

SUBMISSION TO THE
WESTERN AUSTRALIAN
ELECTRICITY REFORM TASK FORCE

ENERGY
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Submission to the Electricity Reform Task Force

Introduction and summary

Electricity is commonly divided into four businesses: generation, transmission, distribution and retailing, with a fifth function: scheduling, being retained under some neutral ownership.

Of the four main functions, distribution is best regarded as a natural monopoly. Its price, therefore, has to be controlled. Ideally this should be against an external reference point with the average price set using a CPI-X formulation so that the distributor is incentivised to operate efficiently. Transmission is also commonly thought of as a natural monopoly, although more recent developments hold the prospect that new transmission could become a deregulated, market-provided service.

The Task Force has proposed a vertical disaggregation of Western Power into single businesses covering:

- retail,
- transmission/distribution, and
- generation.

It also envisages an independent System Management, perhaps with its own board, undertaking system operation, market operation and system planning functions.

We consider the Task Force's proposals to be excessively conservative, especially in the treatment of generation and retailing, sectors where competitive provision is widely recognised to be readily achieved.

The major impact of adopting an ultra-conservative approach to the break-up of Western Power will be seen in terms of higher generation costs. To a considerable degree, these higher costs will stem equally from retailing, as retailing and generation are interdependent. Retailing is the major driver in bringing about the sort of generator structure that best meets the market's needs. But this cannot take place unless there are alternative suppliers of generation, because a monopoly will frustrate the structural change in production which competitive provision ensures.

Although it may be appropriate to have the SouthWestern integrated system (SWIS) operated by a single distribution business, we also believe that it is poor policy to combine the local poles-and-wires functions with those of transmission. We take this view because transmission is showing signs of becoming a contestable service and therefore requires a different corporate philosophy than distribution. Hence, we would prefer to see the more conventional disaggregation of the poles-and-wires business into transmission and distribution. That way, there is also greater assurance (additional to that stemming from an independent planning facility), that no favouritism would be shown to the particular solutions of an affiliate over others offered by a rival.

Those opposed to this view might argue that separate businesses give rise to higher overhead costs. This need not be so and was, in any case, no barrier to such a

disaggregation in other relatively small systems such as Tasmania and South Australia.

Finally, Western Australia has long experienced much higher electricity prices than those in other States. The most recent ESAA data show WA residential customers paying 25 per cent and business customers 40 per cent more than the Australian averages. Cheaper electricity prices are important both for households in WA and for industry competitiveness in processing where the State sees its competitive advantage.

Although it might be contended that WA prices are higher as a result of underlying costs, competitive provision is likely to prove this not to be the case. Jurisdictions that have privatised their electricity have experienced massive efficiency improvements. Over the 1990s, privatised Victorian generators scaled down their manning levels to achieve the fastest growth in productivity among Australian generators and at the same time vastly improved their availabilities. SPI Powernet, the privatised Victorian transmission business, halved its staff levels post-privatisation and, by greater use of contractors, reduced operating costs by 35 per cent. SPI achieved this and the lowest average controllable operating expenditure per MWh in Australia, in spite of the average age of its plant moving from 21 to 29 years over the period.

Arguably, improvements like this are achievable under public ownership. But in practice this rarely occurs, especially over an extended period. Accordingly, we would urge the Task Force to promote the benefits of a more rapid pace of privatisation than will emerge from simply inviting the private sector to participate in incremental and replacement developments.

The role of the electricity retailer

As retail margins are only about 5 per cent of prices, many consider that the role of the retailer is not material to the promotion of efficient electricity supply. Such judgements about the role of the retailer in bringing efficiency and consumer benefits in liberalised markets are incorrect. This is because, under competitive circumstances, the retailer is the *de facto* agent of the consumer and therefore the driving force of a market that responds to the needs of the consumer.

That role of the retailer as the consumer's agent is assumed of necessity—if abandoned, or neglected, a rival will step in. The retailer is the link between the different elements of production and the customer. Its functions are sometimes thought largely to comprise breaking down bulk supplies into packages useful to the consumer, reading meters correctly and cheaply, and showcasing producer's goods and making them available at convenient locations. But even this important list of functions offers an inadequate portrayal. The retailer's activities must extend to discovering what the consumer wants and seeking out the cheapest sources of supply at optimal quality levels.

The homogenous nature of electricity does not negate this. Electricity may be undifferentiable but its supply is from highly variable sources. In terms of assembling

inputs, the retailer must decide, based on its customers' and target customers' requirements:

- how much power to contract rather than buy at the day-ahead wholesale pool market
- how much of different sorts of power (baseload, regular peak, needle peak) to buy;
- how much price risk to take for the needle peak;
- how to respond to the customer's relative preference for some less tangible values (such as those associated with "green" power).

In many cases, the retailer will need to assist the consumer in defining her own needs.

This process will also include discovering prices at which interruptability might be rewarded, seeking out the customers who might find compensation for this of value and alerting them to the opportunities, and the mechanism for implementing such interruptability.

Important in achieving this are the vast differences in the value of electricity at known times of the day and the year and on *ad hoc* occasions. The consumer, and her agent the retailer, have incentives to discover what cost savings they can make by shifting their demand out of those periods. The corollary to the value to the parties of tailoring their needs to costs is the benefit of the system having a flatter load. As electricity can vary in value on the National Electricity Market from \$0–\$10,000 per MWh, a flatter supply load means a clear social benefit¹. The retailer is under great pressure to seek out inputs from all sources.

Generally, retail competition in Eastern Australia has meant that retailers have been better focussed on needs, including time-of-day needs, and have been prepared to pay more for peak power or fast start, thereby encouraging the development of such plant. This has greatly facilitated the ongoing tailoring of supply to market demand.

The retailer's role may also extend to offering energy-saving services or to offering certain services on condition that the customer undertakes particular actions, for example, installing power-saving globes. The retailer will also seek out ways of saving money for itself and its clients and needs to be alert to potential economies of scope (or synergies) in bundling its goods together with other similar products, sharing services of specialists such as meter readers, back-office functions etc. With the onset of Full Retail Competition, at least one Victorian retailer, is seeking to attract customers by offering a steep discount if the customer agrees to direct billing.

The retailer is *compelled* to be the agent of the consumer, as long as the consumer can move to an alternative agent. The retailer is an agent in a far more comprehensive

¹ In Texas according to a McKinsey article, around 30% reduction took place where metering allowed differential prices to be charged (prices were not specified); see Power by the Minute, February 2002. http://www.mckinseyquarterly.com/article_abstract.asp?tk=83967:1142:8&ar=1142&L2=8&L3=48. Similarly, Faruqi et al report that Georgia Power saw similar load reductions for their "most responsive" group with interval meters at prices of about 30 cents per kWh; see Regulation Fall 2001 *Getting out of the dark*.

sense than any representative body because it has to weigh up the needs against the available product inputs—and to do so correctly or face replacement.

A retailer, especially one under private ownership, has a very strong focus on profitability. This means that they will raise prices either to discourage customers who impose too high a cost on the services they can offer, or better to align the costs those customers entail with the prices they charge. Such activity also performs a valuable social function by better aligning costs and prices.

Of course, this process is stunted where full retail competition is not permitted². It is also greatly facilitated by having more than one retailer. Simply leaving existing retail functions in the hands of a single retailer is inadequate, even if the market is fully opened to additional suppliers. A new retailer has to achieve critical mass and, if from interstate, embark upon a learning process, establish credentials and relationships with others in the supply chain and so on. While all this is achievable, it raises the threshold, and means that the benefits of competition are likely to be muted or at least delayed.

Doubtless, a concern of the Task Force in opting for a single State Retailer is that WA may have too small a customer base economically to carry more than one retailer for the smaller customers. This may be correct, but at the present time the optimal size of retailers in the energy business is still being determined and the initial decision of the government should not predetermine this.

In any event, it might be expected that out-of-State retailers will eventually seek to establish themselves in WA, either in association with an incumbent or as independents. This should not be discouraged—even by a government concerned to avoid privatisation of the electricity supply industry. Indeed, as retailing under all Australian approaches is to be fully opened to competition, irrespective of the choices made by government owners, it is by no means certain that a State-owned system will prevail over private competitors.

These considerations aside, retail itself should present fewer ideological difficulties for an anti-privatisation administration than is the case with the “essential facility” functions of the poles and wires, or with the capital-intensive generators.

Our recommendation would therefore be for the State to allocate existing customers to one of two retailers. We would favour both of these being privatised but in any event would not wish to discourage them forming alliances with other suppliers interstate, overseas and with the retail arm of Alinta Gas.

Generation

It is not possible to have retail competition operating effectively if there is no generation competition. A retailer faced by a local monopoly has no incentive to

² See p.30f, of the IPA Submission to COAG’s Energy Market Review, at <http://www.ipa.org.au/pubs/Moranwebpapers/Energy23.pdf>

search out the needs of the customer and package energy in ways that meet those needs most cheaply, since the generator's incentive to respond is stifled.

It is true that over time supply dominance will be eroded to the degree that it fails to fully respond to customer needs. But this can take a very long time. In the UK, the duopoly of the two major portfolio businesses which inherited the coal-based assets of the CEGB took over ten years to break down, even though this was assisted by the somewhat unexpected emergence of a more competitive fuel (gas) and resolute action on the part of the regulator.

During that period, it is reasonable to expect that the UK consumer lost in terms of the price of the energy available. Although market forces may eventually extinguish such losses, their impacts are real. This is all the more serious for Western Australia, because in contrast to the UK, Western Australia's energy and raw materials constitute one of the State's more important competitive advantages.

The potential for competitive provision given Western Australian structure

The Task Force considered it is feasible to separate the generation business into four independent units. The arguments which it found persuasive against this approach could equally have been put (indeed were put) by every other integrated generation business that has sought to prevent disaggregation as a means of introducing competitive provision.

Chief among these arguments was the Task Force's view about the complementarity of Western Power's units. In fact, this does not distinguish the WA business from that in any other jurisdiction; it would be a strange business in any industry that did not develop its different component parts so that they were complementary.

Indeed, whether or not production is horizontally integrated, new capacity will frequently be designed to avoid head-on competition with incumbent capacity. This is all the more so when the incumbent capacity has high sunk costs and is therefore unlikely to be forced out of production. Hence, any new player would probably invest so that it was taking advantage of niche opportunities—in other words, was complementary to the existing providers.

The Task Force's analysis proceeds to examine experiences in other States and concludes that WA is similar to South Australia, which a NEM Task Force in June of last year suggested did not have sufficient competition.

There are, in fact, alternative views about the competitiveness of South Australia. A report by ABARE³ observed no incidences of market power in South Australia for the period of its analysis. South Australia experienced higher prices, but these were simply a function of the State's higher energy costs. The ABARE report went on to

³ C. Short and A. Swan, "Competition in the Australian National Electricity Market," *ABARE Current Issues* (January, 2002).

argue, albeit controversially, that the South Australian outcome was in contrast to that of Victoria, where it claimed to have found market power.

Since mid-2001, the price in South Australia has closely tracked that of Victoria, and the tight supply situation has been changed as a result of the commissioning of Pelican Point, changed to such a degree that the Northern Power Station of Flinders Power is presently under-contracted.

South Australian capacity last year comprised:

Genco	Capacity (MW)	Fuel
Optima	1280	gas
Flinders	700	coal
Pelican	478	gas
Synergen	400	Gas/distillate
CUBE	180	gas
Origin	180	gas

There were three businesses that might be regarded as baseload plus the 500 MW interconnect with Victoria (for which firm contracts cannot be bought).

In SWIS Western Australia, Western Power could be divided into:

Genco	Capacity (MW)	Fuel
Muja	1040	coal
Kwinana	901	gas
Pinjar	586	gas
Collie	330	coal
Mungarra	112	gas

Western Australia also has other sources, which account for 20 per cent of the capacity in the SWIS. It would be no less rivalrous than South Australia in terms of the number of independent players, and does in fact have more competitors than the three in NSW (four if Snowy is included) which by and large have brought vigorous competition.

In this respect, the size of Southwest interconnected market is about six per cent greater than that of South Australia, while generation is some 15 per cent greater. Although examination of this matter would repay further analysis, prima facie it would appear that Western Australia can expect to see greater competition amongst generators than in South Australia. The number of suppliers, four or five businesses split from Western Power plus the existing independent suppliers, is far from ideal. This is, however, sufficient for workable competition.

The Task Force's proposals to bring about increased competition

Although the Task Force is disposed towards leaving Western Power as a single generation business, it examines certain synthetic structures to ensure that the integrated monopoly operates more as though it was in a competitive market. Most of these “virtual arrangements”, designed to provide some operational independence for particular portfolios of generation assets, are difficult to see as anything but poor alternatives to more genuine independence.

The corporatisation model under a single State ownership is most certainly deficient. The shareholder Minister cannot realistically divide his own mind into different shareholder Ministers who must avoid divulging commercial in-confidence information from one firm to another for which he is responsible. Corporatisation is, therefore, a poor substitute for privatisation of a disaggregated Western Power. But both NSW and Queensland would plausibly contend that their State generators under independent Boards are capable of matching the efficiencies of their privately-owned counterparts. It is unquestionably true, as a range of indicators demonstrate, that the present NSW generators are more efficient than when they were under a single “not-for-profit” ownership. The mere implementation of a corporatisation framework would not have provided as potent conditions for promoting efficiency if the single generation business had been left intact.

The Task Force examines some means by which a greater commercial rivalry can be injected into the operations of a Western Power that remained under a single ownership entity. Among the options considered is leasing the assets—a course followed in France and in Ottawa, partly to reduce the risk to the government of having an asset that may face volatile market prices.

Leasing could offer the potential of providing equal incentives to full private ownership under certain circumstances. These would certainly be the case under the South Australian model of very long leases. Some success is also likely even from shorter-term leases, such as those pioneered in France by the water companies. To apply these to electricity would need considerable thought, especially where the lessor saw value in putting in new capital.

All this said, if the Task Force take the view that there is inherently inadequate competition given the structure of the generation assets, no amount of tinkering with governance will provide an improvement.

Our own view on this matter is very different. Our examination of other markets shows that Western Australia can have a workable market based on commercial rivalry. And commercial rivalry is far superior to other means of trying to bring efficiency.

Reform in other jurisdictions offers blueprints for Western Australia. Initial vesting contracts to the different generator entities is an important transition tool. In the fundamentally contractual market that is invariably found in electricity, (except where not allowed, as in the failed Californian model) generators will be keen to ensure that they are contracted. They will be equally keen to ensure that they are operating at least

to the capacity of their contracted load, to avoid having to find replacement energy at potentially very high prices.

The alternative of continued monopoly provision does not provide the stimulus to improved efficiency and lower prices. Western Australian electricity prices have been 25–40 per cent in excess of those of other major States. Views differ on whether or not this is as a result of the efficiency of supply rather than intrinsically higher costs. If monopolistic behaviour elsewhere is a guide, at least some of the costs would be reduced by competition. The extent of these gains and their realization will be difficult to test unless there is a market with rivalrous suppliers operating beyond the current low market shares.