

COGENERATION AND TRIGENERATION IN NEW SOUTH WALES

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UrbanGrowth NSW Submission to the NSW Parliamentary Inquiry into Cogeneration and Trigeneration

UrbanGrowth NSW, formerly Landcom is the state-owned developer. Our aim is to address barriers to private sector investment in NSW development projects. We encourage the uptake of decentralised energy and the draft Metropolitan Strategy identifies our organization as playing a role in the increased uptake of these technologies for future development across the state.

This submission is based on our perspective as a developer with a focus on our recent experience at Green Square with our consortium partners Mirvac and Leighton, working with the City of Sydney.

Decentralised energy offers the potential to deliver economic and environmental efficiencies for NSW. A shift in the energy mix is necessary to build the resilience of our cities in a carbon constrained world.

However we also recognise the gap between the vision for trigeneration and cogeneration and what is currently practical within the existing framework. Unless this gap is addressed, fundamental risks and costs for a range of stakeholders including consumers, developers, and energy providers remain. We highlight these issues to progress resolution towards the ultimate viability and uptake of these technologies.

Secondly we outline the barriers for decentralized providers to compete effectively in the energy market. Revising relevant electricity and gas legislation towards appropriate licensing, connection costs and fee structures is needed to encourage industry activity.

Our views focus on a sense of fairness and certainty for all stakeholders, as well as the mitigation of unforeseen consequences.

The structure of our submission reflects issues we have faced in our experience and some possible ways forward. The table at Attachment 1 outlines our views against the Inquiry's Terms of Reference.

For any questions or clarification on the views expressed in this paper please contact our Sustainability Manager, Felicity Calvert on [REDACTED] or [REDACTED]

Risks and unforeseen consequences

Third line forcing

In the interests of protecting the consumer, particularly from a cost perspective there are anti-competitive provisions under the *Competition and Consumer Act 2010*. The Australian Consumer and Competition Commission (ACCC) can allow third line forcing if it can be demonstrated that the public benefit outweighs the anti-competitive behaviour.

In our view this is a matter of scale. There is no doubt that decentralised energy delivers an associated environmental public benefit. However to deliver this public benefit, individual consumers are currently unable to switch providers, as occurs for other consumers.

Immunity from these anti-competitive provisions is possible via the Consumer, Trade and Tenancy Tribunal (CTTT), but this can only be done after the Owners Corporation has formed, which is too late and risky for developers. At this time the necessary infrastructure and development will already be complete and the risk around an uncertain services contract is too high. The CTTT is not ruled by any timeframes regarding its resolution which adds to the settlement risk for projects.

Amending s47(6) of the *Competition and Consumer Act 2010* provides a legal solution, but may not address the market perceptions. The anticipated demographic profile of Central Park and Green Square where decentralised solutions will be pioneered on a large scale is predominately people from a non-English speaking background. This demographic may have less understanding around their consumer rights and we are keen to avoid any associated negative perceptions that may arise. In addition to 'contracts of sale' which reflect the legal obligations, there is need for targeted consumer education around any limitations on their rights as consumers.

Thermal metering

Currently there are no legal requirements for the metering of hot and chilled water (thermal) metering. Under a user-pays system, with individual bills there is a need for metering. So it is likely that there will be future possible regulatory change around thermal metering. We are concerned that future changes around thermal metering standards would require the re-installation of meters which would be costly and obtaining legal access may also be difficult.

Provider of last resort

The question of a provider of last resort is of particular concern in the provision of thermal heating and cooling. On a practical level there will be no space for the required infrastructure unless a back-up system has been previously planned for and built. It is highly unlikely that commercial grade back-up air conditioning would sit in the building or that the planning provisions of the building would allow for additional equipment on the roof of the building after occupation.

In the Green Square situation there are no current alternative suppliers, nor alternative infrastructure of sufficient quality and reliability which could be retrofitted to meet these needs. In situations where cogen/trigen fails a state utility will need to step in as a provider of last resort. It would not be appropriate to then install window box air conditioning units for a high quality development such as Green Square.

Price protection for consumers

At the Frasers Central Park development with a centralised water system, we have been made aware that an additional Sydney Water Corporation stormwater charge will be applied, which was not previously envisaged. From our perspective we wish to provide customers with certainty and equity and avoid additional pricing.

We understand that the proposed thermal billing system is to be managed by the Body Corporate. This means that customers receive a uniform rate which is not based on the user pays principle. This relates to our earlier point around third line forcing. Where suppliers enjoy an exclusive right, we are concerned that the customer will not be shielded from price rises and unable to switch to another retailer. We recommend that thermal services, similar to other services are regulated by IPART. This will help ensure fair pricing which reflects the capital and operating costs of this system.

Governance and ownership of schemes

We have concerns around the governance and ownership of schemes under strata title. To operate effectively it will be important that Body Corporates has the necessary knowledge and skills to manage and retail for the systems. In the instance where owners or tenants fail to pay bills, the Body Corporate must cover the costs and does not have the statutory ability to disconnect apartments to recover costs for non-payment.

Solutions in the interests of equity and certainty

Standard connection

A standardised approach is needed. As the industry and framework evolve, the process for accreditation and approvals is done on a case by case basis. This results in significant uncertainty in the planning process, commercial certainty in the delivery, delays and costs which ultimately undermines the viability. From a developer perspective planning for infrastructure occurs simultaneously with a range of other competing approvals and uncertainty means that in practice more reliable processes are favoured to meet project timelines and reduce costs of finance.

Appropriate pricing

The current system for grid charges and pricing favours the incumbent providers and was designed with a centralised system in mind. The ability for district cogen/trigen suppliers sell their energy back to the grid may ultimately allow greater competition for end-users. This is because decentralised providers will be able to compete and remove the dependency on their direct building consumers.

The network charges for providers assume greater distances between generation and consumption. This means that these charges for trigeneration and cogeneration are comparatively disproportionate and do not reflect the true costs.

These technologies assist in deferring network upgrades but do not receive an appropriate return for these savings and ultimately consumers. The price signal means that demand side management is penalised, when it should be encouraged because of the savings it provides in avoided infrastructure.

Precinct sharing

To make trigeneration and cogeneration economically viable the ability to share waste heat between buildings needs resolution. To be effective district systems require the ability to retail to multiple customers within the precinct.

Recognition with NABERS and BCA

A NABERS rating is central to the market offering for commercial customers. However the current October 2012 NABERS ruling does not recognise the environmental value of trigeneration and cogeneration.

Similarly the Building Code of Australia does not currently recognise trigeneration and cogeneration.

Conclusions

Risks and unforeseen consequences

- Third line forcing - the legal barriers and market perceptions
- Thermal metering – legal access and future costs
- The uncertainty around providers of last resort and
- Price protection for consumers by IPART regulation of thermal services

Solutions for greater commercial equity and certainty

- Create a standardised connection approach
- Grid charges that reflect the real costs of connection and avoided infrastructure costs
- Allow for precinct sharing between buildings and
- Review of the NABERS ruling

Attachment 1 - Table outlining the Terms of Reference with our submission

Terms of Reference	Our Comments	Recommendation
Adequacy of regulatory frameworks	<ol style="list-style-type: none"> 1. Uncertainty surrounding approvals 2. Grid charges cater for a centralised system 3. Ownership and governance of schemes 4. Balancing across users for storage and consumption 5. Strata Management Act 	<ol style="list-style-type: none"> 1. Introduce standard connection processes 2. Proportionate charges that reflect the true costs 3. 4. Enabling precinct scale trigeneration vs building-based trigeneration (NEM and gas prices) 5. Amend to allow developers to agree to commercial terms for district cogen/trigen for planning new developments
Applicability of cogeneration and trigeneration in NSW	<i>Discussed throughout</i>	
Economic viability (including gas prices)	<ol style="list-style-type: none"> 1. We support incentives such as feed in tariffs 2. NABERS 3. Proportionate grid costs that reflects the avoided cost of network upgrades 4. Limited customer base 	<ol style="list-style-type: none"> 1. Price certainty at the outset, around the value of deferred network investment 2. To reflect real the efficiency to commercial tenants 3. Explore arrangements for sharing between buildings at a precinct scale 4. Ability to retail waste heat to broader base
Financial, public safety and/or other risks	<ol style="list-style-type: none"> 1. Provider of last resort 2. Reliability – of demand for suppliers and of supply from consumers 3. Individual thermal metering – right to users pays principle 	<ol style="list-style-type: none"> 1. Cost implications and ability to retrofit for the state 2. Ability to retail more broadly and for customers to have choice between retailers 3. Future access and costs for replacement to meet possible new standards
Supply security and reliability for customers	<ol style="list-style-type: none"> 1. Third line forcing 2. User pays and unit metering 3. Liveability and rising electricity costs 	<ol style="list-style-type: none"> 1. Legislative change and greater customer education 2. Shared schemes need to reflect user pays 3. Rewarding cogen/trigen for deferred network upgrades and avoided price rises for all customers
Ability of regulatory arrangements to address issues	<i>Discussed throughout</i>	