

COMMENTARY

on

PROPOSED PRICE-SERVICE OFFERING (PSO) APPROACH TO REGULATION BY ENERGEX

by

David K Round

**Professor of Economics
Director, Centre for Applied Economics
University of South Australia**

20 December 2002

1. Introduction

I have been asked by Energex to assess its proposed PSO approach to regulation against the following two criteria:

- whether it accords with developing thinking on the nature of competition
- whether it is practical, robust and feasible as a method of regulating energy networks.

I have been requested to make this assessment within the context of the Australian regulatory framework, in the light of recent landmark events such as the Productivity Commission report and the decision by the Full Supreme Court of Western Australia (WASC hereafter) in what has become known as the Epic matter, and after having read the recent assessment of price-service offerings provided to Energex by Professor Stephen Littlechild.

I note here that the recent decision by the WASC in the Epic matter has led to the belief by many that utility regulators in Australia have been found to have acted contrary to best regulatory practice, as well as to the policy goals spelled out in various reform documents. While I find little to disagree with in the expressions and analysis of the WASC decision, there still exists, as I understand it, a possibility of leave being sought to appeal to the High Court of Australia. Revenue cap regulation is not yet dead in Australia as a result of this decision, and the dead hand of precedent (or lack thereof) will likely serve to restrain any wholesale rush to an immediate acceptance of PSO-based regulation in the short run.

2. Background

The WASC decision has brought to a head the unrest surrounding price regulation of utilities in Australia. It has long been recognised, by empirical economists at least, that real world competition is a process rather than a static equilibrium phenomenon, but

regulatory methods have tended to ignore this and instead have focussed on achieving pricing outcomes compatible with the theoretical norms of productive and allocative efficiency achieved in long run equilibrium in perfectly competitive markets. In focussing on these static welfare criteria, sight has been lost of the third type of efficiency, dynamic efficiency, which is achieved on the supply side when firms constantly strive to innovate and adopt the latest technologies, and on the demand side when firms seek to offer consumers real choices in all aspects of the price-product-service package, as was first clearly enunciated in Australia in 1976 by the then Trade Practices Tribunal in the *QCMA* matter.

Concentration by regulators on trying to replicate outcomes consistent with those applying in long run perfectly competitive equilibrium has also led to a lack of consideration of market dynamics - the process by which firms in markets seek to compete on the way to equilibrium (not that such a state is ever achievable, as markets are constantly being 'shocked' by all manner of exogenous forces). Thus, regulators have concentrated on achieving static productive and allocative efficiency norms through what has become known as a 'building block' approach, whereby the revenue that a firm is allowed to earn is based on a return on its assets (determined through the calculation of a WACC on its asset base, measured on a DORC basis), plus a return of assets (depreciation), and calculated on the basis of assumed efficient and prudent operating procedures.

The focus has typically been on maintaining existing service levels at low 'competitive' prices, in order to curb or eliminate inefficient monopoly rents. Such a heavy handed top-down approach is intrusive and potentially distorting, based as it is on a benchmark of little relevance to modern market conditions, especially markets where supply conditions especially make it unlikely that more than one or two firms could efficiently exist in the market, and with its demonstrated chilling effect on innovation in technology, quality and service offerings.

The hallmark of a workably competitive market is flexibility and independence in decision making, with no coercion, and freedom to choose on the part of both producers and consumers. This should be the implicit goal in theory of any regulatory scheme, but it is one that has in practice been subverted by a misguided application of perfect competition theory in the search for computational specificity and regulatory objectivity.

What is needed is not a revenue cap based on cost of service provision, but flexible regulation that can adapt to market changes, encourage innovation, look after the valid interests of both consumers and producers, and above all be relatively non-intrusive yet transparent. In the real world returns can fluctuate above and below the norm, depending on market forces. It is a denial of market realities to fix revenue caps for lengthy periods regardless of market changes. More regulatory focus is needed on market processes and market dynamics, rather than on outcomes determined by reference to hypothetical (and generally unattainable) market conditions.

When utility markets are structured such that regulation is deemed to be necessary in the public interest, the goal should be to try and replicate as closely as possible (remembering that perfect replication will likely never be achieved on any benefit-cost reckoning) the operation of a workably competitive market. Indeed there now appears to be widespread support for a regulatory approach that promotes dynamic efficiency, coming from various governments, courts, academic researchers, advisory committees, and even from some regulators. The concept of workable competition is understood generally to embrace the competitive pressures of genuine rivalry, strategic behaviour, and interaction between sellers and between buyers and sellers, responding freely and independently to market forces of both supply and demand, all of which compels firms to operate efficiently and to be innovative. This is the environment that regulation should seek to emulate, and this is what the WASC effectively has said that regulators should follow as their guiding model.

However established precedent provides a sturdy lifeline to cling to, from which many of the stakeholders in the regulatory process will probably be reluctant to cut themselves adrift. In industrial economics, it can be shown that it is generally in the interests of incumbents to behave strategically and deter new entry. The same applies to the emergence of new regulatory methods that disturb the status quo – many of these stakeholders may prefer to retain the system they are familiar with, with its predictability, known rents, advantages and disadvantages, and will resist the introduction of new regulatory techniques with their attendant unknown risks, uncertainties, asymmetries and implementation costs.

A problem with using workable competition as a regulatory objective is that there is no magic formula that defines its individual dimensions or outer boundaries. It is, if you like, a philosophy rather than a precise prescription. Different markets with quite different characteristics could be judged as workably competitive even though they displayed quite different structural and behavioural features. What Energex sees as being workably competitive may not be seen thus by others, depending on which of the many conditions of workable competition are thought to be of paramount importance. So use of a workably competitive framework as the goal of regulation might well entail less regulatory certainty, at least in the short run, both within and between various regulatory authorities, in terms of precedent and the ability to predict precise regulatory outcomes. The learning curve may be both quite flat and punctuated with considerable learning difficulties.

Nevertheless, the long term gains in terms of regulatory decisions, consumer choice and options available to regulated firms may well be worth the short term adjustment problems. Regulated firms will simply be facing a different type of regulatory uncertainty, but one which, I suggest, they are better able to manage by means of the ways in which they propose to offer PSO packages that reflect what could reasonably be expected to occur in a workably competitive market. Under such a model of regulation, the outcome lies much more pro-actively in the hands of the regulated firms than is the case under the present revenue cap regime. Here the regulated firm is forced to submit its requests for desired price levels on which the regulator is required to make difficult

quantitative decisions on investment, cost and rate of return parameters upon which agreement is never likely to occur, and whose empirical determination is not without considerable controversy in terms of there being no one objectively determinable correct answer.

3. PSO Offerings as the Emulation of a Workably Competitive Market

Energex is proposing a form of price-service offerings as a model of self-regulation designed to replicate what might occur in a workably competitive market. These offerings will in the first instance be made available to all of its customers individually, and are derived from Energex's expectations as to three different packages that might be attractive to consumers. They are founded in its belief that these packages are of the sort that would emerge in a workably competitive market, and are envisaged to become over time more detailed and tailored more precisely to satisfy smaller groups of consumers with similar demands and consumption characteristics, after extensive and on-going consultations with various consumer representatives.

This approach contrasts with the current one-size-fits-all approach whereby Energex presents its various services in a monolithic manner, at a price determined by regulatory revenue cap intervention. Consumers under this model effectively have no say in what services are available or on the price they have to pay. They are disenfranchised in effect and the suppliers are not encouraged to seek dynamic efficiency gains by constantly trying to lead the market. The fire of the competitive process is lacking.

It is my understanding that, in the absence of full retail contestability (FRC), Energex as distributor has developed these PSO offerings and proposes to offer them through the retailers. Some consultation has been carried out with retailers, but I am instructed that they would be fully consulted on PSO offerings when FRC occurs. It is not clear to me whether, under FRC, independent retailers who are not acting as franchisees of Energex would be free to offer differentiated versions of these PSO offerings, depending on each retailer's best commercial judgments. If so, the potential for even greater levels of consumer choice is enhanced.

To accept the PSO offerings as a valid regulatory procedure/outcome requires the acceptance of what I believe to be a major paradigm shift in Australia. Yet the regulatory (both State and Federal), Court and Tribunal record shows that the traditional revenue or price cap methods of regulation have produced a constant flow of serious disputes leading to significant delays and uncertainties, and high opportunity costs in terms of waste of administrative, legal and management resources. I believe that the mandate exists in terms of review recommendations and source legislation, and indeed in occasional musings by some regulators, for a behaviourally focussed approach that seeks to achieve market outcomes consistent with those obtainable in a workably competitive market. The PSO approach that is proposed by Energex appears to be consistent with this philosophy.

4. Evaluation of the PSO Proposals

4.1 Introduction

I see many positives in a PSO approach to regulation, in so far as it attempts to offer a series of outcomes not dissimilar, at least in theory, to the sort of outcomes that a workably competitive market could yield. A major difference is that it requires Energex to produce internally and voluntarily, absent market pressures, the sorts of consumer-oriented deals that market forces might have compelled them to develop.

The PSO packages proposed by Energex are aimed to be innovative and to provide incentives for investment, unlike the current revenue cap regime which locks Energex in to an investment program for five years and removes incentives to expand within that period. The packages provide incentives for all three types of efficiency to be achieved. They provide for flexibility in price and can lead to profits both above (if Energex performs well) and below (if it fails to produce what customers have contracted for or does so inefficiently) the norm. In this way they replicate the process of workably competitive markets, rather than producing the hypothetical end result of a perfectly competitive market, whatever that might be in the real world. In doing this the PSOs restrain monopoly rents but may not eliminate them entirely in the short run – but there is nothing wrong with this outcome if the prospect of such gains stimulates long run dynamic efficiency.

But the PSO packages do not decrease the need for regulatory intervention or at least involvement in the market, albeit perhaps this will now require more general oversight rather than direct regulatory decision-making on key decision parameters, especially with respect to price. However, the regulator will certainly need the power to step in should the offerings not provide sufficient choice in package options, or should the package prices be unacceptable to consumers.

4.2 Raised consumer expectations and the need for internal cultural change

PSOs will not be all plain sailing for Energex. While the three initial offerings may have been already decided upon (and I believe that Energex should explain carefully how/why it has compiled the specifics of these three bundled offerings – I agree that it is a matter of balance but Energex needs to be ready to counter defend any attacks that the PSOs that it has developed have been created only for its own self-interest), their release may engender heightened consumer expectations of an even greater number of more finely tailored packages, which will involve considerable and on-going management time, consultations with consumer groups, interactions with the regulator and so on.

I imagine that quite significant internal cultural change will be needed in order for Energex's staff to become more consumer-focussed and responsive to consumer wishes. The process outlined to me suggests that consumers will, to the extent possible, be given what they want so long as they are prepared to pay the appropriate amounts, rather than taking what Energex is prepared (or regulated) to give them, as is the case under the

current form of regulation. Such consumer sovereignty will place Energex in a quite different commercial, social and regulatory environment. A new breed of management and staff attitudes and entrepreneurship will be essential. All of this will be costly in the short run, but implementation of radical new strategies is never easy.

4.3 The costs of the consulting process

A problem that Energex will especially have to consider is the cost to it of the consulting process, including the cost eventually of involving retailers, and presumably the need to ring fence its own retail activities; the need to make sure that the widest possible spectrum of consumer groups is consulted; the risk of raised consumer expectations not being met; and the need to ensure that consumers do not suffer from any sort of bargaining inequality.

This last issue is a most important one to resolve. Consumers usually will not hold the same level of information on package options as will the supplier, and even if they do have access to all the necessary information in order to make optimal choices, they may not have the ability to interpret it correctly. To ensure equality of bargaining power, they will need help. For example, to be fully transparent, especially on prices, Energex might need to invite inspection and assessment of its costs. This could perhaps be provided by the regulator, or Energex could agree to fund an independent consultant to advise consumers about the various packages being put forward. In addition, in this process errors of fact and interpretation will be made by all parties and Energex needs to plan for this. Energex also needs to realise that the regulator may get closer to the consumer in this process than heretofore, and needs accordingly to be alert to any sort of capture associated with this.

Energex will need to take care that it does not appear to engage in any form of discrimination, price or otherwise, in setting up and delivering its PSOs. While it will be up to consumers to choose which package they will opt for, the pricing of the components of each package, especially in relation to cost of provision, will need to be carefully considered to eliminate any risk of allegations of price discrimination being made. It will be particularly important to ensure that the base package is not structured in such a way as to depart significantly from the offering currently available to consumers, unless it is clearly to their benefit, and also to ensure that it cannot be said to be structured in such a way as to 'force' consumers to choose a more expensive package.

Thus the PSOs are neither cost-free nor risk-free for Energex.

4.4 Issues surrounding precedent and the involvement of the regulator

It is unlikely that the PSOs will reduce the overall uncertainties attached to revenue cap regulation. Indeed, given that PSOs in a sense potentially invite less hands-on regulation, this lack of interventionary precision, for want of a better word, may involve Energex in some greater level of uncertainty than might have been taken into account in planning for this market-disciplined approach. There will be less definitive precedent for Energex to

follow, certainly at first, although this should not be a major concern if it is serious about developing PSOs that are consistent with the outcomes of a workably competitive process, because in a truly competitive market no firm can be certain of any outcome, especially in the short run. To the extent that precedent will exist in the future, it will relate to the outcomes of the regulatory process, rather than to the regulatory outcomes themselves.

The regulator will still be involved, albeit less intrusively and in a more light-handed way (the intrusive role now belongs to customers), but perhaps no less in terms of quantum, given the different nature of the PSO packages and the need for careful probing of them. The pressure on Energex to deliver on its packages will be high, and the size and nature of the penalties should it fail to deliver, and the implementation of them, are bound not to be without controversy.

The role of the regulator will in fact be quite different under the PSO model. It will be more of a facilitator at the first stage, helping the parties to negotiate and providing advice to consumer groups on their PSO package options. It will, presumably, be responding to, rather than initiating action. After the PSO packages have been agreed to, its role will revert to a monitoring one, to ensure that service provision is meeting its promised levels at the agreed prices, and only if this is not occurring will its role revert to a more traditional intrusive one, but still falling far short of it being the final arbiter of service offerings, quality and price levels.

4.5 Benchmarks and performance evaluation

I expected to find more precise detail on how Energex would measure whether it was meeting its target levels of performance. Feedback and evaluation mechanisms are crucial in a PSO package. In addition, more detail is needed on the penalty mechanism for failure to achieve promised targets – for example, how it is developed, how it is enforced, and appeal procedures; that is, when and under what conditions the regulator can step in on behalf of consumers.

Energex does propose five monitoring tests by which it may be judged. The first is the pure market-based one of giving more and charging less – putting its offerings to the market test of acceptability by consumers, with no direct and only minimum indirect input from the regulator. Should this not transpire, that is, should Energex give more but propose to charge a higher real price (note I am assuming here that the five tests proposed by Energex are ex-ante in nature), then the regulator would need to assess its conduct according to four additional market-focused tests: consumer willingness to pay; the willingness of Energex to supply; a comparison of what has occurred with benchmarked performance via a series of KPIs developed from observations of good industry practices of other utility supply firms; and a reconciliation of cost of service based on the past, with any monopoly rents washed out.

To convince the market and the regulator that its PSOs are fair and reasonable, Energex should provide extensive details on how it proposes to benchmark them, in the process

developing a detailed and justified series of KPIs against which its performance could be evaluated, both in terms of producing new packages and in terms of delivery of the ones currently on offer. At the moment it appears that consumers are being asked to rely on the good faith of Energex as it submits itself in the first instance to a limited form of exposure to market discipline. It needs to provide more complete detail to earn both the consumers' trust and prove to the regulator that what it is offering is either best practice, or close to it, and certainly a major improvement on what currently it has been restricted to offer.

4.6 Future PSO package offerings

At first the burden of managing three PSOs may not appear to be great, at least from an ex ante perspective, but executing and operating them may entail much more effort than currently planned for. In addition, Energex needs to evaluate just how many PSOs it should offer (i.e., is there an optimal number of them?), and how frequently should they be changed, if it is to live up to its contention that by offering PSOs it is replicating the behaviour of a workably competitive market. I am instructed that the first round of PSOs will apply for a five-year period, equating to the current term of Energex's revenue caps, on the basis of the argument that the long term nature of the underlying assets demands such a lengthy period. However, given that consumers will only have choice at the end of long contract periods and no flexibility to change within them (which many would not think of as being characteristic of a workably competitive market), I would suggest that consideration be given to PSOs with shorter periods, say three years. Not all packages need be for three years, and indeed a structured set of PSOs could be offered in due time with prices that reflect not only the content but also the flexibility offered to change packages more frequently. I note here generally that it is not easy for me fully to evaluate what Energex is putting forward in its PSOs as no detail has been provided to me on the detailed contents of the packages.

4.7 Cost issues

I presume that the base level PSO will set the standard for costs. I see no mention made of cost control throughout the contract period, other than the implied profit penalty Energex will suffer if its costs rise above the level contemplated when it negotiated its package prices. Energex may well say that it is in its own pecuniary interests to control costs, which is undoubtedly true once the contract is signed, but some problems remain. For example, what will it do with costs that increase outside of its control? Presumably it will simply pass these on, but this needs to be made explicitly clear in its contracts and it will possibly need to provide for some independent audit of these cost increases.

In addition, Energex may be able to roll cost increases of its own making into new PSOs, if over time many more of these are developed and they come on to the market at different points of time. This would not be in the best interests of particular groups of consumers, and would introduce a form of intergenerational price discrimination. Nor would Energex's failure to minimise costs be consistent with that expected of a firm operating in a workably competitive market, where it is expected that prices will move in

line with costs, where the latter reflect productivity gains, scale and scope economies, technological change and so on. With a price cap form of regulation it could be expected that Energex would be forced explicitly to acknowledge these cost savings and pass them on to consumers. With PSOs this pressure could appear to be less likely. Consumers have to rely on the word of Energex that its offerings and cost levels are in line with those that would be achieved in a workably competitive market, unless they and/or the regulator investigate costs carefully. Generally, I find that the PSO proposal focuses on price and service offerings – as the name implies – but it appears to have no transparent built-in cost check as such. I suggest that more attention be paid to this issue.

5. Summary

The concept of PSOs is an innovative one designed to provide market-type choices for consumers of a sort not usually found under traditional types of utility regulation. It favours innovations in quality and in the variety of service offerings, and puts a premium on both discovering and satisfying current and future consumer needs. The concept is clearly consistent with the law and intent of Australian Parliaments when they established their regulatory principles. Consumer choice and dynamic efficiency are enhanced (consumers currently have no effective choice in the package that is supplied to them), but at the expense of greater transactions and search costs. If Energex betters its specified service standards in terms of efficiency, it will gain. If it fails to achieve these, it will have to pay penalties to consumers. In theory the introduction of PSOs could lead to a Pareto optimal improvement for both Energex and consumers, as well as making the role of the regulator less technical and more one of assessing processes and packages rather than focussing on the technical minutiae of pricing, WACCs and so on.

The role of the regulator will have to change from one of working on behalf of, but largely distant from, consumers, to one of more direct interaction with them to assist in their dealings with Energex. But the regulator will still have to give its seal of approval to the price to be charged for each PSO package, I believe, and will have to approve of the reward/penalty structure. So it will not be entirely distant, albeit less hands on than at present. It will certainly have to resolve its twin roles of impartial regulator and 'friend of the consumer' if it is required to help consumers make their deliberations on the PSO packages being offered.

Energex will need clearly to have to work on a quite different nature and level of intersections with the regulator. This may take some time and patience. Energex will also have to develop its implementation systems carefully and ensure appropriate feedback loops are in place.

As with all such new concepts, the devil is in the detail of the implementation and operation of the new PSO packages. A major problem to be considered is that there are a very large number of criteria that can be used in a variety of combinations to identify a workably competitive market. The subjective nature of this concept will make it easy for those opposed to what Energex is proposing to argue that it should be pursuing other

criteria that more readily embody what these parties see, for their own ends, as being characteristic of a workably competitive market.

Energex will need to consider how much real choice can be offered in its PSO packages, and the costs involved in offering a greater number of packages to progressively more narrowly defined groups of customers. Consideration will need to be given to the socially best length of contract for packages, and whether consumers will be given the flexibility to switch out of packages mid-term, and under what conditions. Is the bundling of services in the packages based on absolutes as seen by Energex (in terms of supply imperatives), or can the service combinations and levels be seen as relatives based on supply and demand conditions as communicated by customers' wishes, and by reference to the range of offerings of other service providers? I note here that Energex appears to have not allowed for any possible need to take other rival's activities into account in its proposals. It does need to be mindful of this possibility, and of the regulator seeking to compare its offerings with those of other service providers of electricity, gas, or water.

The process is still subject to regulatory uncertainties and risks for Energex. These problems should be less burdensome and more easily manageable, it is true, but in the short run considerable interaction will be needed with consumers and the regulator, and new long term relationships will need to be established. I doubt whether outcomes will be easily predictable, certainly at first, and the costs involved in this process will not be insignificant. Greater levels of specificity in dealing with customers will be needed. Energex will need to ensure that it meets with all representative consumer groups; that it helps facilitate consumer/regulator interaction; and it may also need to be prepared to fund the transactions and search costs that this new process may impose upon consumers, if they are to exercise true choice and provide an effective part of the market discipline that Energex proposes to subject itself to. Management and staff will need to view, and respond to, customers in a much different light.

The regulatory approach that Energex is proposing is quite consistent with modern theoretical, empirical and political thinking on the nature of competition and the type of goals the competitive process can achieve. It focuses on the dynamics of markets and offers incentives for being innovative and promoting dynamic efficiency. Its logic is carefully spelled out and its method involves a sensible balance of checks and profit-making opportunities. It offers consumers a mixture of quality and service options, priced according to the effort and facilities required to deliver them. It does appear to offer the opportunity for consumers to be involved in the setting up of the PSO packages, but at the moment it does seem to involve them in a passive rather than pro-active manner. Penalties are provided for if Energex fails to deliver its contracted PSO package contents. It can earn rents on its entrepreneurship if it can deliver the packages in a more cost-effective manner than was apparent at the time of contracting them.

If Energex can deliver what it promises, both the long run private as well as public net gains of a PSO approach to regulation could be impressive.