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Envestra's Payment Terms in SA

A Report for Envestra

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1. Introduction and Background

The Essential Services Commission of South Australia (ESCOSA) has decided to reduce Envestra's annual revenues by around $1.8m in each year of the 2006-11 regulatory period. The proposed justification for this is to undo a perceived advantage Envestra receives as a result of its longstanding prepayment terms.

Envestra has asked NERA to review the economic justification for this decision. Envestra has also asked NERA whether, in our opinion, ESCOSA's decision may be inconsistent with an appropriate economic interpretation of aspects of the Gas Code.

1.1. Background

Envestra was created as a separate entity when, in 1997, Boral sold its gas distribution assets in South Australia and Queensland. This divestment was made via a float on the share market and, as such, investors in that float paid a competitively determined price for that equity. At that time Boral, now Origin Energy, was the only customer for gas distribution services provided by Envestra and Origin remains Envestra's largest customer.

Envestra was divested with prepayment terms in place and Envestra has not changed these terms since that time. The effect of selling Envestra with prepayment terms rather than deferred payment terms ensured that Envestra had revenues immediately available in the first months of its existence capable of covering the costs incurred in those months. (Had Envestra billed one month in arrears after meter reading it would have had something less than 10 months of revenues in its first year of existence). Prepayment has had a negligible effect on Envestra's revenues in all subsequent years (1998 and beyond).

2. Summary of Conclusions

There are a number of errors in ESCOSA's stated rationale for imposing a decrement to Envestra's annual revenues. Specifically:

1. The decision incorrectly ascribes an ongoing 'material advantage' to Envestra from its prepayment terms which is used to justify an offsetting decrement to revenues. In reality, and as a matter of economic fact, Envestra derives no ongoing advantage from its prepayment terms. Any construed advantage to Envestra was fully received in the months after the payment terms were put in place in 1997.
2. Even a construed advantage in 1997 is highly questionable given that shareholders who participated in the public float of Envestra paid a competitively determined price for any such advantage. Origin has just as much claim to having derived an advantage from the prepayment terms in place when it sold the assets in 1997.
3. As a corollary of the above:
   i. reducing revenues to offset a non-existent advantage results in, other things equal, Envestra's revenues being set below efficient costs;
   ii. ESCOSA's methodology will treat economically identical firms[1] differently depending on what payments are 'called' rather than their economic properties;
   iii. ESCOSA's decision amounts to retrospective regulation of revenues in 1997; and
   iv. Rather than reducing the allegedly favourable treatment of Envestra relative to other energy distributors, the decision manifestly makes Envestra shareholders worse off than shareholders in other energy distributors. Such that, all other things equal, Envestra's market value would be less than other businesses regulated by ESCOSA and in other jurisdictions.
4. ESCOSA is in error when it seeks to justify its approach with respect to 'industry practice' by which it means 'regulatory practice'. In reality, standard regulatory practice (quite correctly) ignores differences in payment terms when setting regulated revenues.
5. ESCOSA's solution to the problem it perceives is itself arbitrary, ie, can not be justified even if one were to accept that prepayment conferred an ongoing advantage on Envestra.
6. If the profile of revenues under prepayment provided Envestra with an historical 'advantage' SAIPAR could, under s8.10(f) of the Code, have taken that into account when setting the ICB. Given that it did not do so, it is unclear what scope ESCOSA has now to give effect to the same thing by applying a negative working capital component against the value of the regulatory asset base.

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[1] Firms that have an identical future costs and identical historical costs *and* revenues.

While not purporting to provide legal advice, NERA believes that, on a straight economic interpretation, the above errors are likely to be in inconsistent with the requirements of the Gas Code. Specifically:

A. Setting revenues below expected efficient cost, as per 3i) above, is inconsistent with the stated objective in s8.1(a) of the Code that the regulator should provide the service provider:

   " with the opportunity to earn a stream of revenue that recovers the efficient costs of delivering the Reference Service over the expected life of the assets used in delivering that Service."

B. Under s2.24 ESCOSA is required to, but did not, consider in the Final Decision whether Envestra had a legitimate business interest not to be penalised as a result of its prepayment terms? Had ESCOSA properly considered this question in the context of all the relevant facts and circumstances surrounding the institution of prepayment terms (including those outlined in 2 above) it would not properly have reached the decision it did.

C. We also consider the Code is breached to the extent that the Code requires:

   a. internally consistent logical decision making;

   b. consistent treatment of economically identical firms; and

   c. prohibits retrospective clawing back of pre regulation revenues.[2]

[2] We understand that the only place that the Code allows for future revenues to be set on the basis of how past revenues were set is in s8.10 (f) in relation to setting the ICB. SAIPAR did not consider 1997 revenues a relevant issue under s8.10 nor in the first access arrangement. It is difficult to see how it is relevant now.

3. ESCOSA's Treatment of Prepayment

3.1. How revenues are set

Given a positive time value of money, the timing of revenue receipts and expenditure outgoings is a determining factor in the net present value of costs and of revenues. Therefore, if a regulator wishes to set the present value of expected revenues equal to the present value of costs it must make some assumptions regarding the timing of each. ESCOSA's Draft Decision set required revenue 'as if' the following assumptions regarding the timing of revenues and expenditures were true:

i. the return on capital component of revenues is received on the last day of each year of the regulatory period;

ii. capital expenditure is incurred, and compensation for return on capital received, exactly midway through each year of the regulatory period; and

iii. the lag between receipt of revenues and expenditure on operating costs is equal to the same "benchmark" as was assumed for ETSA Utilities.

The Draft Decision also required Envestra to bill one month in arrears. Even with this monthly billing in arrears, none of the three benchmark timing assumptions accurately described the receipt of revenues for Envestra. It is worth noting that assumptions i and ii) are, to our knowledge, universally used in Australian regulatory decisions governed by the Gas Code (and elsewhere).[3] This is despite full knowledge that businesses' actual payment terms give rise to considerably different timings.[4] Regulators often comment on the fact that these assumptions are 'generous' in the sense that revenues tend to be received earlier than suggested by the assumptions.

In our view, and for reasons discussed in the next section, this regulatory precedent for ignoring actual payment terms is appropriate and reflects a sound reading of the economic requirements of the Code.

The Final Decision reversed the Draft Decision and did not impose a change from prepayment to payment in arrears. The reason given for this was that the primary objections to prepayment (that it would act as a barrier to entry and result in complex billing arrangements) were overstated in the Draft Decision.[5] And that proper consideration of Envestra's legitimate business interests (s2.24(a) of the Code) meant that prepayment (clause 19 of the Access Arrangement) was reasonable.

> *"Moreover, in the Commission's view, section 2.24(a), which requires the Commission to take into account Envestra's legitimate business interests, supports the view that the*

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[3] Assumption iii) is not universally applied. For example, the Victorian ESC sets revenues as though operating expenditures and revenues are paid/received simultaneously.

[4] In fact, the *same* benchmark timing assumptions are applied by other Australian regulators despite the relevant regulated businesses having *different* payment terms. Moreover, ESCOSA's Draft Decision proposed making the same benchmark assumptions for Envestra and ETSA Utilities despite the fact that ETSA receives revenue 'much later' than one month in arrears.

[5] See line 741 of the Final Decision.

proposed clause 19 is reasonable. The Commission notes that the South Australian network is a large part of Envestra's business and thus recognises the impact of a change in payment terms."[6]

Notwithstanding that prepayment was determined to be reasonable on the above grounds, ESCOSA still held the view that prepayment provided Envestra with a 'windfall' timing benefit. ESCOSA determined to remove this perceived windfall timing benefit by applying a decrement to Envestra's Draft Decision revenues. However, somewhat peculiarly, ESCOSA determined the size of this 'windfall' as the 'benefit' derived from prepayment relative to billing one month in arrears. [7] This is despite the fact that, on ESCOSA's logic, the correct measured should be relative to the assumed timing of revenues in the Draft Decision (ie, the assumptions i to iii above).

ESCOSA addresses this inconsistency in the following manner:

"Notwithstanding the above decision, the Commission notes that the application of section 8.1 would appear to direct the Commission to ensuring that Envestra recovers its costs exactly, which would imply that the Commission should have calculated Total Revenue by removing all of the expected overcompensation from the prepayment system. However, the Commission also notes that section 8.4 directs consideration of 'generally accepted industry practice' when considering how to determine the Total Revenue. In this regard, the Commission observes that it has not been the standard practice of Australian regulators to finely tune the calculation of capital-related costs to remove the whole of the overcompensation that is provided by the simple building block approach which assumes that the bulk of the revenue is received on the last day of the year, rather than over the course of the year."

Inexplicably, ESCOSA relies on the fact that other regulators do not make adjustments for payment terms on capital related costs ***at all*** to justify making such an adjustment. . That is, the above paragraph explains ESCOSA's justification for implementing half of what it regards as the 'correct' adjustment by the fact other regulators do not make any adjustment.

A regard to standard regulatory practice provides no justification for the imposition of a decrement to regulated revenues based on allegedly favourable payment terms. There is no Australian regulatory decision where such a decrement has been applied. As illustrated in

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[6] Line 760 of the Final Decision.

[7] At line 3620 the Final Decision states:

"The Commission remains of the view that the method it used to calculate Total Revenue in the Draft Decision would best meet the requirements of the Code, subject to an adjustment for the overcompensation from advance invoicing (using the assumption that is consistent with the decision for Envestra rather than using the ETSA Utilities' assumption – as was done in the Draft Decision). Accordingly, the Commission has calculated Envestra's Total Revenue by:

- *applying the method that it used in the Draft Decision (i.e. applying the same simple building block formula and calculating an allowance for working capital using the same method as employed in the Draft Decision); and*
- *then deducting its estimate of the benefit that Envestra would receive from invoicing in advance compared to invoicing in arrears in the manner proposed in the Draft Decision."*

the below table, standard practice amongst regulators is to ignore actual payment terms when setting regulated revenues. In the few instances where regulators have taken actual payment terms into account they have invariably provided *additional* compensation to the regulated business. This is despite the fact that, had they accepted ESCOSA's logic, any adjustment should have been negative (reflecting the fact that actual payment terms were earlier than assumed payment terms when modeling return on capital[8]).

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8 With the exception of IPART, all Australian regulators determine return on capital 'as if' it is received at the end of each year. This is the same methodology as used by ESCOSA. Those few regulators that then make an adjustment for payment terms make a positive adjustment. There are no regulators that apply a decrement to revenues based on the fact that actual payment terms are 'more advantageous' than those assumed in their return on capital calculation.

Table 3.1
Relevant Regulatory Precedent

No regard given to actual payment terms		Regard to actual payment terms results in increment to revenues		Regard to actual payment terms results in decrement to revenues	
Regulatory Decision	**Date**	**Regulatory Decision**	**Date**	**Regulatory Decision**	**Date**
NEM# Electricity Transmission		**NEM# Electricity Distribution**		**Gas Distribution**	
ACCC (Several, most recent TransGrid)		ESCOSA (ETSA)	04/2005	ESCOSA (Envestra)	06/2006
AER (Directlink)	03/2006	IPART (Several)	06/2004		
NEM# Electricity Distribution		**Gas Transmission**			
ICRC (ActewAGL)	03/2004	WA ERA (DBNP)	11/2005		
QCA (Several)	04/2005	**Gas Distribution**			
ESC (Several)	10/2005	IPART (Several)	05/2005		
Gas Transmission		WA ERA, (Alinta)	07/2005		
ACCC (Several, most recent MSP)	10/2003				
Gas Distribution					
ESC, (Several, Vic)	10/2002				
ICRC (ActewAGL)	11/2004				
QCA, (Allgas and Envetra*)	05/2006				

#National Electricity Market - with regulatory decisions governed by the National Electricity Code
*Note that while the QCA did not attempt to model actual payment terms when setting Envestra's revenues it did require Envestra to change its payment terms (on similar grounds to ESCOSA's draft decision justification for changing Envestra's payment terms).

The above table lists the most recent decisions made by each regulator for each of the types of listed businesses. Note that the longest column is that where the regulator has had no regard to the regulated business's actual payment terms. (This column would be relatively longer still if each decision by the relevant regulator was listed. For example, if all ACCC electricity and gas transmission decisions were individually listed.) The second longest column lists where an adjustment is made for actual payment terms but where the adjustment is positive. (Despite the fact that, with the exception of IPART, had the relevant regulator accepted ESCOSA's position any adjustment should have been negative.) The final column is the shortest which reflects the fact that ESCOSA is the only Australian regulator that has proposed to reduce revenues to remove supposedly

'advantageous' payment terms (relative to the assumed timing of revenues in the modeled return on capital).

We shall see in the following sections why the standard regulatory practice (no adjustment for actual payment terms) is a correct reflection of the underlying economics.

Conclusion 3.1

ESCOSA is in error when it seeks to justify its approach with respect to 'industry practice' (by which it means 'regulatory practice'). In reality, standard regulatory practice (quite correctly) ignores differences in payment terms when setting regulated revenues.

3.2. Arbitrariness of the Final Decision

The Final Decision sets the present value of Envestra's revenues equal to:

- The present value of revenues required if assumptions i to iii above are true;[9] plus
- The difference between the present value of revenues if:
  - a completely different set of assumptions are used (ie, all revenues are received one month in arrears); and
  - prepayment is in place.

ESCOSA effectively starts by setting revenues based on one set of assumptions (i to iii above). It then asks itself "are these assumptions an accurate reflection of when revenues are received"? It answers itself "no". But instead of making an adjustment based on the difference between reality and these assumptions it makes an adjustment based on the difference between reality and another, completely different, assumption (ie, revenues are billed one month in arrears).

Such an approach is completely arbitrary and without justification. ESCOSA does not provide any justification for this approach other than that the Code allows it to take into account 'generally accepted industry practice' (s8.4). ESCOSA claims that standard practice amongst regulators is that they don't 'fine tune' the adjustment. As discussed above, other regulators don't make an adjustment ***at all***. This can not possibly be construed as justification making an adjustment that is, by ESCOSA's own logic, deliberately wrong.

Conclusion 3.2

ESCOSA's solution to the problem it perceives is itself arbitrary, ie, can not be justified even if one were to accept that prepayment conferred an ongoing advantage on Envestra.

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[9] Noting that assumption iii is slightly different in the Final Decision compared to the Draft Decision.

3.3. Windfall gain

ESCOSA's primary rationale for making any adjustment is that prepayment delivers Envestra a 'windfall gain' which should be removed. This is evidenced in the below quotes:

> *"Similarly, the Commission is satisfied that its concerns about the interests of Users and Prospective Users (section 2.24(f)) are better resolved by the Commission's amendments to working capital that redress the windfall benefit to Envestra from the prepayment (see Chapter 9)." (Line 750.)*
>
> *"The Commission rejects the notion that any windfall is part of a credit risk policy." (Line 758.)*
>
> *"The earlier receipt of the revenue was the source of a windfall gain, as revenue received earlier is more valuable (and charges paid earlier by retailers and/or customers are more costly to them). For this reason, amongst others, the Commission's Draft Decision was to require Envestra to change its invoicing policy from charging in advance to charging in arrears for distribution services." (Line 3572.)*
>
> *"Moreover, the Commission does not consider that this level of overcompensation would be consistent with 'generally accepted industry practice' and hence appropriate, noting that this combination of invoicing policy and Total Revenue would place Envestra in a materially advantageous position compared to the energy distributors discussed above." (Line 3664.)*

The next section directly addresses the reasonableness of ESCOSA's view that prepayment provides a 'windfall' gain to Envestra.

4. There is no Ongoing Advantage from Prepayment

ESCOSA is in error when it ascribes an ongoing advantage to Envestra from prepayment. As a matter or economic and financial logic, only changes in payment terms provide an advantage/disadvantage to a business and that advantage/disadvantage is fully utilised at the time it occurs (it does not provide an ongoing advantage).

To illustrate this, consider a firm that is billing $100 per month contemporaneously with service provision. Let it then introduce prepayment one month in advance of service provision. If it had continued indefinitely to bill contemporaneously with service provision it would have received $100 per month indefinitely. By changing its payment terms it continues to receive $100 per month indefinitely except for the month when payment terms are changed. In that month it will receive $200 - being $100 for the services provided in that month (billed under the previous contemporaneous payment terms) plus $100 for the next months services (billed under the new prepayment terms).

Assuming an indefinite life of the business, introducing prepayment provides $100 extra revenue *at the time it is introduced.* While this is a clear benefit to the business at that time, it provides no benefit thereafter. Under each of the following months revenue is $100 under both payment terms.

Envestra's payment terms were put in place prior to, or simultaneous with, divestment of the Envestra assets by Boral/Origin. This was well before regulation in South Australia was introduced. Any advantage derived from prepayment terms relative to some other terms was well and truly exhausted prior to the advent of regulation.

Conclusion 4.1

The Final Decision incorrectly ascribes an ongoing 'material advantage' to Envestra from its prepayment terms which is used to justify an offsetting decrement to revenues. In reality, and as a matter of economic fact, Envestra derives no ongoing advantage from its prepayment terms. Any construed advantage to Envestra was fully received at the time payment terms were put in place in 1997.

In any event, it is entirely incorrect to describe prepayment as providing a 'windfall' to Envestra - even in 1997. The current payment terms were put in place prior to, or simultaneous with, divestment by Boral/Origin. Any 'advantage' associated with these payment terms would have been fully valued in the stock market float of Envestra by Boral/Origin. In effect, the purchasers of equity in that float paid Origin for the right to bill in advance. It is an error to describe even the initial cash-flow benefits to Envestra as being a 'windfall'. Indeed, it would be just as accurate to describe Origin's decision to divest Envestra with prepayment terms as giving it an equal and offsetting 'windfall' in the form of a higher sale price. There is as much justification for applying a decrement to Origin Energy's regulated tariffs on the basis that it received a prepayment 'windfall' in 1997 as there is for applying a decrement to Envestra's regulated revenues.

Conclusion 4.2

Even describing the cash flow benefits in 1997 as a 'windfall' is incorrect given that Envestra's shareholders paid for those payment terms in at the time of the public float. Origin has just as much claim to having derived an advantage from the prepayment terms in place when it sold the assets in 1997.

These conclusions highlight why standard regulatory practice is correct in using assumptions[10] regarding the timing of revenue receipts that are not determined by the actual payment terms in place. Focusing on actual payment terms would, as is elaborated below, effectively 'reach back' in time to undo perceived advantages and disadvantages that occurred in the pre-regulation era (but that have no relevance to the post regulation era).

The following sections derive important implications that flow from ESCOSA's error in ascribing an ongoing 'windfall' to Envestra as a result of prepayment.

[10] There is scope for debate over what those assumptions should be. It could be argued that the assumption should be that revenues are received contemporaneously with service provision on the basis that, irrespective of payment terms, revenues are always received contemporaneously with services (although they are not always billed contemporaneously). However, standard regulatory practice has been to assume that revenues are earned in the manner described in section 3 above. These form a reasonable benchmark set of assumptions as they ensure that no firm is worse off as a result of not taking into account there specific payment terms.

5. Efficient Costs not Recovered

Section 8.1 lists the objectives of the Code and these include:

> *(a) providing the Service Provider with the opportunity to earn a stream of revenue that recovers the efficient costs of delivering the Reference Service over the expected life of the assets used in delivering that Service.*

Applying a decrement to reflect a non-existent advantage of prepayment must, other things equal, result in final revenues being below efficient costs. This is a clear corollary of accepting the proposition in the previous section that ESCOSA is in error to ascribe an ongoing advantage to Envestra as a result of prepayment.

Conclusion 5.1

Reducing revenues to offset a non-existent advantage from prepayment results in Envestra's revenues being set below efficient costs.

5.1. Inconsistent treatment of economically identical firms

To illustrate, and underline, the above proposition consider the following example.

Imagine two identical firms "A and "B" both of which are 100 years old and both of which have, and have always had, exactly the same monthly revenue of $10m. Firm A and B provide exactly the same services and have exactly the same assets, exactly the same historical expenditure profile and expected future expenditure profile. In other words, these firms are economically identical.

The only difference is that, at the time of their inception 100 years ago:

i. firm "A" billed one month in advance but had no other fees or charges;

ii. firm "B" billed one month in arrears but it also charged a 'registration fee' of $10m for any customers wanting service during the first month (no registration fee was charged in subsequent years).

In summary, firm A and firm B have identical assets, identical past revenues and identical past and future costs. The only difference is that firm A called its first $10m a prepayment and firm B called it a 'registration fee'.

Clearly, economic logic dictates that the two firms should, 100 years later, be treated identically by a newly installed regulator. However, ESCOSA's approach would treat them very differently. ESCOSA's approach would reduce firm A's annual revenues below those of firm B by around $1m pa (being $10m prepayment multiplied by a nominal WACC of around 10%).[11] This is despite the fact that the two firms are identical in all

[11] This would reduce the *value* of firm A relative to firm B by $10m - despite the fact that they are, by construction, economically identical firms.

economic respects (have identical past costs and revenues and have identical expected future costs).

The reason for this inconsistent treatment of identical firms is that ESCOSA's methodology incorrectly ascribes an ongoing benefit to firm A from prepayment when no such ongoing benefit exists. In our example prepayment was put in place 100 years ago and any cash-flow advantage was enjoyed in the first month of its existence (and only then). Moreover, the same economic cash-flow advantage was enjoyed by firm B but, because it had a different name ('registration fee' rather than 'prepayment') ESCOSA's methodology for some reasons treats it differently.

Conclusion 5.2

ESCOSA's methodology will treat economically identical firms (firms that have identical future costs and identical historical costs *and* revenues) differently depending on what payments are 'called' rather than their economic properties.

5.2. Envestra's actual circumstances

We are advised by Envestra that its actual circumstances are very similar to those described above. Specifically, when Envestra was established Boral (now Origin) guaranteed that it would, in the first month of Envestra's existence, make a payment equal in value to one month's worth of services (at the agreed prices for those services). This payment happened to be called 'prepayment' of the first month's services. However, it could just have easily been called deferred payment for the previous month's services. Under the two approaches Envestra's past revenues and future costs would be all but identical - the only difference would be the name given to the first payment.

Envestra advises us that, in Victoria, precisely the above scenario actually occurred. The Gas and Fuel Corporation was sold with the purchasers (one of which was Envestra) having the right to sales revenues from unmetered consumption that occurred prior to the date of the sale. This revenue could just as easily have been called 'prepayment' for the next month's gas consumption but, as it happened, was termed a deferred payment for previous unmetered gas consumption prior to the sale date.

This illustrates two financially identical mechanisms being used to ensure that the purchaser of the asset has revenues immediately available to pay for its immediate costs. The only difference between the two mechanisms is the name given to the initial payment. In Victoria the payment was called a deferred payment and in South Australia it was called a prepayment.

From an economic perspective the two mechanisms are identical and neither changes the level of efficient costs needing recovery (nor does it change the level of revenues that have in the past been recovered). By contrast, ESCOSA's position is that lower revenues are required if the first payment is called 'prepayment' than if it is called 'deferred payment'. Given revenues must allow recovery of efficient costs, then, for ESCOSA's position to be correct, the description given to the first payment must be an important determinant of what constitutes 'efficient costs'.

It is very difficult, as a matter of economic logic, to understand how ESCOSA could justify this position. This is especially so when it is recognised that the first payment was made prior to the imposition of regulation and that participants could not reasonably have expected matters of *nomenclature* to materially affect the level of future revenues an *economic* regulator would allow.

6. Legitimate Business Interests

Under s2.24 of the Code, ESCOSA is required to, but did not, consider whether imposing a penalty on Envestra for prepayment was consistent with Envestra's legitimate business interest. Even if one accepts the proposition that prepayment delivers some advantage to Envestra, the Final Decision should have considered whether Envestra had a legitimate business interest to maintain that 'advantage'.

Throughout the Final Decision the existence of prepayment terms are described as providing a 'windfall' to Envestra (see section 3 above). The clear implication is that Envestra derives an unearned and unwarranted benefit from prepayment at the expense of its customers. Had ESCOSA properly considered this question in the context of all the relevant facts and circumstances surrounding the institution of prepayment terms (including those outlined in section 4 above) it would not properly have reached the decision it did.

Specifically, Envestra did not, post divestment, decide to change to prepayment. Rather, prepayment terms were put in place prior to (or simultaneously with) divestment by Boral/Origin. Amongst other things, this means that Envestra's shareholders paid a fair market price for any cash-flow advantages associated with those payment terms. Even if we were to accept that prepayment provided an ongoing advantage to Envestra, it would still be wrong to describe such advantages as a 'windfall' which, by implication, can be taken away while still treating Envestra 'fairly'. If paying a fair market price to a willing seller gives a business a 'legitimate interest' in the thing purchased then Envestra has a legitimate business interest in maintaining any supposed advantage from prepayment.

In our view these facts form a strong argument for Envestra having a legitimate business interest in not being penalised for billing in advance (and especially not 10 years after prepayment was first put in place). The Final Decision's failure to discuss Envestra's legitimate business interests in maintaining the alleged (and in our view non-existent) advantage from prepayment, including failure to even discuss the above facts and circumstances, amounts to a failure to consider Envestra's legitimate business interests.

Conclusion 6.1

The fact that prepayment terms were in place prior to divestment of Envestra by Boral/Origin and the fact that the divestment occurred in a competitive float, gives Envestra's shareholders a legitimate business interest in prepayment. The failure of the ESCOSA to consider the existence of such a legitimate business interest before removing the perceived 'advantage' of prepayment is, in our view, inconsistent with s2.24 of the Code.

7. Retrospective and Discriminatory Regulation

Rather than making Envestra neutral with respect to billing in advance and billing in arrears, ESCOSA's proposed decrement to revenues actually makes Envestra worse off than it would have been had it always billed in arrears.

To see that this must be the case, note that the only difference between Envestra's revenues with and without prepayment occurred in the first few months of 1997. With prepayment, Envestra received revenues immediately it began providing the service (rather than having to wait to bill in arrears). With billing in arrears it would only have started receiving payments with a lag of one or two months. However, after the first few months of 1997 revenues under both approaches would be identical.

By imposing a decrement to revenues from 2006/07 onwards, ESCOSA is setting *lower* revenue than it would have allowed had Envestra always billed in arrears. This clearly suggests that ESCOSA's approach involves retrospective regulation of revenues from 1997, ie, revenues are set lower from 2006/07 onwards solely on the basis that revenues were higher in 1997 than they would have been with deferred payment terms.

7.1. Graphical illustrative example

Consider the following three cash-flow scenarios for Envestra's business:

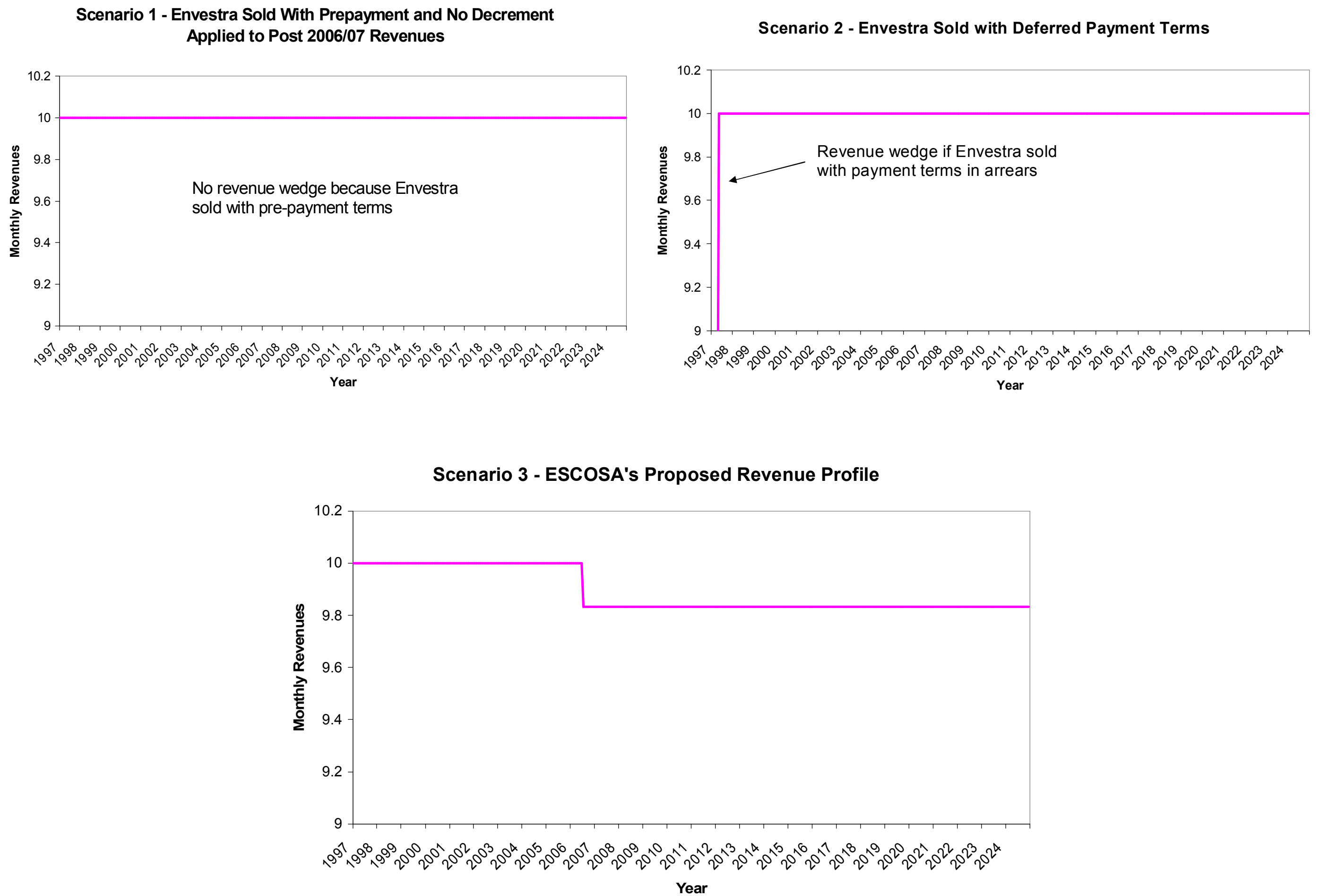
1. **Scenario 1:** Envestra's actual cash-flow profile to date and the future cash-flow if no decrement to revenues is applied by ESCOSA. (This involves no initial delay in 1997 to Envestra receiving revenues);

2. **Scenario 2:** The cash-flow profile for Envestra if it had always billed one month in arrears. (This involves an initial delay in receiving revenues in 1997 but otherwise the same revenues as in Scenario 1);

3. **Scenario 3:** The cash-flow profile ESCOSA seeks to impose. (This involves applying a decrement to revenues in scenario 1 from 2006/07 onwards.)

Revenues under these scenarios are illustrated in the graphics below (assuming, for ease of illustration, constant equilibrium real monthly revenues of $10m).

Relevance of payment terms



Note that, except for the first few months of 1997, monthly revenues are identical under Scenario 1 and Scenario 2. That is, the fact that Boral/Origin sold Envestra with prepayment terms in 1997 has no effect on the level of revenues post 1998.[12] From this fact, a number of important conclusions follow:

i. Looking forward from 1998 onwards, Envestra's shareholders are no better off with prepayment (Scenario 1) than they are with deferred payment (Scenario 2). That is, the present value of future revenue is the same[13] under both scenarios because future revenues are the same under each scenario

ii. The only difference in revenues between prepayment (Scenario 1) and payment in arrears (Scenario 2) occurs in 1997. Consequently, even if prepayment involved a 'windfall'[14] to Envestra it would be a windfall that occurred in 1997.

iii. Again, looking forward form 1998 onwards, the Final Decision (Scenario 3) provides a *lower* present value of revenues paid than under either Scenario 1 or 2. That is, ESCOSA's decision lowers the value of Envestra today to *<u>less than</u> it would have been valued today had it always billed in arrears* (Scenario 2).

An inescapable corollary of the above facts is that the Final Decision is 'reaching back' to 1997 in order to undo a perceived 'windfall' that occurred at the time of Envestra's sale. The Final Decision is, in effect, justifying lower revenues today on the basis of higher revenues in 1997 at the time of Envestra's sale.

Conclusion 7.1

ESCOSA's decision amounts to retrospective regulation of revenues in 1997.

7.2. Discriminatory regulation relative to other regulated businesses

ESCOSA's decision reduces the value of Envestra to below the value of an otherwise identical firm that had always billed in arrears. Specifically, it reduces Envestra's value today *below* that which, for example, ETSA would have if it was, in all other respects, identical to Envestra.[15] (Noting that ETSA is also regulated by ESCOSA.)

This is despite the fact that ESCOSA states[16] that Envestra is being treated the same or more favourably than other regulated businesses.

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[12] Strictly speaking, in the distant future if Envestra ceases to supply services, there will be higher revenues for 3 months under scenario 2 (with deferred payment). However, the value of these higher revenues today is negligibly above zero given the effect of discounting.

[13] This conclusion does not hold quite so strongly if revenues are rising/falling in real terms.

[14] Which, because it was paid for, can not reasonably be described in this manner.

[15] That is, if ETSA and Envestra had the same RAB, opex and capex requirements, gearing, management etc.

[16] See line 3650.

> *"The Commission considers that calculating Total Revenue for Envestra such that Envestra is in a similar position to other energy distributors (after taking account of differences in invoicing policies) is consistent with 'generally accepted industry practice', as required by section 8.4. In this regard, the Commission notes that Envestra's position would only be similar to that of other energy distributors, and that it would be:*
>
> - *treated more generously than ETSA Utilities, as the latter receives revenue with a much longer lag, and no compensation is paid for the additional capital-related financing costs;*
> - *treated more generously than the Victorian distributors, which also receive revenue with a much longer lag, but receive no compensation for the additional financing costs (operating or capital); and*
> - *in a similar position to AlintaGas (WA) and the Queensland gas distributors."*

This erroneous belief stems from ESCOSA's failure to properly analyse the cash-flow implications of payment terms. Had it done so it would have understood, consistent with the above illustrative example, that no ongoing benefit/detriment is derived from different payment terms.

Forcing a decrement to revenues on Envestra today is **not** removing an ongoing advantage to Envestra but rather is imposing a *windfall loss* on Envestra. Rather than reducing the allegedly favourable treatment of Envestra relative to other energy distributors, the decision manifestly makes Envestra shareholders worse off than shareholders in other energy distributors. Such that, all other things equal, Envestra's market value would be less than other regulated businesses by the present value of the revenue decrement applied by ESCOSA.

Conclusion 7.2

Rather than treating shareholders in Envestra neutrally with shareholders in other regulated businesses who bill in arrears, ESCOSA's decrement to revenues makes shareholders in Envestra worse off (other things equal).

7.3. Defacto reduction in the regulatory asset base

ESCOSA's decision, in its own words, impose a negative working capital requirement on Envestra. The amount of negative working capital is calculated as ESCOSA's estimate of the amount of prepayment. In effect, ESCOSA reduces the regulatory asset base on which Envestra receives a regulated return by the amount of prepayment.

This is despite the fact that:

- prepayment was in place at the time that the initial capital base (ICB) was set; and
- s8.10 (f) of the Code explicitly provided SAIPAR an opportunity to take prepayment into account when setting the ICB.

Section 8.10 (f) allows the regulator to, when setting the ICB, take into account:

> *"the basis on which Tariffs have been (or appear to have been) set in the past, the economic depreciation of the Covered Pipeline, and the historical returns to the Service Provider from the Covered Pipeline"*

If the profile of revenues under prepayment provided Envestra with an historical 'advantage' SAIPAR could, under 8.10(f), have taken that into account when setting the ICB. Given that it did not do so, it is unclear what scope ESCOSA has now to give effect to the same thing by applying a negative working capital component against the value of the regulatory asset base.

Conclusion 7.3

SAIPAR did not consider that prepayment since 1997 constituted a *basis on which Tariffs have been (or appear to have been) set in the past* that was relevant to establishing an ICB. This is despite the fact that the ESCOSA now believes that because prepayment delivered higher revenues in 1997 than deferred payment (noting that this is the only year in which there is a difference in revenue profiles between the two payment terms) it is justified in *effectively reducing Envestra's regulatory asset base by the amount of prepayment*.

8. Application to the Code

We consider that ESCOSA's treatment of prepayment is inconsistent with requirements of the Code on the grounds that:

- There is no ongoing advantage to Envestra as a result of prepayment. Other things equal, applying a decrement to revenues to offset a non-existent advantage results in revenues being set below expected efficient costs; and
- There is no consideration given to Envestra's legitimate business interests not to be penalised as a result of Boral/Orign's decision to sell the South Australian business with prepayment terms in place.

We consider that the Code is breached to the extent that the Code requires:

- internally consistent logical decision making;
- consistent treatment of economically identical firms; and
- prohibits retrospective clawing back of pre regulation revenues.

In our view, ESCOSA should set revenues independently of actual payment terms. This is consistent with the economic requirements of the Code and standard regulatory practice.

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Overview

Tom has 16 years professional experience as an economist initially at the Australian Commonwealth Treasury and more recently at NERA. Tom specialises in anti-trust analysis and issues of network economics in both the energy and telecommunications sectors. Tom has represented utilities, industry associations, regulators and governments in various forums.

Qualifications

1998	**MONASH UNIVERSITY** PH.D. in Economics 1st Class Honours

Prizes and Scholarships

APRA Priority Post Graduate Scholarship (Masters and Ph.D.)

Monash University Post Graduate Scholarship (Ph.D.)

Victorian Economic Society award for best honours year student (1991)

Commonwealth Treasury Cadetship (bursary to finance 1990 honours year)

Project Experience

Market Design and Competition Analysis

2006	**Confidential, Australia** **Merger Analysis – Electricity Industry** Providing expert opinion to the Australian Competition and Consumer Commission (ACCC) on the competitive implications of a merger.

2006	**Confidential, Australia** **Section 46 of the TPA - Telecommunications** Providing expert opinion in relation to an action under Section 46 of the Trade Practices Act.
2006	**Confidential, Australia** **Merger Analysis - Transport Industry** Providing expert opinion to the Australian Competition and Consumer Commission (ACCC) on the competitive implications of a merger.
2005	**Confidential, Australia** **Merger Analysis - Telecommunications Industry** Providing expert opinion to the merging firms on the competitive implications of that merger.
2005	**AirServices Australia (ASA), Australia** **Review of Pricing Conduct** Providing expert opinion to ASA on pricing for its services at Australian Airports. Including an examination of allegations that pricing contravened National Competition Agreements.
Ongoing since 2001	**TransGrid, Australia** **Market for transmission** Analysis of the design of the National Electricity Market (NEM) and its implications for efficient investment in generation and transmission assets. This work has involved providing private advice to TrnasGrid as well as public policy documents such as drafting TransGrid's submission to the US energy regulator (FERC) on market design.
2005	**Confidential, Australia** **Competition Assessment of Pricing Strategy** Advising a large corporate on the economic implications of the Trade Practices Act for its pricing conduct.
2005	**Australian Competition and Consumer Commission, Australia** **Competition Assessment of Electricity Generation Merger** Advised the ACCC on the competition concerns (and potential remedies) associated with a specific proposed merger of electricity generation interests.
2004	**Australian Competition and Consumer Commission, Australia** **Competition Impact of Exclusive Rights to Content** Provided a public report to the ACCC on the competition concerns (and potential remedies) associated with the use of exclusive rights to content by incumbent telecommunications infrastructure owners.

2004 **Australian Competition and Consumer Commission, Australia**
Empirical Evidence of Predatory Pricing in Telecommunications
Provided the ACCC with an expert report that developed an imputation test framework and empirical model to test allegations of predatory pricing of broadband services.

2003/04 **Singtel Optus, Australia**
Expert Report on Market Definition and Existence of Market Power in Mobile Termination
Provided Optus with an expert report on the appropriate market definition to use in analysing competition between mobile network operators in providing terminating access.

2003/04 **Singtel Optus, Australia**
Expert Economic Advice on Competition Complaint
Providing Optus advice on a confidential competition complaint relating to the exercise of market power by one of Optus' competitors.

2001-03 **QANTAS**
Advice on Competition Law and Predation Allegations
Provided input into NERA's advise in relation to allegations of anticompetitive behaviour under section 46 of the Trade Practice Act.

2002 **National Competition Council (NCC), Australia**
Exploitation of Market Power by a Gas Pipeline
Provided a report to the NCC in which we developed a number of tests for whether current transmission prices were evidence of the exploitation of market power by a gas transmission pipeline. Also provided a separate report that applied these tests. This analysis was used to inform the NCCs decision on whether to recommend the pipeline in question be subject to regulation under the Australian Gas Code.

Cost of Capital Issues

2005 **Energy Networks Association, Australia**
Debt Margin
Advising on the relative merits of CBASpectrum and Bloomberg's methodology for estimating the appropriate debt margin for long dated low rated corporate bonds.

2005 **Prime Infrastructure, Australia**
Weighted Average Cost of Capital
Provided a report for Prime Infrastructure critiquing the QCA's draft cost of capital decision for Queensland electricity distribution.

2004	**The Australian Competition and Consumer Commission, Australia** **Cost of Capital** Provided a report advising on the correct discount rate to use when valuing future expenditure streams on gas pipelines.
2004	**ETSA Utilities, Australia** **Weighted Average Cost of Capital** Provided a report for ETSA examining the use of historical proxy betas.
2004	**ActewAGL, Australia** **Weighted Average Cost of Capital** Provided a report for ActewAGL estimating its weighted average cost of capital for regulated activities (gas distribution).
2004	**TransGrid , Australia** **Debt Margin** Provided a report critiquing CBASpectrum's methodology for estimating the appropriate debt margin for long dated low rated corporate bonds.
2004	**Prime Infrastructure, Australia** **Weighted Average Cost of Capital** Provided a report for Prime Infrastructure the weighted average cost of capital for its regulated activities (coal shipping terminal).
2004	**ActewAGL, Australia** **Debt Margin** Provided a report for ActewAGL advising on the appropriate calculation of debt margins for BBB+ ten year bonds.
2003	**Electricity Transmission Service Providers, Australia** **Expert Report on the Use of Histrocial Proxy Betas** Critique of the ACCC's statistical interpretation of historical proxy beta in its review of the *Statement of Principles for the Regulation of Transmission Revenues*.
2003	**Orion, New Zealand** **Cost of Capital** Critique of Associate Professor Lally's advice on the Cost of Capital for New Zealand Electricity Distribution .

2003 **TransGrid, Australia**
Expert Report on TransGrid's WACC
Advising TransGrid on the appropriate weighted average cost of capital (WACC) for its regulated assets

2003 **EnergyAustralia, NSW, Australia**
Advice on Financial Capital Maintenance
Advising EnergyAustralia on issues relating to its appropriate WACC and the modelling of cash flows to ensure the expected present value of future net revenues was equal to the value of the regulated asset base.

2002 **Rail Access Corporation, Australia**
Hurdel Rates of Return
Advising rail access corporation on the appropriate hurdle rates of return that should be applied when assessing competing investments.

2002 **Integral Energy, Australia**
Return on Capital
Advising Integral Energy on what risk adjusted regulatory return on capital is necessary to provide sufficient incentive to invest in new infrastructure assets.

2001 **TransGrid, Australia**
Advice on ACCC's Powerlink WACC decision
A report critically appraising the ACCC's decision regarding Powerlink's weighted average cost of capital (WACC).

2001 **Optus, Australia**
Affidavit on Telstra's PSTN WACC
Providing expert testimony to the Australian Competition Tribunal on Telstra' use of the CAPM model to determine an appropriate rate of return on PSTN assets.

2001 **Australian Competition and Consumer Commission, Australia**
International Comparison of WACC Parameters
Preparation of a report on international and domestic WACC parameters and the potential impact of variations in declared WACCs on incentives to invest in various regulatory jurisdictions.

General Regulatory Analysis

2005 **Telecom New Zealand, New Zealand**
Operating Cost Benchmarks
Advised Telecom on appropriate operating cost benchmarks for telecommunications services

2005 **TransGrid, Australia**
Capital Expenditure Indexation
Advised TransGrid on the development of a price index to reflect movements in the unit costs of inputs into its capital expenditure program.

2005 **TransGrid, Australia**
Forecast of Capital Expenditure
Advised TransGrid on appropriate adjustments to forecast capital expenditure to take account of material increases in demand for investment in future Australian electricity infrastructure.

2005 **TransGrid, Australia**
ACCC's Capital Expenditure Regime
Advised TransGrid on the ACCC's proposed regulatory regime to apply to capital expenditure.

2005 **Actew, Australia**
Financing of New Infrastructure
Advised Actew on options for financing new infrastructure.

2004 **Telecom New Zealand, New Zealand**
Avoided Retail Cost Study
Developing an avoided cost study associated with Telecom's fixed line retail activities.

2004 **TransGrid, Australia**
Fair Sharing of Efficiency Gains
Provided a report to TransGrid advising on whether the ACCC's Draft Decision was consistent with the National Electricity Code's requirement that there be a 'fair sharing' of efficiency gains.

2004 **Australian Competition and Consumer Commission, Australia**
Asset Valuation Report
Provided an expert report to the ACCC on the calculation of depreciated optimised replacement cost (DORC) in the context of the EAPL's appeal of the ACCC's valuation of its Moomba to Sydney pipeline.

2004 **ESCOSA, Australia**
Incentive Regulation
Provided ESCOSA with a report on the appropriate mechanism to provide ETSA Utilities with an incentive to achieve cost reductions in operating and capital expenditure.

2004 **Perisher Blue Ltd, Australia**
Review of Municipal Services
Assisted PBL with its submission to IPART on the review of municipal services (roads, waste, water and sewerage) at the Perisher Blue Resort.

2004 **TransGrid, Australia**
ACCC Regulatory Review
Assisted TransGrid in drafting its Application to the ACCC for regulated revenues and in its response to the ACCC's Draft Decision.

2003 **Telecom New Zealand, New Zealand**
Expert Report on Efficient Recovery of CSO Costs
Provided Telecom with a report stepping through all the information necessary to administer recovery of CSO costs in a manner consistent with "Ramsey efficient" pricing. The purpose of this was to inform the NZ Commerce Commission of the practical difficulties associated with pursuing such an outcome.

2003 **EnergyAustralia, NSW, Australia**
Advice on Financial Capital Maintenance
Advising EnergyAustralia on issues relating to its appropriate WACC and the modelling of cash flows to ensure the expected present value of future net revenues was equal to the value of the regulated asset base.

2003 **Optus, Australia**
Critique of Telstra's Access Undertaking for PSTN Services
Advising Optus in relation to the reasonableness of Telstra's cost modelling assumptions underlying its access undertaking for PSTN services.

2003 **Optus, Australia**
Indicative Pricing Principles
Advising Optus in relation to appropriate pricing principles the ACCC should adopt when establishing indicative prices for access to PSTN services.

2003 **Optus, Australia**
Estimation and Recovery of Telstra's Access Deficit
Provided a report to the ACCC on behalf of Optus addressing the appropriate measurement of any 'access deficit' that may exist between the cost to Telstra of its access network and the revenues associated with that network. Also examined the most appropriate recovery methodology for any access deficit.

2003	**Rail Infrastructure Corporation, NSW, Australia** **Expert Report on Hurdle Rates of Return** Advising RIC on the appropriate WACC each division should use as a hurdle rate of return when assessing competing capital projects.
2003	**Telecom New Zealand, New Zealand** **Expert at Commerce Commission Hearing** Provided expert testimony to the NZ Commerce Commission on the appropriate calculation of a wholesale discount for regulated services.
2002	**Telecom New Zealand, New Zealand** **'Intelligent' Wholesale Benchmarking Report** Carried out a benchmarking survey and provided a report to the New Zealand Commerce Commission on behalf of Telecom New Zealand. This report adjusted wholesale prices in the United States for differences in cost drivers (in terms of the cost of capital and labour) compared to New Zealand.
2002	**Telecom New Zealand, New Zealand** **Interconnection Pricing** Advised Telecom New Zealand on the potential forms of price control the New Zealand Commerce Commission could adopt in regulating PSTN interconnection prices.
2002	**Telecom New Zealand, New Zealand** **'Intelligent' Interconnection Benchmarking Report** Carried out a benchmarking survey and provided a report to the New Zealand Commerce Commission on behalf of Telecom New Zealand. This report adjusted interconnection prices in Europe, Australia and the United States for differences in cost drivers (in terms of switching and transmission economies of scale, transmission link lengths and the cost of capital and labour) compared to New Zealand.
2002	**SPI PowerNet, Australia** **Design of Efficiency Carryover Mechanism** Advised SPI PowerNet on the appropriate design of an efficiency carryover mechanism intended to share efficiency gains between a regulated business and its customers.
2002	**SPI PowerNet, Australia** **ReOptimisation of Transmission Assets** Advised SPI PowerNet on the appropriate approach to calculating the value of assets previously optimised out of its regulatory asset base and now being "un-optimised" due to greater utilisation levels of those assets.

2002 **SPI PowerNet, Australia**

Strategic Adviser on Revenue Reset Application

Advised SPI PowerNet on a range of high level issues in relation to their regulated revenue reset application, including appropriate drafting and consistency of argument throughout the document. Presented aspects of SPI PowerNet's application to the ACCC and in an ACCC sponsored regulatory public forum.

2002 **Telecom New Zealand, New Zealand**

Review of Interconnection Benchmarking Report

Advised Telecom New Zealand on issues arising out of an Interconnection Benchmarking report commissioned by the Commerce Commission of New Zealand for the purpose of setting interim interconnection charges. This role included the submission of a report to the Commerce Commission and presentation of the findings of that report at a Commerce Commission hearing.

2002 **Australian Pipeline Trust, Australia**

Expert Advice on CPI Indexation

Advised APT in relation to a dispute with customers on the appropriate CPI indexation adjustment of prices for the impact of the GST required under the Trade Practices Act.

2002 **EnergyAustralia, Australia**

Pricing Strategy Under a Price Cap

Advised EnergyAustralia on the commercial implications for pricing strategies under a weighted average price cap.

2001 **IPART, Australia**

Minimum Standards in Regulation of Gas and Electricity Distribution

Advised the NSW regulator on the appropriate role of minimum standards in regulatory regimes and how this could be practically implemented in NSW.

2001-03 **Rail Infrastructure Corporation, New South Wales**

Preparation of access undertaking

Advised on all economic aspects arising in the preparation of an access undertaking for the New South Wales rail network. Issues arising include: pricing principles under a `negotiate and arbitrate' framework, asset valuation, efficient costs, capacity allocation and trading, and cost of capital.

2001	**Australian Competition and Consumer Commission, Australia** **Determination of Local Call Resale Prices** The ACCC's expert regarding the determination of local call resale prices from Telstra's fixed line network. This involved the application, and manipulation, of the Australian incumbent's (Telstra's) regulatory accounting framework to determine appropriate wholesale prices.
2001	**All NSW electricity distribution businesses, Australia** **Form of Price Control** Advice on the economic efficiency implications of various forms of price control that can be applied under the National Electricity Code.
2001	**Wesfarmers, Australia** **Expert Advice on Reasonable Cost Recovery** Advising Wesfarmers in relation to a dispute with customers on reasonable recovery of costs of coal production.
2001	**Integral Energy, Australia** **Pricing Strategy Paper** Advising on appropriate pricing strategy for Integral's electricity distribution business, including advice on an appropriate regulatory engagement strategy.
2001	**TransGrid, SPI PowerNet and GPU GasNet, Australia** **CPI Indexation Adjustment** Advice on the appropriate CPI indexation adjustment for the impact of the GST required under the Trade Practices Act.
2001	**All NSW gas and electricity distribution businesses, Australia** **CPI Indexation Adjustment** Advice on the appropriate CPI indexation adjustment for the impact of the GST required under the Trade Practices Act.
2000	**One.Tel, Australia** **ULL Pricing** Advising OneTel in their arbitration with Telstra on pricing for access to the unbundled local loop.
2000	**Electricity Supply Association of Australia and Australian Gas Association,** **Adjusting the Regulatory Regime for the Impact of Tax Reform** Advised the peak energy bodies on the implications of tax reform on their members under the Trade Practices Act.

2000 **Victorian Department of Treasury and Finance, Australia**

State Business Tax Reform

Advised the Department of Treasury and Finance on State business tax reform including in relation to the relative economic costs associated with payroll, stamp duty and other transaction taxes.

1999 **Independent Pricing and Regulatory Tribunal of NSW**

Various energy regulation issues

Advice on a range of issues in regulation of the NSW energy sector.

1990-99 **Commonwealth Treasury, Australia**

Various economic policy issues

Provided input in the formulation of a number of economic policies. These included: the year 2000 reforms of the Australian indirect and corporate tax regimes; reform of the social security system and labour market regulation; economic forecasting and monetary policy monitoring; reform to the regulation of the Australian financial system.

Application of Regulatory Test for Network Augmentation

2003 **TransGrid, NSW Australia**

Submission to the ACCC's Review of the Regulatory Test

Advised TransGrid in response to the ACCC's Discussion Paper on the review of the regulatory test. Tom prepared a report which commented both on the ACCC's proposal to amend the regulatory test to improve clarity and to ensure consistency with the provisions in the National Electricity Code, and also on the ACCC's proposed options for incorporating 'competition benefits' in the regulatory test.

2003 **Clayton Utz, TransGrid, NSW, Australia**

Murraylink's Application for Regulated Status

Tom advised TransGrid and Clayton Utz in responding to Murraylink's Application to the ACCC for regulated status, and, in particular, Murraylink's use of the regulatory test to derive a regulatory asset value.

Tom also advised TransGrid in responding to the ACCC's Preliminary View on Murraylink's Application, and helped draft a further report commenting on aspects of the ACCC's approach.

2002 **Clayton Utz, TransGrid, NSW, Australia**

National Electricity Tribunal Hearing of Appeal against NEMMCO's Determination in relation to the SNI Interconnector

Managed the preparation of expert economic testimony in relation to the appeal of NEMMCO's Determination that SNI passed the

regulatory test. Role included assistance with the preparation of testimony, liasing with the modelling firm carrying out the re-application of the regulatory test, providing background briefings in relation to the regulatory test and NEMMCO's determination and all aspects of managing NERA's role in the litigation process.

2001-03 **TransGrid, NSW, Australia**

Application of the regulatory test to network augmentation in the Western Area

Advised TransGrid on the application of the regulatory test for intra-regional network augmentation planned for the Western Area of NSW. The application highlighted issues in applying the regulatory test in a situation where an agreed reliability standard is not currently met.

Commercial Asset Valuation

2002 **Screenrights, Australia**

Advice on methodologies used to estimate the value of retransmitting copyright content contained in local free-to-air broadcast.

General Policy Analysis

2003 **Betfair, UK**

The Impact of Internet Betting Exchanges on the Racing Industry

This project involved estimating bounds for the price elasticity of demand for wagering in Australia and using these to determine the likely impact of licensing internet betting exchanges to compete with existing TAB wagering operations. This project also involved modelling the impact on wagering tax rates required to achieve revenue neutrality under various prices elasticity scenarios.

2002 **Marsh, Australia**

The Impact of Taxation on Levels of Property Insurance

This project involved estimating the number of uninsured households destroyed in the recent NSW bushfires that would otherwise have been insured if the only tax insurance premiums were subject to was GST. The methodology used was based on evidence from studies of the price responsiveness of demand for property insurance in the US and Australian evidence on the proportion of people without home or contents insurance.

Speeches, Presentations and Testimony

2005 International Telecommunications Society regional Conference, Perth, Stepping over the Competitive Line.

2005 ACCC Regulatory Conference, Gold Coast, Exclusive Rights to Content and Competition in Telecommunications.

2005 sworn expert testimony to the South Australian District Court critiquing the ESCOSA cost of capital determination for ETSA Utilities.

2004, Office of the Water Regulator, Perth, Cost Benchmarking – Practical Pitfalls.

2004, ACCC Conference of Regulatory Principles for Electricity Transmission, Melbourne, Drawing a Line in the Sand on Cost of Capital Issues.

2004, Macquarie Bank, internal presentation on regulatory risk across jurisdictions and industries, Terrigal.

2003 ACCC Regulatory Conference, Gold Coast, Anticompetitive Pricing in Telecommunications.

2003 ACCC Conference on SPI PowerNet Regulatory Decision, presentation on the operation of the efficiency carryover.

2002 International Telecommunications Society regional Conference, Perth, TSLRIC Regulation and Leverage of Market Power.

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