The Allen Consulting Group

MEMORANDUM

To: The Essential Services Commission of South Australia

Date: 28 June 2006

Re: Management fee in the Envestra-OEAM Operating Agreement

A. Introduction and Summary

Purpose

The purpose of this memorandum is to provide advice to the Essential Services Commission of South Australia on certain matters relevant to its consideration of how to treat the network management fee component of the price that Envestra pays to Origin Energy Asset Management (OEAM) under its Operating and Management Agreement (Operating Agreement) when the Commission determines the allowance for Envestra's operating expenses for the next regulatory period.[1] Under the Operating Agreement, Envestra and OEAM, Envestra pays OEAM for the costs that OEAM incurs in providing the contracted services to Envestra (with the scope of costs defined in the Operating Agreement), plus a fee that is described as a 'network management fee' that is set at 3 per cent of Envestra's distribution revenue. Under the Operating Agreement, OEAM undertakes the majority of the functions associated with the Envestra's provision of gas distribution services, including:

- operating the network;
- undertaking maintenance;
- planning the development of the network;
- planning the renewal/refurbishment of the network;
- undertaking the physical investments required (i.e. laying new and replacement pipes, meters, etc or contracting for and project managing these works); and
- providing certain administrative functions.

The structure of the memorandum is as follows. First, the 'in principle' issue of why an economic regulator may have a concern with the management fee element of the charge is considered. The specific guidance from the Gas Code is also considered in this context. Secondly, the specific issues that were raised by Envestra in response to the Commission's Draft Decision are then considered specifically.

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[1] This memorandum uses the more normal terminology in regulatory economics (like 'regulatory period') rather than the specific usage in the Gas Code (like 'access arrangement period') for the purposes of readability, except where specific reference to the Gas Code terminology is necessary.

Summary

- The operating expenditure that was incurred over the last regulatory period in providing distribution services is relevant to the Commission's assessment of Envestra's reference tariffs to the extent that measured (historical) expenditure is an input into determining the allowance for expenditure for the next regulatory period. Whether this is so will depend upon the method the Commission employs to derive or assess the operating expenditure allowance. In our experience, the historically incurred operating expenditure provides a useful starting point for determining the new allowance, provided that the historically incurred expenditure is measured appropriately.

- The Operating Agreement was concluded at a time when both Envestra and OEAM were wholly owned by Boral Ltd. In this circumstance, Boral would have had an incentive to fixed a higher price under the Operating Agreement than necessary, given the (then) impending introduction of cost-based regulation for gas distributors. The existence of this incentive provides the Commission with a valid reason to question whether the contract price should be accepted as consistent with the cost that would be 'incurred by a prudent service provider, acting efficiently, … and to achieve the lowest sustainable cost' – and indeed, could support a presumption that the contract price is not consistent with the 'lowest sustainable cost'.[2]

- Given the conclusion that it cannot be inferred that the price Envestra pays under the Operating Agreement is consistent with the cost that would be 'incurred by a prudent service provider, acting efficiently, … and to achieve the lowest sustainable cost', we conclude that the most appropriate proxy for this cost is the cost that was incurred by the contractor to provide the service (i.e. OEAM). The cost that is incurred by the contractor would provide an indication of the price that should have been charged for the service, and/or the cost that would be incurred if a service provider provided the service in-house (which should set an upper limit to the price that it should be prepared to pay if it contracts for the services instead).

- The most appropriate method for calculating such a cost is the method that is used to determine generally the cost that is incurred by regulated business – i.e. the sum of return on and return of investment and operating expenses (the 'building block approach').

  — Provided that all costs are included in this calculation (including the recovery of overheads and an appropriate rate of return on invested capital), then there would be no requirement for a further margin, just as margins are not included when applying the building block approach to calculate regulated charges. Indeed, if a regulator permitted a margin to be added to an outsourcing arrangement to a related party (i.e. where the margin was included after all costs are recovered), then strong incentives would be provided for regulated firms to set up related party outsourcing arrangements, which at best is likely

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[2] Requirements under section 8.37 of the Gas Code.

to leave the cost of production unchanged but raise prices to customers, but may also lead to higher production costs (and hence reduce productive efficiency).

— If it is established that the cost-based component of the charge that Envestra pays to OEAM recovers all of the cost incurred by OEAM (or by Origin Energy on its behalf) to provide the services under the Operating Agreement, then it could be concluded that the network-management fee component should be excluded from what is measured as the operating expenditure that was incurred in the last regulatory period to provide distribution services. We note that what is recovered under the cost-based component of the charge is a question of fact, and dependent upon the scope of the relevant clauses in the Operating Agreement.

— One exception to the above conclusion relates to any risk or working capital requirement that is imposed upon OEAM through the Operating Agreement. We note that these would be valid items that require compensation and could give rise to a need for OEAM to receive a margin (i.e. if these elements are not included in the definition of costs in the relevant clause, discussed above). However, these are also matters where the Commission needs to decide whether the revenue requirement for Envestra already includes compensation for these risks or financing costs. If it does, then Envestra would have merely transferred these risks to OEAM and the payment to OEAM should come out of the compensation that Envestra has received for risks or financing costs it will no longer incur.

- Envestra (or other persons making submissions on its behalf) have made certain arguments that would question the conclusions above, namely:

— *That OEAM's cost structure would not be available to Envestra, and so it is below the 'lowest sustainable cost'.*

  We do not consider the facts sitting behind this argument to be made out, given that Envestra is a large business in itself (operating significant networks in South Australia, Queensland and Victoria).

  In any event, while we would question whether the Gas Code would permit the regulator to conclude that a prudent service provider should undertake structural changes (e.g. a merger) in order to lower its costs (and hence to judge 'lowest sustainable cost' against this standard), a conscious decision was made by the service provider (then Boral Ltd) in 1997 to create two separate entities. We consider that it may be open to the Commission to conclude that the decision to separate the entities in 1997 was not the decision of a prudent service provider acting so as to minimise cost, and hence to judge lowest sustainable cost against the counterfactual of the entities being integrated.

— *Margins are commonplace in competitive markets, and so should be included in the calculation of cost / deeming of the price.*

  As discussed above, whether a margin above cost is ever required depends upon the definition of cost (i.e. whether it includes overheads, a return on

invested capital, a return on other financing costs and compensation for risks borne). The definition of cost under the Operating Agreement is likely to be unique to that agreement, and hence the omitted elements (if any) that may justify a margin are likely to be equally unique. Accordingly, we do not consider simple comparisons with other firms to be illuminating.

— *The network management fee makes up for certain excluded costs.*

This would justify an upward adjustment to the measured costs to take account of those excluded costs. However, whether there are indeed excluded costs is a question of fact, which depends upon the scope of the cost-based element of the charge under the Operations Agreement. We also note that the appropriate adjustment for any excluded costs is to add those costs to the cost allowance, rather than to add the network management fee.

B. 'In principle' assessment of the management fee component of the contract price

Objective and context

The general objective when assessing the expenditure allowance that is to be reflected in regulated prices is to ensure that the forecast is consistent, to the extent reasonable or practicable, with technical efficiency. Technical efficiency, in turn, means that the expenditure is minimised for a given level and quality of output. Amongst other things, this condition means that efficient purchasing decisions are made, including that the choice between provision of certain activities in-house or by outsourcing results in the lowest cost to the firm. The specific provision in the Gas Code (section 8.37) that governs the assessment of the allowance for operating expenditure is broadly consistent with this general objective discussed above:

> A Reference Tariff may provide for the recovery of all Non Capital Costs (or forecast Non Capital Costs, as relevant) except for any such costs that would not be incurred by a prudent Service Provider, acting efficiently, in accordance with accepted and good industry practice, and to achieve the lowest sustainable cost of delivering the Reference Service.

While the actual decision the Commission needs to make is on is the allowance for operating expenditure for the next regulatory period, the matter that is addressed in this memorandum is how the cost that was (or should have been) incurred over a *historical period* should be measured. The relevance for the Commission's decision of the management fee in the Operating Agreement, therefore, depends upon how the Commission takes account of historical expenditures when assessing the proposed allowance for future operating expenditure. Two polar methods may be contemplated (although variants or combinations are possible) which are as follows:

- If it was decided that a future allowance could be determined without reference to the actual historical operating and maintenance expenditure – for example, through some form of benchmarking analysis – then the matters in this memorandum would be irrelevant to the Commission's considerations.[3] Provided

[3] In contrast, as benchmarking draws upon the actual expenditures of other businesses, the Commission would need to assure itself that the actual expenditures for all of the businesses in the benchmarking sample were recorded or measured appropriately.

the sample of firms were considered to operate efficiently (or statistical methods were used to allow for possible inefficiency) and the estimation error was low, then the regulator would demonstrate compliance with the regulatory objective noted above.

- If it was decided that the future allowance should be determined as an amount that takes the historical actual expenditure (as appropriately measured) as a starting point and then adjusts this amount to take account of such matters as changes in obligations and the expected trend in expenditure (i.e. driven by expected productivity growth, market growth and expected input price inflation), then the matters in this memorandum would translate one-for-one into the operating expenditure allowance. By providing the businesses with strong financial incentives to minimise cost,[4] then the Commission can also validly infer that the business's actual level of expenditure at the end of the regulatory period was approximately efficient, and hence meets the regulatory objective noted above.

Our view is that the former method is not a robust method for determining an allowance for operating expenditure for a regulated utility. Even where there is a deep pool of companies with reliable data, the predictions of efficient expenditure (i.e. after allowing for factors that cause costs to vary between networks) inevitably have a high degree of imprecision, as does the assumption that the model for predicting expenditure is the 'true' model. In Australia, we do not even have a deep pool of reliable data.

Rather, our view is that the regulated entity's actual level of expenditure at the end of a regulatory period provides the most reliable starting point from which to judge what needs to be spent (and what will be spent) in the next regulatory period, and that financial incentives are the most robust tool for uncovering the efficient cost of operating the relevant network. Under this method, the measured expenditure during the preceding regulatory period would translate one-for-one into the new expenditure allowance.

Importantly, however, that while financial incentives can provide regulated businesses with an incentive to minimise their actual expenditure, it is not the case that those businesses will have an incentive to disclose truthfully to the regulator what they spend. Rather, where disclosed (or reported) expenditure is used to determine the new expenditure forecast, businesses would unambiguously gain if they were able to convince the regulator that they had spent more than was actually the case.[5] The role of regulatory accounting rules is to address this incentive to misreport information, for example, by specifying rules about how costs should be allocated between regulated

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[4] This is achieved through the combination of price caps and an efficiency carry-over for operating expenditure.

[5] Under the financial incentive arrangements noted above, if a regulated entity disclosed that it had spent a higher amount than was actually the case, it would be penalised (i.e. this would be treated as a loss of efficiency) by not being able to raise prices to recover the additional expenditure for 5 years. However, if no additional expenditure actually had been undertaken (but rather, the entity had merely misallocated cost to the regulated business), then no real penalty would accrue. However, after the initial 5 year period, the entity would be allowed to pass on the (non-existent) higher cost to customers, and hence make a windfall gain.

and non-regulated activities. The issue addressed in this memorandum derives from this inherent incentive to convince the regulator that it costs more to run the regulated business than is actually the case – in this particular case through the design of outsourcing arrangements.

We also note here that while the matter that we have been asked to advise upon relates to the treatment of the management fee element in the Operating Agreement, the question that ultimately needs to be addressed is whether the total operating expenditure that incurred by Envestra was either appropriately measured or efficient. However, the fact that the management fee element (at face value, at least) is unrelated to expenditure outlays by either Envestra or OEAM makes it of particular importance to the matters raised in this memorandum.

The basic structure and components of the Operating Agreement

Prior to discussing the regulatory economic issues associated with the Operating Agreement, it is relevant to understand the key features of this contract. This description is based upon the statement in the prospectus for Envestra dated 21 July 1997, and a review of the statements that Envestra has made in its various annual reports. These key features are as follows.

- *Parties to the agreement and time of creation* – the Operating Agreement was originally between Envestra and Boral Energy Asset Management (BEAM), and was dated 30 July 1997. At the time of the Operating Agreement was entered into, both Envestra and Boral Energy Asset Management were wholly owned by Boral Ltd. Envestra was listed as a separate entity on 21 August 1997.[6] Boral then subsequently renamed itself as Origin Energy and separated off its other activities into new listed entity (which was then named Boral Ltd.), and Boral Energy Asset Management changed its name to Origin Energy Asset Management (OEAM). The cross ownership between the relevant entities is now not substantial, with Origin Energy owning 17.53 per cent of Envestra, but with Envestra having another major shareholder (CKI, which also owns 17.53 per cent) that does not hold an interest in Origin Energy.

- *Appointment and term* – BEAM (now OEAM) was appointed exclusively to operate and manage the networks on behalf of Envestra, which at the time were the former Boral South Australian, Queensland and Northern Territory networks. The Operating Agreement operates in perpetuity unless terminated by agreement or as permitted under the Operating Agreement (which is limited to circumstances of substantial breach by either party). There is no scope under the Operating Agreement for Envestra to seek an alternative supplier for some or all of the services provided by OEAM.

- *Contractual charges* – Envestra is required to pay all costs reasonably incurred or outlaid by OEAM in performance of its obligations under the Operating Agreement, including government charges, redundancy costs and system use gas. In addition, Envestra is required to pay a management fee that is now 3 per cent of

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[6] Source: ASX website, 2 June 2006.

revenue (where revenue includes capital contributions), incentive bonuses where earned in respect of average connection costs and controllable operating expenses.

- *Budgets and reports* – procedures were created for the annual budgeting of operating and capital expenditure. OEAM is required to provide Envestra with monthly reports tracking actual expenditure against the forecasts and information on haulage volumes and revenue, and Envestra is required to provide an annual report on OEAM's performance under the Operating Agreement.

In addition, there were two other agreements put in place between Envestra and Boral that were also dated 30 June 1997, which were as follows.

- *Haulage agreement* – which was the agreement between Boral (now Origin Energy) and Envestra for Boral's haulage of gas through the Envestra networks.

- *Relationship agreement* – which was the agreement between Boral (now Origin Energy) and Envestra regulating the basis under which the parties would work together in relation to future activities. The key features of the agreement include an agreement to cooperate in future acquisitions, a first right of refusal for BEAM to operate any pipeline acquired by Envestra where Envestra chose not to be the operator, and first rights of refusal related to asset sales.

The elements of the above summary that are relevant to the discussion below are as follows.

- While there may be little cross-ownership (or, more relevantly, control) between the entities now, when the terms of the Operating Agreement between Envestra and OEAM were struck, both entities were wholly owned by the same entity (Boral Ltd). We note here that Envestra has stated that a different negotiating team and board acted for Envestra and BEAM when the Operating Agreement was negotiated[7] – the relevance of this point is discussed further below.

- Envestra does not have the opportunity to seek alternative sources for the operation and maintenance of the network. While it states in its Annual Report that OEAM contracts out for some of its activities in order to permit benchmarking of OEAM's performance, this would not enable the price paid for the whole service, or the network management fee, to be tested.

- There are robust procedures in place for Envestra to monitor OEAM's performance under the Operating Agreement.

It is important to note here, however, that the Operating Agreement that was originally set between Envestra and BEAM (and that now exists between Envestra and OEAM) has a number of desirable features, especially when compared to other 'contracting out' arrangements that exist in the regulated-utility sector.

In particular, the majority of the charge from OEAM to Envestra reflects the costs incurred by Origin Energy, and it is understood (based upon previous work for the

[7] Envestra submission, p.6.

Victorian ESC) that the systems for collecting and reporting upon these costs are robust. Indeed, it may well be the case that the tension created between Envestra and Origin Energy has led to the reported costs for Envestra not suffering from the multitude of problems that have beset regulatory accounting for many other utilities.

'First principles' analysis of concerns with outsourcing arrangements

Introduction

The Commission should be aware that it has only been recently that Australian regulators have considered closely the implications for utility regulation of the recent trend by utilities to outsource the majority of the utility operations to an independent party (i.e. rather than performing the activities in-house). It is reasonable to expect that significant additional debate will occur over the matters discussed in this memorandum before a settled position is reached.[8] The discussion that is presented here draws heavily on the Victorian ESC's recent discussion of this matter during its recent review of the distribution price controls for the Victorian electricity distributors,[9] and the subsequent consideration of this matter by the Victorian Appeal Panel. As will be noted below, while the Appeal Panel upheld the Victorian ESC's decision on this matter,[10] it did not endorse all of the Victorian ESC's reasoning.

In presenting the analysis of how to treat outsourcing contracts when measuring what a regulated entity has actually spent, it is useful to separate the inquiry into two parts, which are:

- the threshold issue of whether there is any valid reason to question the contract price for the outsourced activity (hereafter referred to as the 'contractor service') in the first place; and then

- if a valid reason is found to question the contract price for the contractor service, what alternatives are available to the contract price or, alternatively, what sort of justification for the contract price would be considered to be appropriate.

Is there a valid reason to question the contract price?

The Victorian ESC posed (in effect) that there were two situations in which it would be valid to question the contract price for a contractor service, which are as follows:

- where the contract for the contractor service was not negotiated at arms length, which is used here to refer to the situation where the parties who struck the relevant agreement may have not had the incentive to minimise the price for a

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[8] This memorandum only considers the issues that outsourcing arrangements have for price regulation. However, these arrangements may also have implications for other regulatory requirements – for example, whether the licensed entity actually has the capacity to provide the regulated services if all operations are contracted out, and so whether such arrangements may negate the protection that licensing requirements provide to the security of supply.

[9] Essential Services Commission (Victoria), 2005, Electricity Distribution Price Review 2006-2010: Final Decision Volume 1 – Statement of Purpose and Reasons, October, section 5.2.5.

[10] Appeal Panel (Victoria), 2006, Reasons for Decision on United Energy's Appeal.

given level of service (i.e. the incentives would have been different to that of independent entities);[11] and

- the service is one for which a 'market' does not exist.

These are discussed in turn.

NOT AN ARMS LENGTH ARRANGEMENT

The first of the potential objections to a contract price is the more straightforward.

To take the polar case, where the contract price is 'negotiated' between two entities that have common ownership, economic principles would predict that an efficient firm (i.e. one that maximises profit to its shareholders) would maximise the joint profit across the activities, rather than to seek to maximise the profit of each activity independently. Where one of the activities is subject to cost-based regulation, and the other activity is providing a service to the regulated activity, the joint profit is likely to be maximised by negotiating a higher price than otherwise for the contractor service (even though this would not be profit maximising for the regulated entity if it acted on a stand-alone basis). A simple example of how such an arrangement may work is as follows.

- The contractor service costs \$10 to provide, but is charged to the regulated entity for \$20;
- If the regulated entity is able to pass its contract price through to the final customers, then:
  - the business unit that provides the contractor service earns an additional profit of \$10 (i.e. the difference between the price it pays and cost);
  - the regulated entity is able to recover the costs it incurs to provide the regulated service (including the inflated price for the contractor service), and so its profit is unchanged even after it pays the inflated price for the contractor service;
  - thus, the combined entity makes an additional profit \$10 compared to the situation where it only recovered cost; and
  - customers would pay \$10 extra, compared to the situation where prices only recovered cost.
- If the regulated entity thought that the pass through of the contract price may be challenged, then the worse case scenario would be that:

[11] The legal definition of 'at arms length' is '(of parties to the transaction) not connected in such a way as to bring into question the ability of one to act independently of the other' (CCH Macquarie Concise Dictionary of Modern Law). However, while I have used several legal terms in this memorandum, the relevant question is what can be inferred about the incentives of the parties.

— the regulated entity was only allowed to pass through the cost that its related entity incurred in providing the contractor service – and so the regulated entity would pay $20 for the service but pass through $10 to customers, and so make a loss of $10; but

— the contractor business unit would still make a profit of $10, and so the joint profit of the firm would just be unchanged as a result of putting in place the non-arms length arrangement.

Thus, by charging a higher amount for the contractor service, the firm has the prospect of making additional profits (i.e. depending upon how the regulator treats such arrangements), but with no downside risk to the firm overall, and hence the firm would have an incentive to pursue such a strategy. In contrast, if the regulated business acted alone, it would not willingly enter into such an arrangement – at best, the regulated business would break even, but there would also be a chance that it would fail to recover cost.[12]

The rationale for the regulator to question a contract price in this situation, therefore, is that:[13]

- the regulated entity has a financial incentive to enter arrangements to maximise the joint profit of the overall entity;
- the profit of the overall entity would be increased by paying a higher price (at the margin) for services provided by a firm that is under common ownership; and
- therefore, an in principle case exists for questioning whether the decision to outsource the relevant service and/or the price for the outsourced service would be consistent with the cost that would be 'incurred by a prudent service provider, acting efficiently, … and to achieve the lowest sustainable cost' of providing the regulated service – indeed, a valid case exists for adopting a presumption that the price paid under the arrangement was not consistent with the 'lowest sustainable cost'.

As discussed above, when the Operating Agreement was concluded, the both of the entities were wholly owned by Boral Ltd. Accordingly, we consider that this common ownership at the time provides sufficient question for the Commission to question whether the signing of the contract and/or the contract price is consistent with the 'lowest sustainable cost' of providing the regulated services.

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[12] Firms would also have an incentive to structure the arrangements in a way so as to minimise the risk of a regulator overturning the arrangement, for example, by not structuring arrangements that are not too obviously affected by the incentive problems discussed.

[13] While the discussion above illustrates the incentives that exist where there is common ownership between the regulated business and the contractor, and an incentive for the regulated entity to pay more than necessary may also exist where ownership is not completely common – and could even exist (in theory at least) where there was no commonality of ownership at all. That said, pursuing the strategy described above would become more difficult to negotiate and keep from detection as the extent of commonality of ownership decreased.

We note here that Envestra has argued that it would not, at the present, have an incentive to pay OEAM more than necessary to provide the outsourced services. We agree with this point but do not consider it to be relevant. It is the ownership that existed at the time the contract was concluded that is relevant, given that Envestra has not had the opportunity to seek an alternative supplier of the outsourcing services since its ownership has changed. We note that incentive discussed above for the contractor and regulated entity under common ownership for agree to an inflated price for the outsourcing service exist even if the parent entity intends to sell one or both of the entities. In this situation, the strategy for the parent company would be to:

- put in place a contract between the (wholly owned) contractor and the regulated entity that has a price of $20 (whereas it may cost $10);
- sell both entities so that they thereafter are independent entities (but see the note below); in which case
- the additional profit that is expected from this arrangement would be capitalised into the sale price of the contractor entity, while any risk associated with the possibility that the regulator may disallow the additional element would result in a lower price than otherwise for the regulated entity – but the combined sale price would be higher than would have been the case in the absence of the arrangement.

SERVICE NOT PROVIDED IN A 'MARKET'

The second and more difficult and potentially contentious of the arguments the Victorian ESC proposed for questioning the price in an outsourcing arrangement is where (in the Victorian ESC's words) the service is 'not provided in a market'. The particular concerns the Victorian ESC's had was a situation where the service was idiosyncratic (for example, operating the whole business) and hence a market price could not be readily observed (compared to, say, the market price for copying paper or gas meters) and a competitive tender was not likely to be feasible (i.e. any bids for such a contract inevitably would be cost-based or have a significant cost pass-through element, limiting the capacity to use competition to discipline the price that is bid). In this situation, if an outsourcing deal was concluded for a fixed price, then that contract price would merely reflect an amount that the two parties decided was in their joint interests, and need not reflect the efficient cost of providing the service.

It is important to note that this concern about whether a contract price may provide a valid proxy for cost would exist even where the regulated entity and the contractor have no common ownership (i.e. there would be no necessity to demonstrate non-arms length dealings).

The Commission should be aware, however, that the Victorian ESC's more general concern with significant outsourcing arrangements was questioned by the Appeal Panel when the matter was taken to merit review,[14] and there are several difficulties

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[14] Regarding the line of argument set out above, the Appeal Panel stated that '[h]ad the comments on markets and market testing contained in the Determination formed the sole or principal basis for the approach taken to calculating the Appellant's operating expenses there may well be some reason for concluding that this constituted an error in the Determination': Appeal Panel, Reasons for Decision on United Energy's Appeal, para.21. The Appeal Panel was convinced, however, that

in the argument that have not as yet been explored in the necessary depth (for example, the precise point at which an outsourcing contract becomes questionable). However, for the reasons noted already above, the Commission need not consider whether it should have a concern with large outsourcing arrangements even in the absence of concerns of a non arms length relation given that there was common ownership of Envestra and OEAM at the time the Operating Agreement was entered into.

If the contract price can be questioned, how should operating expenses be measured?

As noted above, if there are reasonable grounds to question whether the decision to outsource the relevant service and/or the contract price for the outsourcing arrangement is consistent with the 'lowest sustainable cost' of providing services, it then needs to be considered what should be used instead when measuring the regulated entity's actual operating expenses. This question, in turn, can be divided into two parts, which is:

- whether, notwithstanding the perverse incentives of the regulated entity to enter into an outsourcing arrangement with inflated prices, the contract price may nevertheless be acceptable; and
- if the answer to the first question is no, what should instead be used as the measure of operating expenses?

MAY THE CONTRACT PRICE NEVERTHELESS BE APPROPRIATE?

There is a range of methods that, in principle, could be used to justify that the price charged to a related party is something that may nonetheless be observed in a competitive market, and hence is appropriate. These include the use of some form of benchmarking study, or actually running a competitive tender for the service and only selecting the related party if wins the tender process.

The view taken by the Victorian ESC, which is a view that we share, is that the only justification that is considered sufficient for the price in such an outsourcing arrangement is where a competitive tender process has been run and the related party was successful and where the bid price was a primary selection criterion. The reason for requiring nothing less than a competitive tendering process to justify the price in a contract with a related party – and excluding benchmarking type studies in particular – is that only the former provides a truly objective demonstration that the price being charged by the related party is better than could be obtained otherwise for the outsourcing service. We note that benchmarking studies in particular require a substantial degree of judgement to interpret the market evidence and to apply it to the circumstances of a particular case. Clearly, however, a competitive tendering process could be manipulated – for example, by specifying the requirements in a manner that

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the existence of non-arms length arrangements (or rather, in the Panel's words, 'a reasonable basis for questioning whether incentives to enter arrangements on other than an arms length basis existed': ibid, para.23) justified looking beyond the contract price, and so dismissed United Energy's appeal.

effectively ruled out competitors – and so minimum standards for such a process would be needed.

In the case of the Operating Agreement, the outsourcing arrangement was never put out to a formal competitive tender, and so this exception would not apply. Envestra has argued that Boral created its own 'competitive tension' in the negotiation of the operation agreement by appointing different law firms to argue the case for the two entities, and that, in any event, the arrangement would have to survive scrutiny of the financial markets. While we are not aware of the precise form of the 'competitive tension' that was attempted over the negotiation of the Operating Agreement, we would question its effectiveness given the strong financial incentives on Boral Ltd regarding the contract price, which has already been discussed above. Moreover, it would appear from reading the various statements by Envestra that a number of prior decisions had already been made before the negotiating teams commenced their work, namely that:

- Envestra would be separated into a stand alone entity; and
- the relevant technical personnel from the gas distribution business would remain with Boral Ltd, so that the only options available to Envestra would be to outsource from Boral Ltd, outsource from some other suitable qualified entity (which entity Envestra pointed out did not exist) or to assemble its own staff from anew to operate the gas networks – so that outsourcing from Boral Ltd was the only practicable choice to the team negotiating the Operating Agreement.

To the extent that these prior decisions were made, it would mean that matters of central importance to the efficiency of the Operating Agreement would already have been settled before the separate negotiating terms commenced their work on the agreement, which in turn may have precluded the teams from determining the most efficient arrangements for the future operation of the networks, even if they had the incentive to do so.

REMAINING OPTION – EXAMINE THE COST INCURRED BY THE CONTRACTOR

If a competitive tendering process has not been concluded, and benchmarking is excluded as a means of justifying a price, then the only remaining measure of the cost that was incurred to provide functions that were outsourced is the cost that was incurred by the contractor to provide that service.

The use of the contractor's cost is justified by two separate, but closely related propositions, which are that:

- the cost to the contractor of providing the services provides an estimate of the efficient price for the provision of those services (in the same way that cost of service is used to estimate the efficient price for the regulated entity); and
- the cost to the contractor of providing the services provides an estimate of the cost for which the service could have been provided in-house, and a prudent service provider would not be willing to pay more for an outsourced service than the cost at which it could provide the service in-house.

For the case of the Operating Agreement, the fact that reference should be made to the costs incurred by the contractor is not a contentious issue,[15] given that the Operating Agreement is essentially a cost pass through arrangement plus the network management fee.[16] Rather, the contentious issue is how the cost incurred by the contractor (OEAM) should be measured – and, in particular, whether the cost to the contractor providing the services should include the management fee.

The correct method in principle for determining the total cost that is incurred by the provider of outsourced service should be the same as that used to determine the cost that is incurred by the regulated business – that is, a 'return on' and 'return of' any assets employed and a recovery of operating expenses (company taxation being assumed to be included in one of the above). If this calculation did not correctly calculate the costs incurred by the contractor, then it should also be questioned for the regulated business.

Whether or not a margin should be included in addition to the cost-based element of the charge that Envestra pays to OEAM depends upon the scope of the cost-based element of the charge. If it is the case that the cost-based element of the charge includes all of the costs incurred by or for OEAM, including a return on invested capital and overheads, then the Commission could validly conclude that the network management fee should be excluded from the measure of the actual operating expenses incurred over the previous regulatory period. If this conclusion can be made, the Commission could also conclude that:

- the efficient price for the outsourced service would exclude the management fee, and should not have been paid by a prudent service provider; and
- the cost of in-house provision would not include the fee (as it does not relate to any costs that are actually incurred), and hence a prudent provider would not agree to pay an amount that includes the fee for the outsourced service.

Note, however, that whether the cost-based element of the charge includes all of the costs incurred by or for OEAM, is a question of fact that will depend on the scope of the relevant clauses of the Operating Agreement.

We note more generally that if a margin was permitted to be added to the operating costs incurred by a related party contractor, then a strong incentive would be created for every regulated business to restructure into an asset owner and contractor in order to obtain the margin that would become available if it restructured (but not if it retained its functions in-house). As well as raising prices to customers, this would provide a perverse incentive for corporate restructurings that were not prompted by efficiency improvements, and could even raise the cost of production. This is because the incentive on the owner of the regulated entity would be to:

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[15] The outsourcing contract between United Energy and Alinta that the ESCV assessed in its recent review was a fixed price for the operating services, rather than a cost-plus arrangement like the Envestra-OEAM contract.

[16] As discussed, incentive arrangements also exist to reward OEAM for finding efficiency gains.

- decide to outsource the functions even if it was lower cost to undertake those functions in house;

- appoint its related party as the contractor, even if there were other lower cost providers available; and

- to set a price in the contract between regulated entity and the contractor that overstated the cost to the contractor of providing the services.

These outcomes would breach a number of the objectives for the setting of reference tariffs, including the objective that revenue should recover efficient cost (section 8.1(a)), the objective that the outcome of a competitive market should be replicated (section 8.1(b), noting that firms in competitive markets would select the least cost provider of services) and the objective of efficiency in the level and structure of prices (section 8.1(e), noting the potential for the service provider to incur costs that exceed the minimum cost).

Indeed, if it is the case that the network management fee is a margin that is added after the total cost incurred has been recovered (we note that this is a question of fact that must be established), then the restructuring of Boral Ltd into Envestra and BEAM (now OEAM) would have had the immediate effect of raising Envestra's recorded expenditure even though the costs incurred in providing the regulated service had not changed. That is:

- prior to the restructuring, the costs recorded for the regulated entity would have been calculated as an allocation of the integrated entity's costs (which, under the assumption noted above, is the cost-based element of the Operating Agreement); and

- the day after the Operating Agreement was entered into, Envestra's reported costs would have comprised the allocated cost from Boral Ltd (as before), plus the management fee.[17]

The line of argument presented above is subject to a number of potential criticisms, which have been raised by Envestra (or submitters on its behalf), which are that:

- if Envestra had to provide the services itself, it may not be able to achieve a cost equal to the price charged by OEAM as the latter may be able to achieve economies of scale and scope that Envestra could not; and

- margins are commonplace in competitive markets, and hence should be included as part of the contractor's cost/proxy price.

Turning to the first of these matters, if it was demonstrated that there were economies available from having a combined distributor and operator, the relevant issue would be whether the Commission is required to take the current industry configuration as given (i.e. a separate Envestra and OEAM) when judging whether the 'lowest

17 Addition resources may also be required to monitor the outsourcing agreement, which would be a real increase in cost incurred.

sustainable cost' would have been achieved by in-house provision. The alternative would be that the Commission could judge the operating allowance to be above the 'lowest sustainable cost' on the grounds that the industry configuration was inefficient. This is a difficult question.

- We consider it reasonably standard practice for regulators to take the relevant industry configuration as given when setting regulated prices. That is, while regulation may often provide incentives for regulated entities to merge where this may reduce cost, we are not aware of any case where a regulator has reduced the allowance for operating expenditure on the basis that the regulated entity was inefficient because it could find cost savings if it merged with another entity.

- However, the facts of the current matter are quite unique, in that the current industry configuration (in particular, the separation of Envestra and Origin) was a decision of the service provider (then Boral Ltd.) in 1997. If the Commission concludes that the efficiency of Envestra's costs should be judged against that of an integrated entity, it is equivalent to stating that the decision of the service provider to de-merge the entities in 1997 was not a prudent decision.

That said, we do not consider it to be established that OEAM is able to achieve cost savings as a result of its other activities that Envestra could not achieve if it provided the same services in-house. The material that Envestra provided on this matter – namely, a confidential report by Price Waterhouse Coopers – compared the OEAM contract price to what Envestra South Australia would incur if the South Australian network was operated on a stand-alone basis. However, Envestra also operates large networks in Victoria and Queensland, and it is not unreasonable for the counterfactual to assume the in-house provision of services would be provided jointly across all of its activities, thus permitting much or all of the economies ascribed to OEAM in the to be achieved without any mergers or other restructuring of Envestra (this matter is discussed further in section C, below).

Turning to the question of how the situation of OEAM would compare to that of firms in competitive markets where margins are observed, we note that whether a margin is earned will depend upon how cost is defined in the first place. An outcome of a competitive market that is in long run equilibrium is that revenue should recover cost, with cost including a return on investments made (including investments in building a brand or other intangible assets), a return on other financing costs and compensation for risks incurred. Thus, whether a margin would be expected to be earned over cost over the long term will depends upon how cost is measured.

- If cost is merely measured as direct operating costs incurred (and hence excludes overheads, a return on investments, compensation for risk etc), then a margin will be expected.

- If, however, cost includes every conceivable economic cost, then no additional margin should be expected.

It is for this reason that we would not consider it feasible to benchmark the network management fee to the margins that are earned by other firms. In particular, unless the definition of cost that is used to derive the relevant benchmarks matches perfectly the definition of the cost-based element of the charge that Envestra pays to OEAM, then

the comparison will be invalid. Rather, we consider the most appropriate method for determining whether part or all of the network management fee should be included in the measured operating expenses for the last regulatory period is to ascertain directly whether there are costs incurred by OEAM (or Origin Energy) that are omitted, which after all, merely reflects the inquiry that would have been undertaken if both entities were still owned by the same entity.

Lastly, we note here two exceptions to the proposition noted above that the cost that is ascribed to the Operating Agreement should reflect all of the cost that is incurred by OEAM (or Origin Energy), namely in relation to:

- compensation for risk; and
- the cost of working capital.

The approach the Commission has adopted to determine the revenue requirement for Envestra follows the standard approach that other regulators adopt, which in those other circumstances is intended to provide compensation for all risk incurred by the distributor and for the cost associated with working capital. If this assumption is considered appropriate in relation to Envestra (which is an assumption that we consider is likely to be justified), then Envestra would have already been compensated for the risks and working capital costs that it had transferred to OEAM. In this case, it would be appropriate for the payment to OEAM to provide compensation to these matters to come from the compensation that Envestra has received already for these risks or financing costs it will no longer bear.

C. Response to Matters Raised by Envestra on the Draft Decision

In response, Envestra has argued that the Commission's conclusions are in error for a number of reasons, which include that:

- it is incorrect to characterise the fee as being set on a non-arms length basis;
- the fee relates to services that are provided to Envestra by parts of Origin that are outside of OEAM, the cost of which is not included in the direct costs incurred by OEAM;
- the total charge that is paid by Envestra to OEAM for the provision of the contracted services is:
  - lower than the cost that Envestra could provide the services itself; and
  - is the lowest sustainable cost of providing the service; and
- the setting of the management fee that is based upon revenue provides OEAM with an appropriate incentive to promote the utilisation of gas distribution services in South Australia.

These arguments of Envestra's are considered below. Envestra has also argued that the Commission's approach in its draft decision was inconsistent with how it dealt

with what was argued to be a similar matter in relation to ETSA Utilities, which is not considered in this memorandum.

Whether the contract was 'non-arms length'

One of Envestra's main arguments against the Commission's draft decision is that the Envestra and OEAM are not related parties. It has referred to the fact that there is little cross-ownership (or at least no cross-control) between the entities.

This matter has already been addressed at length above. In particular, we note that the ownership situation at the time the contract was determined is the relevant question, and it is a matter of public record that the Operating Agreement between Envestra and OEAM was created at a time when the activities performed by Envestra and OEAM were part of Boral Ltd. Of course, since the time of the creation of the entities, their incentives would have changed and Envestra would likely have no incentive now to overpay for the operating services provided by OEAM. However, the contract that was set originally would appear to provide Envestra with little scope to terminate the arrangement and seek to reduce the charges or to tender for the services.

Accordingly, we consider it accurate to conclude that the terms of the Operating Agreement were negotiated between related parties and therefore can be considered a non-arms length arrangement.

Other services provided by Origin

As discussed above, one of Envestra's arguments is that there are costs incurred in the provision of the services by OEAM to Envestra that are not captured in the cost-based element of the charge from OEAM to Envestra. These costs are said to be captured by the management fee element. The costs it has identified comprise:

- input and advice that OEAM receives from Origin management that are outside of OEAM;
- the 'return on assets' component of the IT that OEAM uses to provide the services to Envestra;
- a working capital allowance; and
- the indemnity that OEAM gives to Envestra for claims against the latter that are the fault of OEAM.

Our comments on these are as follows.

- *Input and advice and return on IT assets* – as noted above, if, in principle, there have been costs incurred by OEAM or Origin Energy that are attributable to providing the relevant service to Envestra, then those costs should be included in the calculation of the operating cost over the last regulatory period. However, as discussed already above, this is a question of fact that depends upon the scope of the definition of cost in the relevant provisions of the Operating Agreement, and is not examined further here.

- *Working capital* – as noted above, the preferred means of dealing with working capital is to calculate the required allowance on the assumption that Envestra performed the OEAM tasks itself (this is the assumption we have adopted in work for the Commission on this matter), which is how we would interpret the effect of the Commission's final decision. Any working capital effect is then a matter between Envestra and OEAM and would not justify any additional charge to customers. Our calculation suggests that OEAM's cost of working capital under the Operating Agreement would justify a margin of approximately 0.35 per cent (as a proportion of operating expenses, which is about 0.14 per cent of distribution revenue), but to reiterate the comment above, this amount should come from the compensation for working capital that Envestra has already received.

- *Indemnity/risk* – likewise, any indemnity from OEAM to Envestra is a zero-sum game (the cost to OEAM is a benefit to Envestra). If the compensation that Envestra receives for risk is assessed on the assumption that Envestra provides the whole of the service – which is how we would interpret the Commission's draft decision – then it is a matter between Envestra and OEAM as to how the risks are shared, and the compensation that Envestra provides to OEAM for this risk should come from the compensation that Envestra has already received.

For the avoidance of doubt, even if is decided that there were material cost-omissions from the OEAM cost-based charge, the application of a fee that is unrelated to the omitted cost is not the appropriate means of remedying the situation.

Whether the cost (inclusive of the management fee) is the lowest sustainable cost

Envestra has also argued that the charge that it pays to OEAM for the operating services (inclusive of the management fee) is:

- lower than the cost that Envestra could provide the service itself (as OEAM is able to reap economies from it being part of a larger entity) – a report from Price Waterhouse Coopers was provided to support this position; and

- the lowest sustainable cost of providing the service – benchmarking from WorleyParsons and Benchmark Economics was provided to support this view.

Our comments on these matters are as follows.

- *Stand alone cost of provision* – Price Waterhouse Coopers has estimated the additional cost that Envestra South Australia would incur in providing its corporate overhead service (i.e. not network operation / maintenance) compared to the OEAM allocated costs, and finds that additional people would be required to ensure that the entity has a normal or appropriate organisational structure. We have two concerns with the Price Waterhouse Coopers analysis.

  — First, its actual methodology is based very much upon judgement, and the benchmarking analysis that is performed draws upon confidential information and is therefore not open to any scrutiny. It is difficult, therefore, to provide a well informed review of the robustness of its analysis.

— Secondly, the counterfactual posed by Price Waterhouse Coopers (and Envestra) is that, in the absence of the Operating Agreement, *Envestra South Australia* would operate as a stand alone entity. It is against this the stand-alone structure that the current contract charge (inclusive of network management fee) was adjudged to be a lower cost option. However, we do not consider the counterfactual that is posed by Price Waterhouse Coopers to be compelling – and therefore do consider that its conclusion that the Operating Agreement represents the 'lowest sustainable cost' necessarily to follow.

  : Envestra also operates large networks in Victoria and Queensland. Accordingly, if Envestra hypothetically was to operate on a stand alone basis, then it surely would share corporate overheads across its networks. This would allow it to achieve much or all of the economies of scale in corporate overheads that were found by Price Waterhouse Coopers. We note that, where regulated businesses operate across industries or jurisdictions, it is standard practice for the total costs to be allocated between the businesses and for any economies of scale to be passed on to customers through lower prices (at least after any period of retention of efficiency gains has passed).

  : As discussed already above, the Operating Agreement only exists because the service provider (Boral Ltd at the time) decided to separate the network business (as Envestra) and to create the Operating Agreement. If this structural change had not been made, then both Envestra and Origin would have remained as parts of a larger corporate entity (Boral Ltd) and the operating expenses in the network's business's regulatory accounts would comprise an allocation of the costs incurred by the company as a whole. This would have resulted in the benefit from economies of scale/scope being passed onto customers, much as they are where a distributor co-owned with a retailer. This scenario under which both Envestra and Origin remained as part of the larger corporate entity would appear to be an equal – or superior – counterfactual against which to judge whether the Operating Agreement is consistent with the lowest sustainable cost.

- *Benchmarking of costs* – in our experience, benchmarking of costs is an imprecise science, particularly in Australia where the data is of poor quality. As a consequence we advise regulators generally that benchmarking analyses (even those that attempt to allow for the factors that may create cost differences, such as performed by Benchmark Economics) are not sufficiently robust to justify placing substantial weight upon. We note that the Commission has received separate expert advice on the robustness of the benchmarking studies that Envestra has presented, and so have not addressed this matter further.

Incentive properties of the management fee

Envestra has also pointed to the desirable incentive properties associated with the structure of the management fee – namely, that it rewards OEAM for increasing growth (and so would encourage OEAM to promote growth, to the extent that it could).

We consider that, if it was considered desirable for the Operating Agreement to provide OEAM with a strong incentive to promote load growth, a better mechanism would have been to do this through a direct instrument (i.e. along the lines of the incentive arrangements in the Operating Agreement for the unit cost of connection and for the per GJ controllable operating expenses). The problems with using the network management fee for this purpose are that it:

- provides a large transfer to OEAM (i.e. the fee is always paid) rather than rewarding OEAM only for superior performance; and

- would reward OEAM (or penalise OEAM) for matters that have nothing to do with load growth – such as price changes.

Accordingly, we consider that the claimed incentive properties of the network management fee do not provide a justification to include the fee in measured operating expenditure. In particular, we do not consider that the payment of the network management fee is an incentive arrangement of the type that would be entered into by a prudent service provider.