**From:** Chris Sayers
**To:** EPR
**Subject:** Inquiry into energy prices in Tasmania
**Date:** Thursday, 28 September 2023 5:17:30 PM
**Attachments:** Submission to MLC Inquiry into Energy Prices.pdf

Dear Ms Thompson

I wish to make a submission to the subject Inquiry (see attached).

I was formally the Assistant Commissioner, Economic Infrastructure at the Productivity Commission. The submission is intended to provide background and suggestions for the Committee to consider in their deliberations. I am retired and have no affiliations or interests other than being a consumer of electricity and gas.

Yours sincerely,

Chris Sayers
[redacted]

# Submission to the MLC Inquiry into Energy Prices

Businesses in the energy supply industries have market power because their large fixed costs discourage direct competition. For this reason, they are usually regulated. Governments appoint regulators to ensure the businesses are efficient, provide levels of service that are in the public interest, and ensure revenues do not exceed costs.

Traditionally, the industry was comprised of public utilities. However, many have now been privatised. Some, like the Tasmanian electricity businesses, remain in government ownership. They have been corporatised as government-owned businesses, and, as such, are subject to external governance by a shareholding minister.

The price outcomes under scrutiny by the Committee are determined by the structure of the industry, the conduct of the businesses, regulation, and other forms of government supervision.

The key factors (ToR 1) affecting Tasmanian energy prices are Tasmania's participation in the National Electricity Market (NEM), the current regulatory approach, the external governance of Tasmanian government-owned businesses, and the governance of the Tasmanian regulator.

Ensuring local regulation and government business supervision are effective represents the greatest opportunity to achieve the lowest prices possible (ToR 2). There is also some scope to make cost improvements at the margins by changing the structure of supply and the nature and extent of Tasmania's participation in the national energy market.

Throughout this submission, are suggestions on what the Committee might focus on in its deliberations. Some might be regarded as naive because they are contrary to some past reforms and require governments to be more transparent and, therefore, accountable. However, they are worthy of consideration as best practice benchmarks.

## The regulation of electricity

A neoliberal approach underlies the structural reforms that led to the establishment of the NEM. The aim was to split up the state-owned electricity businesses into their generation, transmission, distribution, and retail components so governments could divest through privatisation if they wished.

The more extreme advocates of reform wanted the businesses to be split up so that governments could not put them back together again.

Disaggregation, however, comes at a cost to economic efficiency, principally through the loss of economies of scope from vertical integration. These economies are estimated in cost studies to be between 15 and 20 percent.

These reforms were justified by 'ring fencing' the elements judged to be competitive in generation and retailing from the natural monopoly transmission and distribution elements. It was also justified by making it possible to move government-owned businesses off budget, establish competitive neutrality with the private sector through corporatisation, or divest them by privatisation.

In essence, it was claimed that any economic efficiency cost would be offset by gains from competition. However, this is difficult to accept where the transmission and distribution businesses are monopolies and because generation businesses have been found to be able to exercise market power and game the spot market.

A note on NEM reform issues is included in Attachment 1.

There is scope to reintegrate generation, transmission, distribution, and retailing where businesses remain in government ownership. Reintegration can be expected to improve operational co-ordination and planning investment for overall system-wide performance.

> *The Committee might consider reintegrating the generation and delivery of electricity.*

The reforms also required the establishment of a market operator and more businesses to regulate. The current cost of market operations is around 8 percent in Tasmanian transmission costs.

The cost of the increased scope of regulation introduced in support of the structural reforms is unknown but significant. For example, the Australian Energy Regulator has a budget of $9 million per year.

***The current approach***

The current approach used to regulate electricity and gas supply businesses is based on attempting to replicate the behaviour of a benevolent private sector. It is aimed at ensuring that regulated businesses only make a financial return.

It is argued that this also promotes entry and competition, or contestability by the threat of entry, where direct competition is not possible.

Economic efficiency is difficult to achieve under this approach. Efficient allocation of resources requires prices to be set at the short-run marginal cost. In the energy sector, the cost of capital assets is proportionally large, fixed, and usually sunk (that is, they have no alternative economic use).

The cost of these assets can be either borne by the government or recovered from users. The economic efficiency cost of recovering fixed costs from users is minimised by causing the least distortion to allocative efficiency. This requires costs above marginal costs to be recovered through price discrimination by setting different charges across users on the basis of the sensitivity of their demand to price.

There are many other criticisms of marginal-cost pricing. Notably, marginal costs do not reveal the social cost of maintaining production. Furthermore, price discrimination is also difficult to implement for both practical and political reasons.

The current regulatory approach can come at the cost of transparency. Businesses sometimes claim some costs cannot be revealed for business-in-confidence reasons when they enter into contracts with suppliers. This restricts the regulators from revealing all the information relevant to their decisions.

The regulation of transmission, distribution, and retail businesses is widely based on a building block approach.

The underlying rationale of this approach is to ensure revenues cover a return on capital assets plus depreciation and operating costs. The regulatory asset base is either fixed initially or revalued from time to time to take account of technological advances.

The cost of a theoretically ‘optimised’ contemporary asset that has the same service flow is assessed. The estimated value of the asset is then adjusted over regulatory periods by subtracting depreciation and adding capital expenditure.

The building block approach results in a cost of supply for each disaggregated business.

It is widely accepted that assets should be valued at their depreciated optimised replacement cost (DORC) under the building block approach, and this is supported by the ACCC.

The Australian Energy Regulator (AER), in regulating the TasNetworks transmission and distribution business, uses a variation of the DORC approach. It establishes an initial valuation of the asset base using the optimised replacement cost.

The asset base is then adjusted over a regulatory period by:

- indexation of the regulatory asset base;
- a reasonable rate of return on capital for that year;
- the depreciation for that year;
- the estimated cost of corporate income tax for the provider for that year;
- certain revenue increments or decrements for that year arising from an *efficiency benefit sharing scheme*;
- the forecast operating expenditure accepted or substituted by the Australian Energy Regulator for that year; and
- compensation for other risks (so-called bypass provisions).

DORC valuations are based on a contestability concept. The depreciated replacement cost is intended to represent the maximum that a monopoly business could earn in a perfectly contestable market and deter new entrants.

This is a high benchmark that is conceptually difficult to justify. Perfect contestability is an implausible concept in the energy sector. The conditions for contestability, that is, costless entry and exit and sticky prices, are not met in businesses with very large capital costs.

This form of regulation is referred to as a cost of service (COS) approach. The regulator, having established an asset base, determines the average revenue required to cover the costs for the period in question. The approach is expected to provide incentives to lower costs over a relatively short regulatory period.

The average revenue of a regulated business is affected by the extent of services provided and its ability to price discriminate. Issues arise in the estimation of average revenue if governments intervene to protect some consumers from high prices.

The use of DORC across different businesses is controversial. There is evidence that it does not achieve its objective for some monopolies. Apart from

disputes, its calculation is also extremely contentious because regulators do not have sufficient industry information or regulatory experience to hold businesses to account.

Accounting data does not provide a basis for its calculation or scrutinising regulatory decisions. For this reason, an equity method of accounting has been suggested as a better approach. Under this approach, the investment is initially recognised at cost and adjusted thereafter for the post-acquisition change in the investor's share of the investee's net assets.

Price cap (PC) regulation is another form of controlling the behaviour of monopolistic businesses. Under this approach, the regulator sets a maximum price for a service or basket of services. The regulated business is usually free to set prices at or below the level of the cap.

This form of regulation is designed to provide, like the cost-of-service approach, an incentive for the regulated business to increase profits through efficiency savings. The incentive to be cost-efficient is considered to be stronger under price cap regulation than cost-of-service regulation.

As with cost-of-service regulation, the effectiveness of the incentive to pursue efficiency improvement depends on the ability of the regulator to estimate caps that just cover costs and provide a return on investment.

There are many issues that affect the efficacy of regulation and the incentive to improve efficiency. These include:

- Asymmetrical information, where the regulated business has superior information on costs and the demands for their products or services.
- The incentives for long-term investment in energy infrastructure appear to be weak.
- The stochastic nature of demand and the existence of economies of massed reserves.
- Bayesian techniques are difficult to apply and provide only a framework for addressing uncertainty over time.
- The estimation of DORC gives rise to disputes because of the subjectivity in its evaluation.
- Regulation itself can give rise to adverse selection and moral hazard.

All the current regulatory approaches come at a cost to transparency. Government and private businesses claim some costs cannot be revealed for

business-in-confidence reasons when they enter into contracts with suppliers. Consequently, it is difficult to scrutinise regulatory decisions.

Another major issue is that regulators do not report the efficiency cost of setting prices above the short-run marginal cost. It is complex because it requires general equilibrium modelling to do so. However, it is important that governments understand the economic consequences of current regulatory regimes.

The regulatory approach in Australia is well established and it must be recognised that regulation is an imperfect substitute for strong competition. As such, there is little scope to do better as long as the governance of the regulators is sound.

The main area of failure appears to be providing incentives for efficient investment. This typically concerns operational expenditure on maintenance and, most importantly, capital expenditure programs.

Improvements can only be made in a disaggregated supply structure with greater government intervention to ensure that there is adequate system-wide investment to maintain existing infrastructure and that investment in additional capacity takes place at an optimal time.

> *The Committee might consider whether infrastructure planning in Tasmania has been effective and whether infrastructure investment in asset maintenance and service capacity is undertaken to minimise costs.*

Another possible avenue for improving regulatory outcomes is by compelling Tasmanian monopoly government businesses to co-operate openly in the regulatory process. The government could achieve this by issuing a direction under a treasurer's statement of expectations.

> *The Committee might explore the possibility of the government compelling their businesses to co-operate with regulators to ensure that the regulatory process is rigorous and the outcomes are in the public interest.*

***Regulation of HydroTasmania***

HydroTasmania revenue accounts for approximately 35 percent of a typical bill. However, this does not represent the cost of generation. It is the revenue that the regulator determines that the business can earn from the wholesale sale of electricity.

The regulatory framework establishes the maximum wholesale electricity price (WEP) that HydroTasmania can charge for wholesale contracts. Regulated contract prices are determined under the *Wholesale Contract Regulatory Instrument (WCRI)*.

The Tasmanian Economic Regulator is required to calculate the WEP in accordance with *s.40AB* of the *Electricity Supply Industry Act 1995* and the method set out in the relevant Standing Offer Price Guideline. The *Electricity Supply Industry Act 1995 (ESI Act)* specifies that the Victorian weekly load-following swap prices (in the hedge market) are used as a price cap.

This method, however, has not always been used. The Treasurer determined the WEP by making a Wholesale Electricity Price Order in 2017-18, 2018-19 and 2019-20. The reason for these determinations is likely to be the significant increase in market prices over the period.

The Tasmanian regulatory approach is strongly linked to that of the NEM. The rationale for this is unclear. There are a large number of competing policy objectives, such as a desire to attract new investment in generation in Tasmania and achieve greater interconnection to the Victorian market through the Bass Link and the proposed Marinus Link.

This approach is reflective of the value of electricity as a traded resource. However, it does not appear to recognise that the NEM market price is inefficient. In effect, the regulated price approximates the opportunity cost forgone. That is, it represents the price that HydroTasmania would obtain if the electricity it generates were sold into the NEM instead of to Tasmanian consumers, less an adjustment for the cost of exporting the energy from Tasmania to Victoria.

*The Committee might explore the rationale for this approach.*

This approach appears to have a number of issues that affect the cost of electricity in Tasmania. The Victorian NEM hedge price does not represent the efficient cost of electricity. The NEM has some serious short-comings that have

led to real price rises of over 20 percent since its establishment, even before the price of energy inputs increased following the Ukraine conflict.

Mainland prices are well above the cost of generating electricity in Tasmania, where 80 percent is hydroelectricity. Also, the mainland market is distorted by supply shortages, transmission constraints, and generators gaming the market. Mainland prices also include the cost of operating the market and the inclusion of higher taxes.

The regulatory approach is likely to result in a price above a building block assessment of the revenue required to cover the efficient cost of generating electricity in Tasmania and be much more than that of using an economically efficient (short-run marginal cost) price.

Hydroelectricity is one of the cheapest sources of electricity. The cost of generating electricity is less than on the mainland because coal and gas are still being used for generation. Other forms of renewable electricity, such as off-shore wind and solar, are more expensive, and their intermittent supply requires 'firming' energy storage.

The approach suffers from a perceived conflict of interest by the government. Setting prices above costs increases the dividends paid by HydroTasmania to the Treasury. In effect, it represents an indirect tax on Tasmanian consumers if the price cap is greater than the cost of supply.

The approach is only effective if the revenue received under the price cap approximates the efficient cost of production. There is a muted incentive to maintain efficient services if the cap is well above costs, which is likely to be the case in Tasmania.

It is an inappropriate way of achieving competitive neutrality with new private wind farms and other renewable developments. Not using the lower cost of hydropower to set regulated levels of revenue disadvantages Tasmanian consumers.

The approach makes it difficult to scrutinise HydroTasmania efficiency as a government-owned business. The absence of direct regulation means that the government does not necessarily have the information required to closely monitor its performance.

*The Committee might consider the possibility of re-regulating HydroTasmania's revenue.*

Currently, there is no information published on how much higher the cost determined under the current regulatory approach is above the actual cost of generation in Tasmania, its impact on demand, its overall effect on the Tasmanian economy, or the competitiveness of Tasmanian businesses. This could be a significant factor affecting the price of electricity.

*The Committee might consider recommending a study on the economic impact of the current approach to regulating HydroTasmania.*

Another potential problem with this approach is that major capacity-enhancing investments might be difficult to accommodate. At some stage, a requirement to invest in greater capacity or pumped energy storage capacity for firming supply and water security might arise.

Currently, pumped storage is being considered under the 'Battery of the Nation' initiative. The cost is mainly covered by concessional loans from the federal government. If it goes ahead, it would be incumbent on the regulator, for competitive neutrality reasons, to take the concessional interest rate into account when regulating HydroTasmania's required revenue.

***Regulation of TasNetworks***

TasNetworks allowable average revenue is determined by the Australian Energy Regulator. Its revenue accounts for 40 percent of a typical bill.

The valuation of assets by regulators is controversial in general. There is evidence that regulatory asset base has been valued too high, resulting in windfall gains. Indeed, some of the real increase in NEM electricity costs could be attributed to this regulatory problem.

The regulatory approach has not encouraged mainland investment, resulting in network constraints. Furthermore, governments are having to intervene to ensure that renewable energy projects are connected to the transmission grid.

The regulator uses the optimised replacement cost (ORC) to value TasNetworks assets. Under this approach, assets are valued at the cost of replacing the existing asset with a modern equivalent available asset (MEA).

The use of ORC, and thereby the allowed return on assets, involves a greater degree of subjectivity and results in even higher valuations and prices, especially for assets with very long service lives, such as transmission and distribution networks. It has been estimated that the ORC valuation of transmission assets can be up to twice that of DORC valuations.

*The Committee might consider whether the Office of the Tasmanian Economic Regulator should take over the Australian Energy Regulator's role in regulation of TasNetworks.*

Regulating TasNetworks by the Tasmanian regulator would provide more direct government control of the method used to adopt an approach that is better suited to local circumstances in Tasmania and a government-owned business. This could be achieved through the objectives that govern the regulator while ensuring its independence and effectiveness.

One of the objectives might be to ensure greater transparency of the performance and the efficient cost of services. It should not be asked, however, to make decisions about the appropriate levels of service quality.

***Regulation of retail services***

The Office of the Economic Regulator sets retail electricity prices in Tasmania. The Standing Offer Price for small consumers (households and small business). Consequently, the regulator is responsible for just 14 percent of the overall costs underlying Tasmanian prices.

On 25 May 2022, Aurora Energy was directed by the government not to seek recovery of costs in 2022-23 associated with Aurora+, a digital usage data and account management tool for customers.

Retail electricity prices are set at the maximum amount of revenue that Aurora Energy can earn. This revenue is calculated based on various inputs, including wholesale prices, network costs, retailing activities, metering costs, an allowable retail margin, and forecast renewable energy target costs.

The regulator refers to this as a building block regulatory approach. The rationale for this approach is to ensure fair and 'economically efficient' prices are charged to customers in order to deliver quality, safety, reliability, and security of supply of electricity. "It is also aimed at ensuring all market participants can earn an appropriate rate of return."

Retail electricity tariffs set by the regulator are proposed by Aurora Energy, and the revenue expected must not exceed the maximum revenue. Final retail prices for contestable (commercial and industrial) customers are unregulated, with competition expected to drive pricing outcomes.

The maximum price increases are determined by reference to the Consumer Price Index to ensure that Tasmanian consumers are not subject to recent NEM price increases.

On face value, this is inconsistent with the regulatory approach of tying wholesale prices to Victorian hedging contracts. It also implies that there is scope to absorb costs and that overall revenue exceeds costs.

Ensuring profitability for each business in a disaggregated supply chain results in multi-marginalisation. In the electricity supply industry, the costs of the retailer of electricity include the profits and taxes of upstream generation and transmission suppliers.

The building block approach to regulating standard retail price offerings is not as economically efficient as claimed by the government. Multi-marginalisation causes significant departure from the short-run marginal cost benchmark for economic efficiency, and departures from optimality have significant economic consequences.

> *The Committee might consider how to eliminate multi-marginalisation if they do not reintegrate the Tasmanian businesses.*

A feature of the regulatory approach is to have regard for the forecast renewable energy target costs. Currently, this cost amounts to approximately 6 percent of the electricity charge to a typical small consumer.

The Renewable Energy Target is an Australian Government scheme designed to reduce emissions of greenhouse gases in the electricity sector and encourage the additional generation of electricity from sustainable and renewable sources.

The Renewable Energy Target operates through the creation of tradable certificates by large renewable power stations and the owners of small-scale systems for every megawatt hour of power they generate, creating the ‘supply side’ of the certificate market. Wholesale purchasers of electricity have obligations to buy these certificates to meet their renewable energy targets, thus forming the ‘demand side’ of the certificate market.

Participation in this scheme appears to be somewhat anomalous because Tasmania’s supply of electricity is reportedly 100 percent renewable and already meets its renewable target. There is no reason to purchase certificates

to reduce demand for the purchase of unsustainable energy or to offset carbon emissions.

In effect, it is a tax on consumers of non-renewable energy to subsidise future investment by the Clean Energy Regulator in projects such as the Tarraleah hydro-power station upgrade and the Lake Cethana pumped-storage scheme.

> *The Committee might investigate whether a case can be made to reduce Tasmania's participation in renewable energy target schemes.*

***Supply security***

An important consideration in supervising Tasmanian businesses is supply security. The government has to ensure that there is adequate capacity to guarantee supply with an acceptably low risk of disruption. This affects HydroTasmania's decisions on capital expansion programs and capital expenditures to maintain the reliability of the existing infrastructure.

One of the justifications for the Marinus Project is that it will be possible to supplement the supply of electricity in Tasmania as demand grows and take advantage of low prices when they arise in the NEM. It is true that Tasmania has benefitted in this way with Bass Link.

Supply security considerations should dictate that Tasmania should be self-sufficient in supply. It would be irresponsible to allow our supply capacity to reach a point where the State became dependent on the links to the mainland market. The cable could fail, or like Bass Link, the carrying capacity could become impaired.

Supply security can be ensured by investment in new dams or other types of renewable supply.

> *The Committee might consider the future investment required and its impact on future costs to maintain adequate levels of reliable electricity supply in the State.*

***Water security***

There will be increased pressure to guarantee water security as the effects of climate change increase and the demand for electricity increases. It is incumbent on the government to ensure that hydroelectricity generation does not compromise the availability of water.

It might be prudent to proceed with the proposed pumped-energy project at Lake Cethana, irrespective of whether the Marinus Link project goes ahead. This would also complement proposed wind generation projects that are unreliable as a continuous supply of power.

> *The Committee might investigate the need for and impact of pumped energy storage on the future cost of electricity supply.*

**Regulation of energy: Gas**

The regulation of gas in Tasmania is limited because it is undertaken by the Australian Energy Regulator.

There is no scope for the Tasmanian government to regulate the gas supplied to the State, other than to take an active interest in the national efforts to curb market power and ensure prices are reflective of costs. This can be achieved through the National Cabinet process and by making submissions to inquiries into the Australian gas industry.

There is, however, an emerging cost issue that bears close scrutiny. As gas is phased out to meet emission targets, the gas reticulation network will be underutilised unless natural gas can be replaced by hydrogen. Some of the infrastructure might even become stranded.

Underutilisation of gas pipes could result in the owners trying to recover their capital costs from fewer customers. This would increase supply costs, with efficiency consequences.

In this case, the regulation of supply must ensure that the pipe network is valued efficiently. That is, as a sunk asset, pricing above marginal cost for financial viability and economic efficiency should be based on valuing the asset according to its deprival value.

The deprival value estimates what the owner would do if deprived of the asset. It is estimated as the lower of replacement cost and the recoverable amount, where the recoverable amount is the higher of net selling price and the value in use.

> *The Committee might explore the cost implications of gas usage being phased out.*

## External governance of GBEs and SOCs

There are two different types of government-owned businesses in Tasmania: Government Business Enterprises (GBEs) and State-Owned Companies (SOCs). The major difference is GBE objectives are set out by ministerial charter and established in their constitutions for SOCs. Another minor distinction is that the minister's expectations for SOCs is set out in a shareholder statement. Both GBEs and SOCs are subject to treasurer instructions.

HydroTasmania and Aurora Energy are GBEs. TasNetworks is a SOC.

In view of the importance of the energy GBEs and SOCs to the Tasmanian economy, good governance has significant potential to enhance economic performance and community wellbeing. Performance, in turn, has a direct bearing on energy costs. Conversely, poor governance practices can potentially distort operational efficiency, asset management, investment, and dividends.

A clear definition of the public-interest reasons for government ownership and consequent ministerial control is crucial for sound governance. For ministers to be held accountable, their actions should be open and transparent. The public should be confident that the public interest has been defined, is widely known, and is being served.

Clear policy objectives and the appropriate role of government-owned businesses are central to allocative efficiency, with the public interest and consumer preferences fully taken into account. Governance also influences the performance of boards, which affects customer service, investment decisions, and asset management.

The non-commercial public interest objectives of government-owned businesses should be made explicit and weighed against commercial performance. Without their clarification, it is not possible to assess whether the businesses are acting in the public interest.

There should be a clear distinction between external and internal governance, with greater transparency and scrutiny of the external governance role played by ministers.

*Tasmanian legislation*

Hydro Tasmania operates under the Government Business Enterprises Act 1995 (GBE Act) and the Hydro Electric Corporation Act 1995. The GBE Act

requires HydroTasmania to prepare a Statement of Corporate Intent each year that provides an overview of the business and strategic direction.

TasNetworks and Aurora Energy, as SOCs, are established under their own Portfolio Act and incorporated under the *Corporations Act, 2001*. SOCs also have a number of special requirements due to government ownership that do not apply to their private sector counterparts.

*Governance arrangements*

External governance refers to the authority and systems utilised by ministers and government agencies for the control and supervision of publicly-owned businesses. It is a feature that makes government-owned businesses distinctly different from private sector enterprises.

The distinction between internal and external governance is one of responsibility, not focus. Indeed, in performing their responsibilities, boards must have regard for the external environment in which the business operates.

Current governance arrangements largely reflect the concerns of the late 1980s about the quality of their goods and services, high prices, levels of indebtedness, a lack of transparency, and high public subsidies. The poor performance of these departments and statutory authorities providing these services at the time came to be viewed as a major impediment to economic growth.

Governments responded to these concerns by commercialising many government businesses, replicating private sector principles and practices, shedding non-core activities, such as licensing powers, and placing greater emphasis on cost recovery.

The next round of reforms involved the corporatisation of many commercialised entities. These reforms were subsequently incorporated into the Competition Principles Agreement (CPA) of 1995, through which governments agreed to adopt a corporatisation model for significant businesses (and major agency business activities and public financial enterprises) to the extent that the benefits of corporatisation outweighed the costs.

Governments agreed that competitive neutrality principles should apply by requiring their businesses to impose full tax (or tax-equivalent payments) and debt-guarantee fees, while also subjecting the corporatised entities to normal private sector business regulations. Prices charged by businesses must fully reflect their costs.

Tasmanian governments have embraced and generally complied with these reforms. However, there is always scope for improvement so that the reforms are implemented in the intended spirit of ensuring rigorous oversight and transparency.

*The committee might review whether the governance of its businesses complies with current best practices.*

*Shareholder Minister expectations*

Shareholder ministers' expectations in Tasmania are specified in either ministerial charters or shareholder statements of expectations. This approach appears to be very broad and non-interventionist. As such, it does not provide for objectives or priorities that change over time. Furthermore, it does not provide guidance on how competing objectives are to be resolved.

The principal objectives are to operate in accordance with sound business principles and be as efficient as possible. However, in achieving a sustainable rate of return, they must also have regard to the social and economic objectives of the government.

The expectations concerning the achievement of these objectives are published. They include requirements to reduce carbon emissions, ensure prices are affordable, pursue growth in retail electricity sales, and promote safety. Furthermore, their investment initiatives must have regard for the risk to the State's balance sheet.

The external governance approach could be improved because the government and their businesses are not accountable for the decisions to operationalise the strategies and the planned outcomes, almost all of which are conflicting. It is inappropriate that businesses are left to resolve these tensions because they are not directly accountable to the public.

The Tasmanian legislation requires the business to furnish a statement of corporate intent to be submitted for approval by the minister. This approach lacks transparency and relieves the government of its responsibility to determine what is in the public interest and expose it to the public.

*The Committee might examine whether government expectations of corporate intent should include what the government perceives to be in the public-interest, how it wants the business to respond.*

It should be recognised, however, that there are limits on the accountability of ministers because of the difficulties in obtaining a clear public view on what will maximise community wellbeing. Furthermore, even where the public is widely dissatisfied with ministers regarding the objectives of particular businesses, accountability through the ballot box is likely to be weak because election outcomes are usually determined by broader government policies and performance.

Furthermore, ministers should not be held accountable for the actual performance of the business itself. This is a board responsibility (differentiating the corporatised business model from the departmental model). However, ministers may ultimately be seen as responsible for the failures of a business if the external governance processes are inadequate or unsound, or if they fail to act after becoming aware of problems with the governance of the board.

*Treasurers Instruction's*

Treasurer's Instructions primarily relate to the financial management of the businesses, accounting standards, business corporate plans, and CSOs. They mainly define the government's required framework for financial management. In Tasmania, Treasurer's Instructions must be published in the government gazette and reported to parliament in their annual report.

In some cases, public disclosure requirements may be overridden if disclosure is considered detrimental to the business's commercial interests, to represent a breach of a duty of confidence, or to potentially prejudice an investigation. Such override provisions need very clear criteria to ensure the transparency of the minister–business relationship.

It is inconsistent with good governance for ministers to relay directions to the boards in an informal, non-transparent manner. Directions to pay special dividends are required to be made public in Tasmania.

> *The Committee might consider whether they are satisfied that all ministerial directions to boards are transparent.*

*Statements of Corporate Intent*

The key to sound external governance is the Statement of Corporate Intent (SCI). This statement should embody information on decisions to be made in the public interest. It is one area where governments can scrutinise business plans and ensure that they are consistent with the government's objectives.

The SCIs published by the businesses do not provide sufficient information to determine how the objectives are being operationalised and what trade-offs were made. They mainly comprise of a restatement of minister and treasurer statements of expectations, and business strategies to achieve objectives. They do not outline the details of how the conflicts were resolved and, importantly, their impact on service costs.

Judgements about welfare outcomes, efficiency, and other matters within the purview of the public interest are more properly made if information is available about public preferences. In relation to services, however, there are limited avenues for preferences to be revealed.

Typically, there are no alternative service providers to switch to, and there may be limited substitutes for some services. Consequently, prices might not reflect the willingness to pay. Further, the costs (and benefits) of externalities, while important to assessing the public interest, may be difficult to measure and internalise through prices.

Ministers, as elected representatives, should have responsibility for resolving the inevitable trade-offs between conflicting commercial and other public-interest objectives. Holding ministers accountable for their performance in this regard requires transparent and unambiguous governance processes and substantive performance reporting.

It is also essential that there be clarity of vision and agreement across all arms of government about the objectives to be pursued.

Of particular importance is the trade-off between operational and capital investment because it affects the whole-of-life cost of the service. Another is the trade-off between operational expenditure and quality of service. Expenditure on environmental remediation, safety, research, and non-core activities also affects costs.

A requirement for ministers instead of government-owned businesses to publicly provide reasons for their decisions would improve transparency and accountability. It could also improve the quality of the decisions and reduce the possibility that the preferences of minority interests or political considerations are given undue weight. In some instances, public consultation may be appropriate prior to ministerial decision-making.

> *The Committee might consider the appropriateness of the respective roles of the government and government-owned businesses in establishing SCIs.*

Furthermore, attribution of responsibility for safeguarding the public interest is made more difficult when boards and ministers are jointly involved in drafting SCIs. Responsibility is further diffused if regulators and supervisory bureaucracies become involved.

For these reasons, it would be more appropriate for governments to be very explicit about their objectives and how to resolve conflicts. This poses a tension between government accountability and the corporatisation model, where the business is supposedly acting like a private entity with very little government involvement.

> *The Committee might consider whether SCIs can be improved to ensure greater accountability for the way government businesses are run.*

*Corporate Plans*

Government-owned businesses are required to produce a detailed annual corporate plan. Guidance on the content of corporate plans is specified in the minister's statement of expectations.

In the absence of SCIs that set out how the government and business objectives are to be operationalised, there is a strong case for a high level of detail about board decisions. Furthermore, information should be provided on whether the outcomes are consistent with the objectives.

Justification for such confidentiality is often on the basis of the commercial sensitivity of information provided to the minister, although this reduces *ex ante* accountability for board performance and ministerial governance.

Although there may be legitimate confidentiality concerns surrounding the detailed strategic business directions, such concerns should not apply to publishing higher-level objectives.

> *The Committee might review whether corporate plans contain sufficient information to make judgments about board decisions and how they can be improved.*

*Performance measurement and audits*

The objectives contained in the minister's expectations and the SCIs should be the basis that government-owned businesses report on performance.

Their objectives identified in corporate plans are, by their nature, subordinate to the higher-level objectives set out in the statement of the minister's

expectations. The implication is that the government's objectives will be met by the objectives outlined in the corporate plan.

Performance should be quantified against operationalised objectives with measurable and meaningful metrics. That said, there is a fundamental problem. There is no information to judge whether the business is acting in the public interest.

> *The Committee might consider whether corporate plans adequately hold the government and businesses accountable for their management decisions and performance.*

Financial and performance audits both have the potential to strengthen incentives for good governance. Financial auditing contributes to good governance through its assurance as to financial and other outcomes, but it also provides the board with an incentive to report fully and accurately to avoid an independent expert disclosing an error.

Performance audits can be used constructively to improve the operations of an entity, and they can also act as an incentive for efficient and effective performance given that exposed deficiencies could reflect poorly on the board. Any such deficiencies could also be portrayed by some as evidence of poor ministerial stewardship.

Ministers typically have extensive powers to request any information that they require, which means businesses might be compelled to produce *ad hoc* reports on any operational or politically important matter. Boards are also required to keep ministers informed of emerging strategic issues and changes in operating environments.

Other mechanisms by which performance is publicly reported include parliamentary committee processes in Tasmania. Information in *ad hoc* reports is often very revealing, but these reports do not represent a systematic accountability mechanism.

> *The Committee might examine the adequacy of current external performance monitoring with a view to ensuring both government and business accountability.*

Consideration could be given to removing any restrictions on the ability of auditors-general to undertake performance audits. There is a strong case for much greater use of performance audits because of the paucity of information

on how the public interest is being served and the extent that it is being achieved.

Auditors-general could strengthen incentives for good governance by undertaking independent audits of the financial and non-financial performance of government-owned businesses. In some cases, it could be appropriate to perform them on a regular basis.

> *The Committee might consider the merits of auditors-general undertaking independent audits of the performance of government-owned businesses.*

*Community Service Obligations (CSOs)*

Historically, governments have recognised the broader public benefits of non-commercial functions undertaken by government-owned businesses by funding their operating deficits. Current government policy, but not necessarily practice, is generally to recognise the costs of providing the CSOs and to make corresponding payments from the budget.

CSO funding should be disclosed by government-owned businesses. CSOs provided by businesses without reimbursement typically involve transfers and cross-subsidy between customers.

A stricter adherence to explicit on-budget funding for CSOs by governments would improve external governance. Separate CSO funding promotes the recognition, clarification, and funding of the economic and social benefits to the community provided by businesses over and above the direct benefits of their goods and services as paid for by consumers.

Separate CSO funding also subjects businesses to annual scrutiny to ensure programs are appropriate, cost-effective, and reflective of government priorities. They also serve to remove consideration of equity issues in price regulation.

Accountability is best served where CSO arrangements are rigorously costed, made transparent, monitored, and reported against. Once it is determined that a particular CSO is justified, it should be included in the minister's statement of expectations, and the performance of the business in meeting the CSO would ideally be monitored and publicly reported.

CSOs should be fully funded at an avoidable cost to ensure they do not adversely affect the financial performance of the business. Avoidable costs are those that

would be avoided if the business were not required to provide the CSO (excluding any common costs that would have been incurred anyway).

In electricity supply, CSOs are presently funded internally through cross-subsidisation, resulting in distorted efficiency, inequities, and a lack of funding transparency. The lack of funding transparency means that benefits are provided without scrutiny of the cost by either the government or parliament. They are directed at consumers who are unaware of the true cost of service delivery.

In essence, existing CSOs differ from other government outlays because they are not subjected to the budget process and are not subjected to the scrutiny normally applied to the outputs funded through annual appropriations from the Consolidated Fund. There is currently no minister accountable for the outcomes of CSOs apart from the portfolio minister and the treasurer by instruction.

> *The Committee might review whether CSOs should be funded out of government budgets.*

Funding CSOs separately should increase dividends by an amount that covers their costs. This might be regarded as an unnecessary transfer, but there is a loss of transparency and accountability if CSOs are unfunded.

## Oversight of government regulation

Governments and parliaments should have a role in the supervision of regulators, just as they do with government-owned businesses. The regulation of infrastructure services affects the welfare of consumers, shareholders, and the providers of other goods and services.

Indeed, relatively minor errors in regulatory decisions, or any increase in regulatory risk caused by inconsistent decisions or changes in policy, can discourage efficient investment and distort household and business demand. See Akerlof and Yellen, *Deviations from Rationality*, The American Economic Review, September 1985 Vol.74, No.4 for a theoretical exposition.

Effective regulation depends not only on the soundness of the policy decision to regulate and the regulatory framework employed, but also on the appropriateness of the regulatory decisions that follow, which inevitably affect rights.

The economic framework for the Office of Economic Regulator in Tasmania is set out in the *Economic Regulator Act 2009*. The Act specifies the powers of the regulator and its processes, including its relationship with the government.

The aspects of governance that should be covered in any review of the legislation include:

- clarity of objectives as expressed in legislation and government statements of intent;
- independence of the regulator and its powers as they affect the degree of delegation of responsibilities by governments and their authority to initiate action;
- flexibility that the regulator has in deciding on their processes and in decision-making;
- consultative processes required to determine preferences in distorted or incomplete markets;
- strength of accountability mechanisms; and
- consistency of regulation for those affected.

This list is not exhaustive. However, it includes the major aspects of governance that should be considered when reviewing the efficacy of Tasmania's regulation of energy.

> *The Committee might consider whether the governance arrangements for the Office of the Economic Regulator are consistent with good practice.*

*Clarity of objectives*

In the case of monopolistic infrastructure services, many of which are regarded as essential, effective decision-making by the regulator depends on resolving a large number of competing objectives and dealing with many uncertainties. In doing so for price-setting determinations, they are typically required to balance, among other things:

- the cost of current consumption with the provision of sufficient financial resources for investments that will reduce future costs or provide for service improvements;
- environmental protection with economic development and prosperity; and
- identifying and evaluating the public interest with the cost of regulation.

Clear objectives are also crucial to the accountability of regulators, both in terms of the accountability of the regulator to the government and the accountability of the government to the electorate. Conflicting objectives can pose particular problems in terms of both certainty and accountability.

Where conflicting objectives arise, say between service costs and quality of service, regulators must implicitly prioritise them. This process involves making decisions about the 'public interest', which has historically been a role for governments and probably should remain so.

Ministers, as elected officials, should have responsibility for resolving trade-offs between public-interest objectives. Conflicting objectives should be avoided, and where such conflicts are considered best left for the regulator to resolve, they should be provided with clear guidance on the prioritisation of objectives.

The absence of weights to resolve conflicting objectives in regulation encourages lobbying of regulators by interest groups on the weights that ought to be placed on different objectives. Regulators are potentially less accountable for subsequent decisions because it is difficult to determine the priority attached to particular objectives and the influence of particular interest groups in the setting of priorities.

In competition regulation, the allocative efficiency benefits of competitive outcomes have to be balanced against:

- any loss of economies of scale and scope in structural adjustment;
- disincentives to invest created by imposing third-party access rules and prices; and
- the cost of ongoing market oversight and administration.

Governance arrangements can help in both of these areas of regulation by ensuring that objectives are clear and, as far as possible, non-conflicting. They can also influence how a regulator goes about obtaining a thorough understanding of preferences if any uncertainty remains about where the overall community interest lies.

There are no provisions in the Act outlining interactions with the government that would guide the regulator on the government's objectives and how to resolve tensions between them when they are conflicting. The Act specifies that the regulator is not subject to the control or direction of the Minister or any other

Minister in respect of a monopoly provider investigation other than that provided under the Act or any other act of parliament.

> *The Committee might consider whether there should be new provisions in the Act requiring the government to clearly set out objectives and the weights to be given to them when they are conflicting.*

*Independence*

The independence of the regulator must be preserved. A lack of independence can allow governments to influence decisions for political gain and reduce efficiency in doing so. For example, governments might encourage low prices on some occasions to win short-term political favour, or to ignore altogether the longer-term consequences, such as inadequate levels of investment.

The governance arrangements must provide for adequate powers and sufficient resources to fulfill their responsibilities if regulators are to be independent of the government and accountable for their decisions. Inadequate power to access information or insufficient resources to undertake thorough assessments have the potential to compromise outcomes and weaken accountability.

> *The Committee might examine the extent to which the powers and independence of the regulator are affected by provisions for the minister to intervene on matters relating to the level and structure of monopoly businesses.*

*Flexibility*

Regulators should have the flexibility to conduct their deliberations in the most effective manner that achieves the government's objectives. In regulating electricity charges, the regulator has a limited role. As already described, the maximum price HydroTasmania can charge is predetermined under legislation and has been subject to ministerial orders in the past. TasNetworks transmission and distribution costs are regulated by the Australian Electricity Regulator.

The regulator does not have much flexibility in determining retail electricity prices. The costs of generation and transmission are included as given input costs.

*Consultative processes*

The Tasmanian Act requires the regulator to undertake stakeholder and public consultation in the course of its deliberations. These include requirements to give notice, conduct hearings, and take evidence.

*Accountability*

Accountability is inter-connected with other aspects of governance. Clearly defined objectives allow the weight that was attached to particular objectives to be determined and make it more apparent where the regulator favours the concerns of particular stakeholders.

Regulator independence, effective consultation, and the existence of independent appeal mechanisms are similarly interconnected.

Regulators must have the power to obtain the information required to be accountable for their decisions or recommendations. However, the commercial-in-confidence interests of regulated entities and the privacy rights of individuals also need to be considered and balanced against the need for relevant information.

Regulators cannot be held entirely accountable for their performance if they are not provided with adequate resources to carry out their functions. As these resources will be provided at a cost to taxpayers, the expected increase in effectiveness and efficiency of the regulator's performance facilitated by any additional resources must be balanced with the cost of these additional resources.

The House of Lords' Select Committee on the Constitution identifies the following three key elements when focusing on the processes through which accountability is given effect:

- the duty to explain;
- exposure to scrutiny; and
- the possibility of independent review.

Regulators have a duty to explain because they are appointed by ministers in order to achieve certain objectives independently of political considerations. However, placing the responsibility for decisions in the hands of independent regulators also reduces the level of public accountability.

Unlike ministers, who are accountable to the public through the election process and to parliament, regulators are not directly accountable to the public. Therefore, it is appropriate that mechanisms also exist to ensure that regulators act in the public's best interest and in accordance with the law.

Exposure to public scrutiny works as a powerful incentive for regulators to adopt 'good' practices. However, this is dependent on the transparency of their processes and decision-making. That said, the benefits of public scrutiny must be balanced with the need to maintain the confidentiality of commercially sensitive information in decision-making.

A key role of regulatory governance is to establish incentives for good processes and decision-making. Potentially, effective accountability mechanisms are just as important to regulatory processes and outcomes as they are to business management.

For example, public audits of processes and periodic reviews of decisions should be used to provide incentives for the regulator to promote effective and efficient decision-making. Without these disciplines, the best possible regulatory decisions are less likely to occur, and lessons will not always be learned.

Accountability also encourages regulators to act impartially, with appropriate regard for proper process, and within the limits of their authority. It is also necessary to ensure that regulators are held responsible for their performance and that deficiencies in regulation and oversight frameworks are identified and remedied.

> *The Committee might consider whether there is adequate transparency in regulatory processes and ensure accountability for the regulator's performance.*

The possibility of reviewing regulatory decisions by an independent body is potentially another worthwhile element of accountability. Subjecting the regulator to an independent review of the processes and reasons for decisions assists in the identification and improvement of ineffective regulation. It can also highlight any insufficient reasoning or misuse of power on the part of the regulator.

Increased accountability through reviews involves additional costs that must be balanced against the benefits of reducing the risk of unsatisfactory

outcomes. Increasing accountability through reviews can lead to duplication of effort, particularly where analysis and consultation are carried out by both the regulator and its monitoring body.

Regular audits focused on whether the operations of the regulator are sufficiently transparent to the public and to ministers are one way of ensuring this. Audits can also be used to ensure regulators follow suitable processes and provide adequate reasons for decisions.

A House of Lords Committee found that the transparency and accountability of regulators can be increased by ensuring, where practicable, that their procedures are conducted publicly and that a management statement is agreed upon and implemented with the relevant minister.

The Committee recommended that management statements outline:

- processes to carry out a self-assessment of their compliance;
- the design of effective consultation procedures to engage interested parties;
- ensuring the clarity and accessibility of redress and compensation procedures; and
- incorporating the results of their plans in their annual reports.

It is important that management agreements cover these recommendations because they are not covered by the legislation.

> *The Committee might consider whether regulation could be improved by requiring management agreements that are published.*

*Consistency*

In the case of regulation, it is also important that governance arrangements promote predictable decisions. Inconsistent decision-making gives rise to regulatory risk, which adds to compliance costs. Inconsistent decisions also have the potential to distort markets.

Differences in the level of cost recovery can distort energy use towards areas where the subsidy is the greatest, thereby reducing the effectiveness of allocating energy to its highest-value use. Similarly, investment and efficiency differences in each component of supply will not minimise overall costs.

> *The Committee might consider whether there is adequate consistency in the decisions of the Tasmanian regulator.*

**Attachment 1: Problems with the NEM**

There are fundamental problems with the NEM that are relevant to the Committee's broader deliberations. These problems have increased energy prices in all of the Eastern States and added to the cost of living.

Past reforms have clearly failed. They have not led to lower-cost electricity, as promised. Instead, the price of electricity has risen by around 36 percent in real terms since the reforms were implemented. More recently, prices have increased alarmingly, and the market operator has had to impose price caps and look to remedy supply shortages.

The genesis of the reforms that led to the establishment of the NEM was the 1991 Industry Commission Inquiry into Energy Generation and Distribution. Underlying the recommended reforms was a judgment that the cost savings from increased competition, increased private sector involvement, and the facilitation of interstate trade would outweigh the cost of changing the structure and conduct of the industry.

The key recommended reform was to vertically separate generation, transmission, distribution, and retailing to 'ring fence' competitive generation and retailing activities from transmission and distribution, which are natural monopolies.

It was assumed that the cost associated with any loss of economies of scope in vertical integration (savings in transactional costs and co-ordinating overall supply with demand) would be small. Furthermore, industry disaggregation and a market-based approach would facilitate the sale of assets and minimise the future involvement of governments.

The recommended disaggregation of vertically integrated government-owned businesses contradicted, however, the well-accepted economic principle that a chain of monopolies is worse than a single monopoly.

The economies of scope in vertical integration are significant. Industry cost studies in North America and Europe reveal that vertical integration reduces electricity supply costs by between 15 and 20 percent. Moreover, vertical integration mitigates the problem of multiple marginalisation that occurs with a chain of monopolies that set prices above their marginal costs.

The loss of these economies is likely to be the cause of the significant drop in industry productivity that occurred after the reforms were introduced in Australia.

In proposing its recommended reforms, the Industry Commission did not take into account the cost of supervisory and regulatory activities. The proposed model was predicated on generators producing and trading electricity in a competitive market facilitated by a market operator.

It was assumed that generators, along with retailers, would be disciplined by competition and require no regulation. Transmission and distribution businesses, as natural monopolies, on the other hand, would be regulated separately.

The possibility of failing to fully curb market power and ensure that prices reflect efficient costs were not considered. Furthermore, there was no consideration of whether it was possible to ensure that the capital expenditure programs of all the entities involved would be consistent with the overall efficient system-wide supply of electricity.

The assumption that electricity generation businesses are naturally competitive has proven to be unrealistic. It is now acknowledged that generators have been gaming the market (euphemistically termed strategic pricing in Australia). This manifestation of market power is consistent with the experience of even larger overseas power pools. It is also likely to be a significant contributor to price volatility and underinvestment in generation capacity.

The Industry Commission argued that excess capacity in electricity generation could be reduced by competition and interstate trade. Base-load generation capacity, however, has not been maintained as expected. Furthermore, adequate levels of investment in other forms of generation have not been forthcoming, thereby causing supply shortages.

These shortages in generation capacity have caused massive price differences between peak and off-peak demand, as well as the threat of blackouts as the shortfall increases. It is also possible that this price volatility is leading to wasteful over investment in batteries and pumped hydroelectric energy storage as a means of firming supply through energy arbitrage.

Transmission system constraints have also arisen. They are a likely consequence of the absence of the internal co-ordination of investment that normally occurs within vertically integrated businesses.

These constraints impede efficient market operations. They are also a barrier to potentially efficient investment and the location of new sustainable forms of electricity generation and efficient energy storage systems.

System-wide intervention is required to remove constraints because electricity flows in networks according to the laws of physics and not the location of electricity generators and consumers. The ongoing existence of transmission constraints suggests that system-wide oversight has not been successful.

Further reform is required to address all of the problems outlined above. This will be challenging but necessary if the supply of electrical energy is to actually increase.

Industry participants and the bureaucracies that have been established to manage the NEM and supervise the participants might resist further reform. They have vested interests in preserving the *status quo*, especially if the reform reflects poorly on their performance or jeopardises their existence.

The problems with the existing market model will also be difficult to overcome. It will require governments to have greater involvement, not less, as originally envisaged. Governments will have to collectively incentivise adequate investment, the adoption of new, more sustainable generation technologies, and the accommodation of solar and energy storage in distribution systems.

There is also a case for allowing businesses to vertically integrate again. This is supported by the US Reagan Government decision to reject mandatory disaggregation and accept vertical integration as beneficial when the US industry was reformed in the 1980s.

Further structural reform allowing for integration is needed. It can be expected to be an effective way of significantly reducing energy prices and the cost of living.