.¹⁶⁶⁰

Amortisation of allowance

In its April 2009 final decisions, the AER adopted the approach to treat an allowance for equity raising costs as part of the RAB—that is, to amortise the allowance.¹⁶⁶¹

¹⁶⁶⁰ ECCSA, *ETSA Utilities application, a response*, August 2009, p. 37.

¹⁶⁶¹ See for example AER, *Final decision, TransGrid transmission determination 2009–10 to 2013–14*, pp. 96–97, 246.

This approach was consistent with the AER's previous treatment in the 2006 Powerlink transmission determination, which considered the benchmark cash flow analysis to determine the extent of equity raising cost associated with forecast capex for the first time. The AER considers that although the amortisation treatment is equivalent in NPV terms to a perpetuity income stream provided as part of the opex allowance, there are several advantages to this approach:

- it ensures a transparent link between the equity raising cost and the capex that required the equity raising
- it eases administrative implementation in future regulatory resets
- it implements the recommendation made by ACG.¹⁶⁶²

In accordance with the AER's previous approach, the benchmark equity raising cost allowances for the DNSPs will be amortised over the weighted average standard life of their RABs to provide the equity raising cost allowance associated with forecast capex in the next regulatory control period.

Details of the AER considerations specific to the Qld DNSPs' proposed treatment are set out in chapter 8 of the Queensland draft decision.

J.6 AER conclusion

The AER has considered the arguments made by the DNSPs on equity raising costs, including consultant reports and submissions.

The AER considers that there is no evidence that the benchmark firm must use equity raising methods in market average proportions. The most relevant analysis of equity raising methods supports the AER methodology, with a hierarchy of retained earnings and dividend reinvestment plans, then SEOs (placements and rights issues).

The AER considers that there is no basis on which to accept an allowance for indirect equity raising costs. The AER notes that personal transaction costs are not an appropriate justification for an allowance under the regulatory framework. Similarly, the AER notes that arguments relying on wealth transfer between investors are not appropriate justification for an allowance, since the regulatory framework specifies investor return in aggregate.

The AER considers that the best estimate of the direct costs of raising equity varies depending on the method employed:

- 0 per cent of equity obtained via retained earnings
- 1 per cent of equity obtained via dividend reinvestment plans
- 3 per cent of equity obtained via external SEO (placements and rights issues).

¹⁶⁶² ACG, *Debt and equity raising costs*, December 2004, p. xiii

These benchmark unit costs include updates to previously applied figures based on recent data. The AER rejects the alternative estimates of direct equity raising costs proposed by the DNSPs on the grounds that they deviate substantially from the equity raising conditions relevant to the benchmark firm.

For each DNSP, the AER will apply the benchmark cash flow analysis and determine the amount that will be available from retained earnings and the amount reinvested via dividend reinvestment plans, and the amount of external equity required for the next regulatory control period from SEOs (placements and rights issues). Each component will be added to arrive at a total benchmark equity raising cost for each DNSP.

K. Benchmark debt raising costs for the completion method – CONFIDENTIAL

L. Annual reporting requirements

In a number of chapters of this draft decision, the AER has indicated that ETSA Utilities will have to be report certain information on an annual basis. This information is generally required for the administration of incentive schemes, to ensure compliance with approved control mechanisms, to monitor ETSA Utilities' performance or for annual pricing purposes, amongst other reasons.

The purpose of this appendix is to provide a summary of the information ETSA Utilities must report during the next regulatory control period to ensure compliance with the distribution determination. The AER anticipates that some of the information indicated in this appendix would be reported annually for the purpose of ring fencing compliance or as part of a DNSP's annual pricing proposal. Otherwise, the AER anticipates that this information will be collected via a Regulatory Information Instrument at or around the time that annual ring fencing compliance reports are submitted by ETSA Utilities.

Information contained in the table below has been drawn from the chapters in this draft decision.

Table L.1: Annual reporting requirements

Reference	Reporting requirement	Purpose
Annual inflation adjustment – chapter 4.	The percentage change in the Australian Bureau of Statistics (ABS) Consumer Price Index (CPI) All Groups, Weighted Average of Eight Capital Cities from March in regulatory year $t - 2$ to March in regulatory year $t - 1$.	Adjustment to the weighted average price cap (WAPC) each year.
Actual demand quantities – chapter 4.	Customer numbers, energy consumption, maximum demand broken down by tariff class.	Calculation of the WAPC each year.
Undergrounding allowance – chapter 4.	A proposed undergrounding allowance, including sufficient detail for the AER to be satisfied that clause 7.3(c)(ii) of the Electricity Pricing Order (SA).	Calculation of the WAPC each year.

Chapter reference	Reporting requirement	Purpose
Transitional EDPD factors (K,Q, PU & SI and any under/over recovery of ESCOSA’s demand management allowance) – chapter 4.	A calculation of these transitional adjustments, including sufficient detailed information for the AER to confirm the calculations.	Calculation of the WAPC each year.
TUOS unders & overs – chapter 4.	Information as set out in Appendix F of this draft decision.	Calculation of TUOS charges each year.
Ring fencing compliance – chapter 4.	Annual ring fencing compliance reporting against the applicable guideline and approved cost allocation method.	To ensure compliance with the NER ring fencing requirements and to ensure the correct application of the control mechanisms for standard and alternative control services.
	Report annual performance against the following parameters, consistent with section 3.1 of the national distribution STPIS: <ul style="list-style-type: none"> • Unplanned SAIDI • Unplanned SAIFI • MAIFI, as it is able to provide this information. 	The AER will use the unplanned SAIDI, unplanned SAIFI and the customer service performance to determine: <ul style="list-style-type: none"> • the penalties or rewards to apply by reference to the relevant performance targets set out at table 12.4 of the this draft decision. • the targets to apply for the 2015–20 regulatory control period.
Service target performance incentive scheme – chapter 12.	ETSA Utilities is to divide its electricity network into segments by network type as specified in clause 3.1(c) of the national distribution STPIS for the purposes of reporting this information. ETSA Utilities is also to report performance against the customer service parameter ‘telephone answering’. Section 5.4 of the national distribution STPIS must be observed in determining events to be excluded for the purposes of reporting performance under the 2010–15 data collection process.	

Chapter reference (chapter, page)	Reporting requirement	Purpose
Demand management incentive scheme – chapter 14.	<p>Submission of annual report, as per requirements set out in AER, <i>DMIS – Energex, Ergon Energy and ETSA Utilities, October 2008</i>. Required information includes:</p> <ul style="list-style-type: none"> • DMIA expenditure for each year of the next regulatory control period. Details of reporting requirements are set out in section 3.1.4 of the DMIS. • Calculations and explanations of foregone revenues for each year of the next regulatory control period. Details of reporting requirements are set out in section 3.2.4 of the DMIS. 	<p>Ex–post assessment of expenditure and compliance with the DMIA criteria, and approval of expenditures.</p> <p>Ex–post assessment of revenues foregone as a result of implementation of demand management projects approved under the DMIA, and approval of compensation.</p>
Self insurance – appendix H.	<p>When a self insurance event occurs, the following information should be reported to the AER as soon as practically possible:</p> <ul style="list-style-type: none"> • the nature of the event • the total cost of the event, identifying: <ul style="list-style-type: none"> • costs that are provided for by external funding such as insurance or where the cost is paid for by third parties • costs that are covered by self insurance • costs to be passed through • other costs, for example costs that do not relate to the regulated assets. • independently verifiable information/report to justify the estimated total cost of the event and funding components of the total cost that were used to cover the loss. 	<p>The AER considers a prudent service provider should disclose self insurance events each regulatory year and provide a brief description of the nature of the self insurance event in accordance with AASB 137 in its regulatory and audited financial accounts.</p> <p>AASB 137 requires the business, where practical, to also disclose an estimate of the financial effect of the liability, an indication of the uncertainties relating to the amount or timing of the outflow, and the possibility of any reimbursement.</p>

Chapter reference (chapter, page)	Reporting requirement	Purpose
Efficiency Benefit Sharing Scheme – chapter 13.	<p>For each year, actual opex expenditure excluding the following cost categories:</p> <ul style="list-style-type: none"> • actual debt raising costs • actual self insurance costs • actual insurance costs • actual superannuation costs relating to defined benefit and retirement schemes • actual Demand Management Incentive Allowance expenditure • actual non-network alternatives costs • actual costs of recognised pass through events • actual costs of other specific uncontrollable costs incurred by ETSA Utilities, which ETSA Utilities proposes the AER considers for exclusion after assessment against the relevant principles expressed in clause 6.6.1(j) of the NER and the EBSS. 	<p>Identify the proposed actual opex amounts attributable to each approved excluded cost category incurred during each regulatory year</p> <p>Identify the actual total controllable opex for EBSS purposes after these exclusions</p> <p>Determine the rolling carryover amount each year for the application of the AER’s EBSS.</p>
Pass through – chapter 15.	<p>List and describe any pass through events during the reporting year.</p>	<p>Confirm whether or not a positive or negative pass through event has occurred during the reporting period (a regulatory year).</p> <p>This reporting requirement is in addition to the requirements of the NER.</p>

M. Submissions

The AER received submissions on ETSA Utilities' regulatory proposal from the following interested parties:

Business SA

Council on the Ageing Seniors Voice

Electricity Consumers Coalition of SA

Energy Users Association of Australia

ETSA Utilities

Origin Energy Retail Ltd

SA Water Corporation

South Australian Council of Social Service

The Hon Patrick Conlon MP

Trans Tasman Energy Group

Uniting Care Wesley

The AER also received a submission from AGL Energy Ltd regarding the negotiated distribution service criteria.