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15 October 2004

Mr Lew Owens  
Chairperson  
ESCOSA  
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Dear Mr Owens

**RE: Inquiry Into Retail Electricity Price Path: Discussion Paper**

NRG Flinders is pleased to offer the following comments and input to ESCOSA's retail electricity price path inquiry, in response to the discussion paper and accompanying reports released in September 2004.

These comments address in turn a number of the issues on which ESCOSA has sought comment.

*Form of Regulation*

ESCOSA has sought comment on the precise form of the price path to be implemented.

As a general principle, it may be preferable to adopt the most straightforward and intuitive approach. As the primary intent of the price cap is to provide a glide path to competition, rather than implement cost-based pricing, this appears largely to remove the need for precision and more elaborate tariff controls. The competitive environment of the retail market also removes the need for incentive and efficiency improvement mechanisms within the tariff structure, as might apply in a regulated monopoly industry segment.

From this perspective, the simplest approach to implement and administer might take the form of an average revenue per MWh price path. This approach would also provide the market with a readily understandable benchmark, and achieve consistency with relevant approaches applied interstate. ESCOSA has highlighted the weaknesses of more prescriptive approaches, such as average revenue per customer controls, which appear more heavily dependent on consumption levels.



In addition to specifying a regulated price path, ESCOSA may wish to consider applying a side constraint (eg 5% pa) to enable rebalancing of individual tariff categories to market cost reflective levels, noting the range of existing cross-subsidies that it has identified. In this respect, the Victorian model might perhaps provide the most relevant example. Provision could also be made for any greater adjustment of individual tariff categories where necessary, on application to ESCOSA.

#### *Conditions for Reopening*

There is a clear and inherent risk in applying retail price caps at the retail level, while costs are dictated by market forces at the wholesale level, as demonstrated by the Californian experience.

For this reason it would appear essential to allow for reopening of the price path in the event of unforeseen and material increases in wholesale energy costs. The host retailer would be the party best placed to trigger this mechanism, and bear the onus to demonstrate that significant deviations in wholesale energy costs and exceptional circumstances have arisen. This mechanism could revolve primarily around energy costs, as prudent cost allowances for other cost components could be expected to allow for all but massive increases in these elements.

Conversely, there would appear to be no obvious need to reopen the tariff path in the event of any unexpected and material fall in energy cost. In a competitive market place any such windfall gains would simply be competed away, accelerating the role of the price path in providing a glide path to competition. In this regard, it is noted that a healthy churn rate is already evident in South Australia, with close to 20% of small retail customers estimated by ESCOSA to have moved to market contracts.

As acknowledged by ESCOSA, an asymmetric risk exists in setting the level of the price path, with greater potential risks in setting price caps too low. This reinforces the need for reasonable cost allowances.

#### *Pass Through*

Coupled with the above reopening mechanism, it is also essential to allow for cost pass through of cost items genuinely outside the control of the host retailer. From this perspective, the initial list identified by ESCOSA does not appear unreasonable, noting the inclusion of items such as network charges, tax events, market related changes and new charges.

However, it would also be appropriate to specifically include within the definition of tax events the cost impact of any carbon tax or equivalent greenhouse abatement measure that may be adopted in future by government. Failing this, it would be necessary to build a specific estimate of such costs into the price path, if and when such an event occurs. It would also be appropriate to include provision for pass through in relation to material market force majeure events, again to avoid imposing undue risk as a result of applying regulated price caps.



*Allen Consulting Group Report*

NRG Flinders offers the following comments on the assumptions and analysis contained in the *Energy Wholesale Price Study Final Report* prepared for ESCOSA by the Allen Consulting Group. At the outset, NRG Flinders acknowledges the difficulties in seeking to estimate forward energy prices over any significant timeframe, and the dependence on the assumptions used.

It is noted that the forward contract prices incorporated into the analysis are derived from market data as at August 2004. NRG Flinders notes that SA forward contract prices have moved upwards in the order of \$1/MWh since that time. NRG Flinders believes a number of factors underlie this movement:

- NRG Flinders believes that contract prices were artificially low at that point in the pricing cycle, and was not in fact a seller of hedges at those prices for any significant volumes. Based on observed trading activity, NRG Flinders would suspect other South Australian generators were of a similar view at that time.
- The forward curve in SA has been held down in part by a number of independent market traders in recent years as a consequence of proprietary / speculative trading activities, and on the basis of thin volumes. The market has been heavily hedged in South Australia through this time, and consequently little upward pressure has been placed on the price curve by existing market participants to reflect the underlying demand/supply position.
- Movements in the forward price curve generally incorporate outcomes observed over the previous 12-month period, as this provides an indication of general trends emerging in the market. The upward pressure on the price curve observed in recent months is reflective of the current 12-month rolling average pool price in South Australia, which has now risen above \$40/MWh, as at the time of writing.

NRG Flinders would therefore suggest that the modelling be updated to reflect the current forward contract prices. More broadly, the movement observed in the space of a few months demonstrates the difficulty in attempting to define forward prices over a regulatory horizon approaching 4 years, and reinforces the need for realistic energy cost allowances.

In terms of the scenarios modelled, it is noted that historic prices feature heavily in the analysis. New entrant pricing levels are specifically recognised in only one scenario. NRG Flinders believes this raises a number of issues.



In particular, the use of historic pool prices in forecasting over a forward 4-year timeframe appears to suffer a number of weaknesses:

- Contract and pool prices across the NEM have demonstrated a clear convergence in recent years. Price outcomes in South Australia are increasingly dependent on national trends and volatility, and are not driven purely by demand movements in South Australia. Both local and national factors need to be considered in projecting pricing trends.
- The reference period chosen (2001-02 to 2003-04) corresponds to a low period in the price cycle, representative of the capacity balance, mild weather and market dynamics in play during that period. The tightening demand-supply balance in the future might be expected to yield very different price outcomes over the next 3-4 year period, noting the reserve shortfalls forecast by market planning bodies across most regions in the NEM.

The limited emphasis placed on new entrant pricing trends also carries a number of implications:

- This appears to assume limited prospects for new investment in the market over the next four years. This stands at odds with the increasing need for additional capacity that has been forecast by the market planning bodies, noting that NEMMCO is presently procuring capacity to address a shortfall of reserves for the current summer period.
- Reflecting this assumption in a regulated price path runs a serious risk of removing incentive for new capacity investment, and thereby creating a self-fulfilling prophesy that would deny the scope for new entry to occur. This highlights the regulatory risk involved in artificially setting price caps below viable levels.
- Whilst only one scenario appears to assume new entry pricing specifically, no scenarios appear to have been chosen to represent a high price outcome in which new entry pricing is exceeded for a period. This would recognise the reality that new entrant prices need to be exceeded before a new entrant can enter the market and expect viable post-entry returns. New entrant pricing is seen as a long term-average, rather than a theoretical ceiling, with fluctuation around this level over time as low and high price years are experienced.

It is therefore unclear that a reliance on historic prices can be expected to provide an accurate indicator of likely price over the next four years. The emphasis placed on historic price trends may therefore need to be reconsidered, and other factors given greater weighting to balance the analysis, particularly future pool price expectations.

Placing greater emphasis on new entrant pricing and balancing the scenarios with a range of both high and low price outcomes would be expected to provide a more realistic outlook, and ultimately support a regulated price that is more consistent with encouraging competition, market entry, capacity investment and a sustainable and viable market in the longer term.



In terms of the contracting strategy assumed, the assumed use of simple swaps and caps may oversimplify the position. A retailer might be expected to rely on a sophisticated range of products to manage expected peak demand, and insurance products to manage the risk of extreme demand events. Consequently, the level of pool exposure assumed may be unrealistic, and some allowance for more sophisticated range of products might be warranted.

It is also noted that generator transmission losses have not specifically been taken into account in determining wholesale energy costs, based on the assumption of a notional new entrant at or near the regional reference node. NRG Flinders would question this assumption, and considers it highly likely that future significant generation investment will not occur at or near the node (eg adjacent to the metropolitan area) particularly from an environmental and community perspective. Some allowance for average or indicative generator transmission losses would therefore seem appropriate.

As a result of the assumptions and analysis undertaken, the model has produced a flat to declining wholesale energy cost outlook over the regulatory period. At an intuitive level, this appears to conflict with the upward sloping forward contract curve, the growing peakiness of small customer demand in South Australia, and the increasing penetration of wind generation which is expected to increase volatility and reduce the capacity factor of existing generators. Each of these factors would appear to be placing upward pressure on energy costs. This highlights the need to revisit the assumptions and scenario weightings to ensure a more balanced assessment, as outlined above.

#### *ESIPC Report*

NRG Flinders offers the following comments on aspects of the methodology and analysis undertaken by ESIPC in its Information Paper prepared for ESCOSA, *Estimates of long run marginal cost of supplying electricity to small customers in 2005*.

In terms of the financial parameters assumed, a number of key variables appear unusually low by merchant generation standards:

- An equity beta of 1 would appear too low, and we note that this is the same as used in regulated network asset determinations. Merchant generation is clearly more risky and has more volatile earnings than regulated network businesses;
- An assumed cost of equity of 13% appears low. A level of 15% to 20% might be considered more realistic, reflective of accepted market risk premia, which clearly exceed those of regulated assets;



- The levels of WACC assumed also appear on the low side, and insufficient to sustain investment in merchant generation.

Consequently, it may be desirable to focus on scenarios incorporating higher rates of return.

In terms of other specific aspects of the analysis:

- The modelling also assumes a notional new entrant generator locates at or near the regional reference node. For the reasons outlined above, NRG Flinders does not believe this is necessarily an accurate representation of likely new entrant scenarios, and believes allowance should be made for likely generator transmission losses.
- It is assumed that the host entrant retailer bears no systematic risk in losing retail customer share, since small customers are settled on the same load profile. NRG Flinders believes this assumption is incorrect, and understands some retailers are segmenting the market and targeting higher volume, peakier customers. Second tier customers are settled against the standard load profile, leaving the host retailer to bear the residual cost of peakier loads, given the use of settlement by differencing in the NEM. This has the impact of leaving the host retailer with a worsening residual load profile than would otherwise be the case, and consequently bearing the increasing cost of a deteriorating load profile.

It is noted that a base case new entrant cost scenario has been presented, accompanied by 8 scenarios modelling potential cost variances. However, the base case has been chosen as the representative cost curve. As this takes no account of the cost sensitivities, in order to present a balanced picture, it might be preferable to rely on a weighted average figure reflective of the impact of all cost scenarios, rather than limit assessment to the base case.

### *Summary*

In the view of NRG Flinders, the overarching purpose of the retail price path in providing a transition to market competition defines a number of key features to be considered.

The form of tariff path should be chosen to provide a straightforward control to implement and monitor, with allowance for tariff rebalancing to achieve market cost reflective tariff levels. Allowance for reopening in the event of unforeseen energy cost increases, and appropriate pass throughs, assist in avoiding the key risks inherent in regulated retail price caps in the context of a competitive, unregulated wholesale market.



The level of the price path should be chosen so as to provide an optimum glide path to a deregulated market environment. A greater focus on realistic new entrant pricing levels would be consistent with this objective, and provides scope for increased competition at the retail level whilst providing the basis for increased capacity investment at the wholesale level. NRG Flinders believes it would be worthwhile considering refinements to the methodology and assumptions of the forward wholesale cost analysis undertaken on behalf of ESCOSA to this end, consistent with the above comments.

The retail market has achieved encouraging churn rates, with an estimated 18% of small retail customers electing to switch to market contracts to date. This inquiry provides a pivotal opportunity to continue this momentum, and complete the transition to a fully competitive retail market.

NRG Flinders trusts the above comments provide useful input to the inquiry. While NRG Flinders does not propose to make a presentation to the public hearing scheduled for 20 October 2004, we would be pleased to discuss, elaborate or expand upon any of the issues raised in this submission if that would be helpful to the inquiry.

Should you wish to discuss this submission, please contact me on the number listed below.

Yours sincerely

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