

Submission to IPART Energy prices in embedded networks

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Public Interest Advocacy Centre
ABN 77 002 773 524
www.piac.asn.au

Gadigal Country
Level 5, 175 Liverpool St
Sydney NSW 2000
Phone +61 2 8898 6500
Fax +61 2 8898 6555

About the Public Interest Advocacy Centre

The Public Interest Advocacy Centre (PIAC) is leading social justice law and policy centre. Established in 1982, we are an independent, non-profit organisation that works with people and communities who are marginalised and facing disadvantage.

PIAC builds a fairer, stronger society by helping to change laws, policies and practices that cause injustice and inequality. Our work combines:

- legal advice and representation, specialising in test cases and strategic casework;
- research, analysis and policy development; and
- advocacy for systems change and public interest outcomes.

Energy and Water Consumers' Advocacy Program

The Energy and Water Consumers' Advocacy Program works for better regulatory and policy outcomes so people's needs are met by clean, resilient and efficient energy and water systems. We ensure consumer protections and assistance limit disadvantage, and people can make meaningful choices in effective markets without experiencing detriment if they cannot participate. PIAC receives input from a community-based reference group whose members include:

- Affiliated Residential Park Residents Association NSW;
- Anglicare;
- Combined Pensioners and Superannuants Association of NSW;
- Energy and Water Ombudsman NSW;
- Ethnic Communities Council NSW;
- Financial Counsellors Association of NSW;
- NSW Council of Social Service;
- Physical Disability Council of NSW;
- St Vincent de Paul Society of NSW;
- Salvation Army;
- Tenants Union NSW; and
- The Sydney Alliance.

Contact

Thea Bray
Public Interest Advocacy Centre
Level 5, 175 Liverpool St
Sydney NSW 2000

T: [REDACTED]
E: [REDACTED]

Website: www.piac.asn.au



Public Interest Advocacy Centre



@PIACnews

The Public Interest Advocacy Centre office is located on the land of the Gadigal of the Eora Nation.

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Recommendation 1

Amend the criterion: 'Ensure there is no interruption to energy supply' to: 'Interruptions should be explicitly limited to circumstances where the interruption is facilitating maintenance and improvements in the long-term interest of the residents with respect to available price of services and products; quality and reliability of supply; accuracy of usage information; access to supports; and protections benefits for residents.'

Recommendation 2

Remove the criterion: 'Ensure that an efficient embedded network provider is able to recover its efficient costs of supply'.

Recommendation 3

Amend the criterion: 'Respond to changes in the costs of supplying customers' to: 'Respond to market trends in the cost of supplying consumers'.

Recommendation 4

Amend the criterion: 'Incentivise consumers and embedded network operators to supply and use energy efficiency' to: 'Incentivise embedded network operators to supply and enable the efficient use of energy'.

Recommendation 5

An explanation of how pricing is calculated should be included on consumer bills.

Recommendation 6

Amend the criterion: 'Allow for cost reflective pricing' to: 'Allow for cost reflective network pricing, while retaining residents' choice of retail pricing structure'.

Recommendation 7

Amend the criterion: 'Be enforceable' to: 'Be enforceable and capable of being effectively monitored'.

Recommendation 8

That IPART consider the additional criteria outlined by PIAC in deriving an appropriate pricing protection methodology.

Recommendation 9

That IPART set maximum prices on a six-monthly schedule, based on the lowest advertised price on the Energy Made Easy website for the corresponding distribution network area. Schedules of minimal fixed costs for unmetered premises and a schedule of discounts to be applied where amperage levels are inadequate should also be generated and updated regularly.

Recommendation 10

Unmetered premises should only be charged a regulated, minimal fixed cost, not usage related charges.

Recommendation 11

Use the common factor to calculate the units of energy for heating and chilling water but apply an efficiency factor (with on-bill discounts where systems are not performing efficiently).

Recommendation 12

That embedded networks (including hot and chilled water embedded networks) only be allowed where the proponent can demonstrate a tangible benefit(s) to residents, subject to robust regulation to ensure equivalent protections and rights for residents. Where such regulation is not pursued, NSW should move to ban embedded networks and unwind existing arrangements.

1. Introduction

The Public Interest and Advocacy Centre (PIAC) welcomes the opportunity to respond to the Independent Pricing and Regulatory Tribunal's (IPART) Energy prices in embedded networks Industry Consultation paper ('the Consultation paper').

The role of pricing in overcoming other detriments for residents in embedded networks

People in embedded networks generally have no alternative service options and experience a range of detriments including less protections and supports and less transparency of their circumstances than consumers in standard supply arrangements. Any methodology for calculating price protection in embedded networks must take into consideration:

- Embedded network operators can source energy at lower cost than would otherwise be available to individuals through standard supply arrangements.
- Accessing an on-market retailer is either very difficult or not possible for residents in embedded networks.
- Embedded network residents experience material detriment through reduced protections and access to supports (both through a reduced protections framework and due to practical obstacles of the supports and protections that should be available).
- Energy is an essential service and provision of energy outside the standard supply arrangements should not be an opportunity for an additional revenue stream for developers or embedded network service providers at the expense of residents.

Embedded networks, properly structured, can provide benefits to consumers through lower costs, access to on-site generation, and shared, efficient infrastructure and appliances. However, the vast majority of embedded networks do not deliver these benefits and have been structured to take advantage of lighter regulation, lower costs and less responsibility, to deliver additional revenue for operators.

In this review IPART should be guided by an objective to use pricing to address the disadvantages faced by embedded networks and remove the incentive to utilise an embedded network structure for any reason other than tangible benefits for residents. IPART should be informed by the actual experiences and outcomes for people in embedded networks, including some people's effective lack of options but to reside or remain in an embedded network.

2. Criteria to consider when assessing different pricing methodologies

PIAC strongly supports the Australian Energy Market Commission's (AEMC) conclusion 'that consumer protections should be driven by the needs of customers and not the business model of suppliers'.¹ Consumers' equal and consistent access to affordable, dependable, sustainable energy must be the fundamental consideration for IPART when assessing different pricing

¹ Australian Energy Market Commission (AEMC), *Updating the Regulatory Frameworks for Embedded Networks, Final Report*, 2019, i.

methodologies. Importantly, IPART should also consider the longer-term impact pricing can have as an ongoing incentive to limit embedded networks and ensure they are only employed where they involve a demonstrated, tangible benefit to their residents.

Below we comment on the criteria listed in the Consultation paper and then our additional criteria are listed for consideration.

Criteria included in the Consultation paper

1. Ensure there is no interruption to energy supply

Residents should be protected from unreasonable supply interruptions. The conditions of any interruptions should be consistent with the expectations of on-market consumers. Interruption to supply may be required to facilitate improvements to infrastructure (such as metering) which benefit residents. Accordingly, interruptions should be explicitly limited to circumstances where the interruption is facilitating maintenance and improvements in the long-term interest of the residents with respect to available price of services and products; quality and reliability of supply; accuracy of usage information; access to supports; and protections benefits for residents.

Recommendation 1

Amend the criterion: 'Ensure there is no interruption to energy supply' to: 'Interruptions should be explicitly limited to circumstances where the interruption is facilitating maintenance and improvements in the long-term interest of the residents with respect to available price of services and products; quality and reliability of supply; accuracy of usage information; access to supports; and protections benefits for residents.'

2. Ensure that an efficient embedded network provider is able to recover its efficient costs of supply

PIAC does not support this criterion and does not consider it practical or appropriate. The efficient costs of supply for embedded network operators are often not easily determined. This often relates to the range business models of embedded network operators and their ability to shift where costs are incurred and recovered. Given the initial justification for allowing embedded networks was to accommodate lesser regulation for operators where energy was not the primary business (ie where their business model was primarily concerned with other costs and revenue), it is difficult to justify considering efficient energy costs for operators as a determinant of a fair price for residents.

Embedded network operators are responsible for setting up and operating the network and determining the sustainability of that business model. It is not appropriate for the regulator (IPART) to protect the energy component of an operator's business model at the expense of outcomes for residents. The primary concern for regulators should be ensuring that the energy related outcomes for residents are equivalent to those served on-market.

Recommendation 2

Remove the criterion: 'Ensure that an efficient embedded network provider is able to recover its efficient costs of supply'.

3. Respond to changes in the costs of supplying customers

The pricing methodology should be able to respond to the costs of supplying consumers based on general market supply costs, not individual supply contracts. Pricing protections should recognise that consumers can't choose another service provider and consumers should not effectively assume the risk or cost associated with operators who negotiate poor energy supply terms. The pricing methodology should retain a strong incentive for any embedded network operator to negotiate the best possible terms for supply, and pass those benefits to residents.

Recommendation 3

Amend the criterion: 'Respond to changes in the costs of supplying customers' to: 'Respond to market trends in the cost of supplying consumers'.

4. Incentivise consumers and embedded network operators to supply and use energy efficiently

PIAC supports a pricing methodology which incentivises embedded network operators to supply energy efficiently.

However, price signals are not an appropriate incentive for people living in embedded networks to use energy efficiently. Any consideration of incentives for residents should recognise:

- There are limited, and in some cases no, ways that people living in apartments, social housing, manufactured homes, caravans and retirement villages can improve the thermal performance of their dwelling.
- There are likely to be little or no options to access distributed energy resources (DER) for people living in embedded networks. Even where DER, such as solar, can be installed by individual residents, there may be implications to the community and/or network infrastructure which reduce the benefit which can accrue to the individual resident.
- People living in embedded networks often cannot replace inefficient fixed appliances due to building and space restraints, reducing their ability to take advantage of efficient heating/cooling (for example, reverse cycle split systems) and water heaters (for example heat pumps).
- Many people living in embedded networks, particularly residential land lease communities (RLLCs) and social housing, are on lower incomes and less likely to be able to afford the generally higher upfront cost of more energy efficient appliances.
- Some people in embedded networks, in particular RLLCs, retirement villages and social housing may have higher needs to maintain comfortable temperatures in their home due to age and/or disability.
- Many people who have difficulty affording their living expenses already have lower than average energy use, often to the detriment of their health and wellbeing.

Given the vulnerability of many people who live in embedded networks and the limitations they face in reducing their energy use in healthy ways, incentives for energy efficiency should be directed at embedded network operators and entities responsible for building management. This is more effectively done through implementing higher energy efficiency standards, mandating minimum energy efficiency standards in rentals, and initiating government energy efficiency

programs that provide assistance and investments focused on health and wellbeing through improved energy efficiency.

Recommendation 4

Amend the criterion: 'Incentivise consumers and embedded network operators to supply and use energy efficiency' to: 'Incentivise embedded network operators to supply and enable the efficient use of energy'.

5. Be simple for consumers to understand and easy to apply

PIAC agrees with these criteria. An explanation of how the pricing is calculated should be included on bills.

Recommendation 5

An explanation of how pricing is calculated should be included on consumer bills.

6. Allow for cost reflective pricing

PIAC broadly agrees with this criterion but notes that this should clearly focus on cost reflective network pricing. Consumers should not be exposed to more cost reflective 'retail' prices unless they have chosen to do so. Any implementation of more cost-reflective retail tariffs for embedded network consumers must come with appropriate notice, education to improve understanding, and targeted supports and assistance to ensure they are not negatively impacted.

Recommendation 6

Amend the criterion: 'Allow for cost reflective pricing' to: 'Allow for cost reflective network pricing, while retaining residents' choice of retail pricing structure'.

7. Be enforceable

PIAC supports this criterion but adds that it also needs to be easy to monitor. In order to be enforceable there must be a clear understanding of how many embedded networks there are, how many households are served by them, and what outcomes residents are experiencing.

Recommendation 7

Amend the criterion: 'Be enforceable' to: 'Be enforceable and capable of being effectively monitored'.

PIAC recommends that the following criteria be added:

8. Contribute to addressing consumer vulnerability

Robust and efficient price protection in embedded networks has an important role in alleviating the impact energy can have on consumer vulnerability.

People experiencing disadvantage are over-represented in embedded networks, particularly in RLLCs and social housing. The current nature of embedded networks further exacerbates that vulnerability.²

Pricing should recognise that embedded network operators can benefit from sourcing lower cost energy. It should ensure that benefit is realised for residents as a means of 'balancing' the detriment and vulnerability faced by residents as a result of being in an embedded network.

Billing information regarding usage and billing should be equivalent to on market bills and be required to meet standards for access to rebates, Energy Accounts Payment Assistance (EAPA) and the Energy and Water Ombudsman NSW (EWON).

Pricing should also include protections that residents are not required to pay unreasonable costs for supply that does not meet basic requirements (as occurs in some RLLCs).

9. Support transparency/visibility of outcomes for residents

The current exemption framework enables no understanding about what people are paying for their energy services in embedded networks, what service they receive and whether these prices are fair. That is, there is no visibility of outcomes for consumers. A new pricing methodology must support improved visibility regarding the prices residents are paying and what service standards they receive for this.

10. Provide support for pricing stability

PIAC does not support applying the Default Market Offer (DMO) to embedded networks. However, the price it supports within a DMO period is beneficial for consumers. Support for price stability is an important criterion for determining pricing protection in embedded networks.

Recommendation 8

That IPART consider the additional criteria outlined by PIAC in deriving an appropriate pricing protection methodology.

3. Setting maximum prices

Summary of how maximum prices should be set

IPART should implement a maximum pricing methodology that supports two main objectives in relation to embedded networks and outcomes for their residents:

- It should ensure that NSW residents of embedded networks are paying a fair price for their essential energy needs, with this price reflecting (and helping to offset) the disadvantages and detriments resulting from residing in an embedded network.

² With little or no option to access an alternative (cheaper) provider; less protections; less supports; less or no opportunities to access DER or more energy efficient fixed appliances etc.

- It should provide a strong incentive for existing and prospective embedded network operators to only consider operating an embedded network where they can deliver demonstrable price benefits to consumers. It should effectively act as a strong deterrent to the creation of new embedded networks (by removing additional revenue) while leaving open the scope for embedded networks which can deliver demonstrated benefits to consumers.

In order to effectively promote these objectives, the level of maximum prices for embedded networks should reflect that:

- Embedded network operators have chosen the arrangement which provides a financial (and regulatory) benefit for them. They have capacity (and should be required) to pass that benefit to consumers, and can unwind the arrangement where it no longer serves their business model.
- Accessing an on-market retailer is either difficult or impossible for most embedded network residents.
- Being in an embedded network comes with a range of actual consumer detriments regarding reduced protections and access to supports.
- Energy is an essential service and provision of that service outside standard supply arrangements should not facilitate additional revenue for the operator at the expense of the rights of the residents.

We broadly support IPART's 'preliminary view that a methodology to set maximum prices should result in maximum prices for embedded network services that are comparable to prices paid by relatively engaged on-market customers.'³ However, we consider it more appropriate for the maximum price to be set at the level of the lowest available market offer. This should be done with the intent of providing 'balance', accounting for the additional detriments experienced by embedded network residents. PIAC recommends that prices be set on a six-monthly schedule, based on the lowest advertised price on the Energy Made Easy website for the corresponding distribution network area.

Unmetered residences

Unmetered premises are under the control of the embedded network operator and are not the responsibility of the resident. Operators have the scope to manage the costs of unmetered energy, including through installing an appropriate meter.

Residents in unmetered properties do not have control of their circumstances and should not be unreasonably impacted by them. Accordingly, they should only be charged a minimal regulated fixed daily cost (where they pay any cost at all). Where this results in excess costs for operators, the operator can either decide the costs can be absorbed (in circumstances where the operation of energy services is a minimal cost contributor to their operations), or they have a strong incentive to improve and meter the property.

The cost of the meter should not be able to be passed on to the consumer but recovered from building or strata funds as appropriate.

³ Consultation paper p3.

How the PIAC proposal responds to the updated criteria

PIAC consider our recommended approach to maximum pricing in embedded networks responds to the updated criteria we propose, as follows:

1. Interruptions should be explicitly limited to circumstances where the interruption is facilitating maintenance and improvements in the long-term interest of the residents with respect to available price of services and products; quality and reliability of supply; accuracy of usage information; access to supports; and protections benefits for residents

This proposal would be based on the lowest price available for supply under minimum standard arrangements and would only allow for interruptions under conditions which prevail on market, and where the interruption enables improvement or maintenance of service delivery for residents.

2. Respond to market trends in the cost of supplying consumers

This proposal would be based on a prices available in the market and as such would reflect general trends in market conditions.

3. Incentivise embedded network operators to supply and enable the efficient use of energy

Embedded network operators can source energy at lower cost. Robust price protection based on the best available market offer provides a strong incentive for operators to ensure usage costs associated with resident usage (such as network costs) are efficient, in order to minimise or avoid potential losses they may face as a result.

4. Be simple for consumers to understand and easy to apply

It is simple to let consumers know that their energy costs will be the cheapest in their network area. The figure will be easy for embedded network providers to apply to their billing, with price updates only occurring every 6 months.

5. Allow for cost reflective network pricing, while retaining residents' choice of retail pricing structure

Using an on-market reference point helps ensure that more cost-reflective network costs are accounted for while retaining scope for choice of 'retail tariff' for residents.

6. Be enforceable and capable of being effectively monitored

To achieve easy monitoring and enforceability, the NSW Government will need to collect data on embedded networks including how many embedded networks there are, what business structures are in operation, what services are provided and how many people live within these arrangements.

Adequate reporting requirements, monitoring and education will be required.

7. Contribute to addressing consumer vulnerability

The pricing will be the same as, or lower than, the lowest on-market offer to reduce the bills of people living in embedded networks and help balance the impact of other detriments faced by embedded network residents.

Increased visibility of embedded networks (through improved monitoring) and the services they provide will assist compliance with pricing, supports and protections.

8. Support transparency/visibility of outcomes for residents

All maximum pricing and schedules should be publicly available and easy for residents to access to check against their bills.

9. Provide support for pricing stability

Updating maximum pricing on a six-monthly basis will help reduce bill uncertainty. A mechanism to access smart meters would improve residents' ability to monitor their usage and improve their ability to manage their costs.

Recommendation 9

That IPART set maximum prices on a six-monthly schedule, based on the lowest advertised price on the Energy Made Easy website for the corresponding distribution network area. Schedules of minimal fixed costs for unmetered premises and a schedule of discounts to be applied where amperage levels are inadequate should also be generated and updated regularly.

The Default Market Offer is not a suitable mechanism for pricing in embedded networks

The DMO is not designed to be an actual protection for consumers. It is not intended as a fair or efficient price and is explicitly designed to encourage 'shopping around' for a fair deal. This is not relevant to most embedded network residents and is not an appropriate or effective pricing protection for people living in embedded networks.

Specifically, the DMO is not an appropriate maximum price because:

- Retail costs in the DMO include an arbitrary (inefficient) margin and an extra 'head room' allowance. The calculation of retail allowance is a proportion of the entire cost stack rather than being a proportion of retail cost to serve, and is not based on an efficient cost to serve.
- Retail costs in the DMO also include the cost of customer acquisition and retention (CARC) inputs in addition to the cost to serve. This is an inefficient cost that is not relevant in embedded networks which are effectively a monopoly provider.
- Smart meter costs are explicitly included in retail cost calculations but without appropriate transparency around how retailers are incurring and recovering those costs.
- There needs to be improvements made to the accuracy of wholesale cost modelling in the DMO, and a prioritisation of outcomes for consumers where there are trade-offs between accuracy and transparency.

Different metering arrangements

The complexity of metering in embedded networks demonstrates why setting an objective in line with universal advanced metering is warranted.

Smart meters

Smart meters provide direct and indirect consumer benefits allowing transparency of energy usage, greater control and access to DER and greater scope to go 'on market'. For embedded networks where there are no smart meters, PIAC sees merit in setting a target for universal smart-meter rollout in embedded networks, with an appropriate program to support this.

Unmetered residences

Unmetered premises are under the control of the embedded network operator and are not the responsibility of the resident. Residents in unmetered properties should be charged a minimal (regulated) fixed daily charge. This will provide operators with an incentive to meter the property or absorb this cost where it is an acceptable part of their business model. The cost of installation of any meter should not be able to be passed on to the consumer.

Recommendation 10

Unmetered premises should only be charged a regulated, minimal fixed cost, not usage related charges.

Setting prices for different types of customers and different types of embedded networks

For people in RLLCs, there are often issues with amperage levels delivered to residents' properties. A schedule of discounting should be developed, based on service adequacy and amperage of the resident's services.

Using the common factor to calculate the units of energy for heating and chilling water

PIAC supports billing using the common factor. We contend an efficiency factor should be applied to encourage upgrades of the heating/chilling system (with on-bill discounts applied where systems are not performing efficiently). This would provide incentives for electrification and improved efficiency and help mitigate the impact of energy related costs on households.

While PIAC does not support embedded networks in their current form, appropriately regulated embedded networks may be able to deliver good consumer outcomes. For instance, where space limitations or building density mean that it is more practical and efficient to provide centralised services, ie there is not enough space for individual water heaters and/or air conditioning compressors.

Experience to date demonstrates that these efficient outcomes which benefit residents will not occur without robust regulation. With no requirement on developers to demonstrate tangible beneficial consumer outcomes through efficiency, the choice of common water heater or chiller has been, in most circumstances, to reduce costs or burdens on the developer to the ongoing detriment of the residents.

Recommendation 11

Use the common factor to calculate the units of energy for heating and chilling water but apply an efficiency factor (with on-bill discounts where systems are not performing efficiently).

Setting the price for hot and chilled water to provide incentives for energy efficiency

Embedded network providers

PIAC recommends that an efficiency factor be applied to encourage upgrades of the heating/chilling system (with on-bill discounts applied where systems are not performing efficiently). This would provide incentives for efficiencies and mitigate the impact on households.

Residents

Price signals are not an appropriate way to encourage people living in hot and/or chilled embedded networks to use energy efficiently. There are limitations to how efficiently people in embedded networks can use hot and chilled water. They can't upgrade the heating/cooling system; have little or no control over improving the thermal performance of their dwelling to reduce the reliance on space cooling from chilled water; some residents (such as renters) might have no ability to replace the hardware (such as showerheads) in their home to make them more efficient, or even undertake relatively minor maintenance or repairs that would improve efficiency of the dwelling or appliances.

It is more appropriate to encourage energy efficiency through regulation of embedded network operators and building developers and managers. Energy efficiency programs that focus on health and wellbeing for residents, should be done in conjunction with regular billing which gives clear feedback about usage and associated cost and information about using hot/chilled water efficiently.

Incentives for low emissions energy generation

PIAC contends that with maximum pricing (and other appropriate regulations) in place, embedded network providers have a greater potential incentive to improve efficiency and utilise DER to offset or reduce the cost of energy.

Enforcing maximum prices

A crucial first step in achieving effective compliance and enforcement is for the NSW Government to collect data on embedded networks including how many embedded networks there are, what business structures are in operation, what services are provided and how many people live within these arrangements.

Appropriately robust compliance and enforcement will require adequate reporting requirements, monitoring and education. This must include ensuring that consumers in embedded networks know what their rights are, what expectations they should have and how they can seek enforcement.

The Committee on Law and Safety's Inquiry into embedded networks in NSW raised the serious concerns about the limitations to compliance and monitoring of embedded networks. Efforts to improve outcomes for people in embedded networks will not be successful without effective

compliance and monitoring. The NSW Government should proceed independently in order to protect and promote the interests of NSW residents in embedded networks, and should not rely on potential national action.

4. The future of hot and chilled water embedded networks

PIAC does not support embedded networks in their current form. However, it is possible that appropriately regulated embedded networks can deliver good consumer outcomes. For instance, where space limitations or building density mean that it is more practical and efficient to provide centralised services, ie there is not enough space for individual water heaters and/or air conditioning compressors.

However, any future for embedded networks (including hot and chilled water embedded networks) must squarely place the onus on the proponent to demonstrate what tangible beneficial consumer outcomes will be realised as a result. This should be accompanied by robust regulation to ensure equivalent consumer rights and protections are also delivered.

While there is a general preference for a national approach to regulations related to energy, such as that proposed by the AEMC in its [Review of Regulatory arrangements for embedded networks Final Report](#), this should not be prioritised at the expense of NSW residents. The reforms outlined by the AEMC could be implemented directly in NSW and adapted to also apply to hot and/or chilled water embedded networks.

In the absence of an appetite to reform embedded network regulation, the NSW Government should pursue measures aimed at converting embedded networks to regular on-market supply arrangements. This approach would maintain national consistency, but simply make embedded network exemptions increasingly irrelevant in NSW.

Recommendation 12

That embedded networks (including hot and chilled water embedded networks) only be allowed where the proponent can demonstrate a tangible benefit(s) to residents, subject to robust regulation to ensure equivalent protections and rights for residents. Where such regulation is not pursued, NSW should move to ban embedded networks and unwind existing arrangements.

5. Continued engagement

PIAC welcomes the opportunity to meet with IPART and other stakeholders to discuss these issues in more depth.