



public interest
ADVOCACY CENTRE

Supplementary Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper

31 January 2019

About the Public Interest Advocacy Centre

The Public Interest Advocacy Centre (PIAC) is an independent, non-profit legal centre based in Sydney.

Established in 1982, PIAC tackles barriers to justice and fairness experienced by people who are vulnerable or facing disadvantage. We ensure basic rights are enjoyed across the community through legal assistance and strategic litigation, public policy development, communication and training.

Energy and Water Consumers' Advocacy Program

The Energy and Water Consumers' Advocacy Program (EWCAP) represents the interests of low-income and other residential consumers of electricity, gas and water in New South Wales. The program develops policy and advocates in the interests of low-income and other residential consumers in the NSW energy and water markets. PIAC receives input from a community-based reference group whose members include:

- NSW Council of Social Service;
- Combined Pensioners and Superannuants Association of NSW;
- Ethnic Communities Council NSW;
- Salvation Army;
- Physical Disability Council NSW;
- Anglicare;
- Good Shepherd Microfinance;
- Financial Rights Legal Centre;
- Affiliated Residential Park Residents Association NSW;
- Tenants Union;
- The Sydney Alliance;
- Mission Australia; and
- St Vincent De Paul Society of NSW

Contact

Craig Memery
Public Interest Advocacy Centre
Level 5, 175 Liverpool St
Sydney NSW 2000

T: (02) 8898 6522

E: cmemery@piac.asn.au

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.

Contents

- Introduction..... 1**
- Responses to Consultation Questions..... 1**
 - Question 1: Assessment framework1
 - Question 2: Nature of the issue raised.....1
 - Question 3: Wholesale demand response currently in the NEM2
 - Question 4: Approach for facilitating transparent, price responsive demand.....2
 - Question 5: Efficient consumption of electricity.....3
 - Question 6: Competition for wholesale demand response services5
 - Question 7: Demand response participating as a scheduled load.....5
 - Question 8: Reducing barriers to a range of demand response6
 - Question 9: Costs of implementing mechanisms6
 - Question 10: Reducing extent of upfront costs7
 - Question 11: Indirect costs of proposals.....7
 - Question 12: Risk allocation for baselines7
 - Question 13: Retailer participation.....8
 - Question 14: Embedded generation and storage.....8
 - Question 15: Thresholds for participation in mechanism.....9
 - Question 16: Implementation timeframes10
 - Question 17: Centrally determined baselines10
 - Question 18: Accuracy of baselines.....10
 - Question 19: Settlement under this proposal11
 - Question 20: Other considerations for the wholesale demand response mechanism ..11
 - Question 21: Cost recovery for the separate market.....12
 - Question 22: Introduction of a separate market12
 - Question 23: Wholesale demand response register mechanism14
 - Question 24: Standard wholesale demand response offer and mandatory wholesale price pass through offer.....14
 - Question 25: Issue addressed by LSCM15
 - Question 26: Benefits and issues of an LSCM.....15

Introduction

PIAC welcomes the opportunity to provide this supplementary submission to respond to the consultation paper regarding the three wholesale demand response mechanism (WDR mechanism, WDRM or DRM) rule changes.

As a joint proposer, we fully support the rule proposed by PIAC, the Total Environment Centre (TEC) and the Australia Institute (TAI), and in this submission provide further detail for a number of matters identified in that proposal as well as responses to questions raised by the AEMC.

PIAC sees the South Australian Government's proposal (SAG) as complementary to the PIAC, TEC and TAI proposal. PIAC supports the intention of the SAG's proposed transitional arrangement to enable the timely introduction of the WDR mechanism with minimised impact on existing participants, but thinks there are more efficacious ways to achieve this, as detailed in this submission.

PIAC does not support the rule proposed by the Australian Energy Council (AEC). While the AEC now accepts the need for more wholesale DR—a major concession by generators and retailers—the AEC proposal offers only a tokenistic reform while retaining veto power for retailers over customer involvement in the DR market.

For further background, please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

Responses to Consultation Questions

Question 1: Assessment framework

Do stakeholders agree with the proposed assessment framework? Alternatively, are there additional principles that we should be taking into account?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

Question 2: Nature of the issue raised

(a) Is it difficult for consumers to participate in wholesale demand response? If so, which consumers face the greatest amount of difficulty? What is the cause of this difficulty?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

(b) What demand response providers and products are currently available in the market?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

(c) Is there effective competition for demand response as a service to be used by retailers? If not, are consumers able to access the benefits of wholesale demand response directly? Is competition for wholesale demand response as a service increasing?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

Question 3: Wholesale demand response currently in the NEM

(a) Do stakeholders have views on the existing levels of wholesale demand response in the NEM? Please provide evidence or data to substantiate these views where possible.

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

(b) Can retailers indicate to the Commission what they are currently doing to facilitate wholesale demand response?

Residential consumers have been given little or no opportunity to participate in WDR. Currently, retailers are responsible for facilitating consumer participation in WDR. PIAC has observed that there has been a very recent burst of ad-hoc DR activity from a small number of retailers. Rather than a sign of enough progress in retailer-offered WDR services, this appears to be an attempt to head off this reform process. The AER, in its recent wholesale electricity market performance report, observed that WDR by retailers has actually decreased in the last year, noting: "For summer 2017–18, AEMO estimated there was only 207 MW of expected demand response to different wholesale price levels."

PIAC notes also the AEMC's observation that the majority of Market Participants have failed to provide Demand Side Participation information to AEMO. This behaviour is consistent with

- an intentional lack of transparency about DR of energy retailers,
- the lack of interest in DR by energy retailers, and
- the inconsistency of DR with retailer and generator business models

This is reflected in the experience of consumers. In early 2018, PIAC conducted a research project that involved 'mystery shopper' calls to retailers active in NSW, asking whether they offered demand response programs for residential consumers. Of the 23 retailers contacted, only one, niche retailer, currently serving less than 0.01% of the NSW household electricity customer base, offered a wholesale demand response service to households.

This indicates that

- even if consumers are aware of what to ask for, it is very unlikely that they will be able to find a retailer that is willing to offer WDR, and
- the vast majority - at least 99.99% - of NSW households would be required to change retailer to do demand response.

PIAC is updating this research in February 2019, and will provide the findings to the AEMC and interested stakeholders.

While some retailers have offered DR to consumers as part of RERT, these have been

- trials, limited in duration and number of participants, rather than ongoing product and service offerings,
- applied for emergency purposes, not the day-to-day operation of the NEM, and
- significantly subsidised by ARENA.

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper for further discussion on retailer participation in WDR markets.

Question 4: Approach for facilitating transparent, price responsive demand

Do stakeholders consider there are other regulatory solutions:

(a) to providing the demand side with greater access to wholesale prices

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

(b) to increase the transparency of demand side response to these prices?

Potentially, yes, such as the example provided in the Consultation Paper; but none that achieve the objectives of the WDR mechanisms as proposed by PIAC, TEC and TAI or SAG, and none that come without material costs and/or risks.

PIAC agrees with the AEMC that it is increasingly important that greater transparency of demand response is available.

Question 5: Efficient consumption of electricity

(a) Do stakeholders agree with our characterisation of how efficient wholesale demand response would improve outcomes in the wholesale market?

Yes.

In addition to the observations made by the AEMC, PIAC notes that more demand response could also support innovation and accelerate the uptake of technology that further improves the efficiency and cost of meeting demand for energy.

When delivered by third party service providers as distinct from large retailers and generators, demand response will also

- dilute concentrated markets, improving competition,
- in some cases, respond or dispatch faster than generators, improving price, security and reliability outcomes,
- limit the potential for strategic bidding and gaming by generation businesses, particularly in concentrated markets, and
- minimise the cost of reliability mechanisms such as RERT or NEG.

(b) What are stakeholders' views on how facilitating wholesale demand response could affect outcomes in the wholesale energy market?

In PIAC's view, the NEM can only be considered truly efficient and effective, and therefore to be promoting the long-term interest of consumers, if it has optimal levels of demand response in all its markets and networks, as illustrated below.

Stage in supply chain	Wholesale system operation	Transmission	Distribution	Retail	Customer (behind the meter)
Role of DR	<ul style="list-style-type: none"> Alternative to expensive generation to meet peak demand Provide system security Provide ancillary services 	<ul style="list-style-type: none"> Avoid or defer capital investment Cost effective alternative to expensive interconnection investment 	<ul style="list-style-type: none"> Avoid or defer capital investment Provide power quality support 	<ul style="list-style-type: none"> Manage wholesale market exposure Manage retail market exposure 	<ul style="list-style-type: none"> Reduce consumers' electricity costs Provide backup supply during outage
Necessary reforms or outcomes	<ul style="list-style-type: none"> Demand Response Mechanism (that is independent of retailers) 5 minute settlement 	<ul style="list-style-type: none"> Offering DR to consumers Provide products to allow consumers to self-select their cost-reliability level Ringfencing arrangements and network incentives to support DR 	<ul style="list-style-type: none"> Offering DR to consumers Network tariffs for DR Provide products to allow consumers to self-select their cost-reliability level Ringfencing arrangements and network incentives to support DR 	<ul style="list-style-type: none"> Pass on network tariffs and products for DR Provide products to allow consumers to self-select their cost-reliability level Offer retail products for wholesale price arbitrage 	<ul style="list-style-type: none"> Consumers are able to self-select cost-reliability trade-off Allow aggregation of individual consumers to provide DR portfolio
Essential	Coordination of services and products to overcome split-incentives and barriers to efficient use of DR				

(c) Figure 1 - The role of demand response in each part of the energy market and system

Demand response (DR) for the purpose of avoiding or deferring network upgrades has been the focus of reforms in recent years, yet there remains a dearth of demand-side participation in energy markets. Despite recommendations in the Parer review in 2002, and by the AEMC ten (and again, 16) years later, there is still no mechanism for offering demand response in the wholesale electricity market.

Due to the lack of wholesale DR undertaken by retailers and generators, and the absence of a means for consumers to undertake wholesale DR without a retailer, WDR remains greatly underutilised in the NEM. The potential for demand response to mitigate wholesale prices, which are driving consumer retail bills to the highest level ever, is still not being realised.

In the NEM's ancillary service markets, however, where demand response aggregators are able to provide services independently of retailers, the use of DR is growing and has been shown to bring down the costs of ancillary services dramatically, particularly in more concentrated markets such as South Australia.

A WDRM will provide a more effective and efficient energy wholesale market, by displacing more costly generation capacity and dispatch with more cost-effective voluntary load reductions. This will in turn place downward pressure on wholesale prices and reduce concentration, while improving options for cost effectively maintaining system security and reliability.

Please refer also to PIAC's response to questions 5 (a)

Question 6: Competition for wholesale demand response services

Are consumers able to access competitive offers from retailer or third parties to assist consumers to undertake wholesale demand response? Is the level of competition greater for larger consumers?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

Question 7: Demand response participating as a scheduled load

(a) Has the Commission appropriately characterised the benefits of increasing transparency relating to wholesale demand response?

Yes. PIAC notes with concern the AEMC's observation that the majority of Market Participants have failed to provide Demand Side Participation information to AEMO. In PIAC's view, this behaviour appears to be emblematic of:

- an intentional lack of transparency about DR by energy retailers,
- the lack of interest in DR by energy retailers, and
- the underlying inconsistency of DR with retailer and generator business models.

(b) Do stakeholders consider that if demand response were to participate in the wholesale market, it should do so as a scheduled load (rather than scheduled "negawatts")? Would the pros and cons of participating as a scheduled load differ for different types of demand response providers, e.g. those that have demand response controls on all or only part of their load?

No.

In PIAC's view, it is important that there is consistency, where practicable, between arrangements for demand response providers and generators. Accordingly, DR providers should provide 'negawatts' (and be paid for 'negawatt-hours', so to speak) being the difference between baseline and measured consumption.

PIAC disagrees that demand response should be treated as a scheduled load, and does not share the view that scheduling demand response, as opposed to scheduling load, will unavoidably lead to gaming.

With respect to concerns that baselines may be rendered unacceptably inaccurate, PIAC notes that load, and any demand response related reduction in load, are directly and exactly related: when one goes up, the other goes down, and vice versa. The formulas and approach used to calculate or predict one will work for the other, with similar accuracy.

PIAC also supports comments made by Enel X, in its submission to the Consultation Paper, on these topics.

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper, response to questions 12, 17 and 18, for commentary on baselining and gaming that relate to this question.

(c) Do stakeholders consider the obligations placed on scheduled load remain appropriate in the context of demand response? If not, how might they be changed to better allow loads to participate in central dispatch?

Please refer to 7 (b).

(d) Which information provision processes should a demand response provider participate in, i.e. pre-dispatch, ST-PASA, MT-PASA?

PIAC supports comments made by Enel X, in its submission to the Consultation Paper, on this topic.

(e) How should compliance with dispatch targets and the causer pays procedure apply to demand response providers?

PIAC supports comments made by Enel X, in its submission to the Consultation Paper, on this topic

Question 8: Reducing barriers to a range of demand response

To what extent will these mechanisms facilitate more demand side participation throughout the NEM?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

Question 9: Costs of implementing mechanisms

(a) What is the extent of the upfront costs that would be imposed on participants to introduce the proposals outlined in the rule change requests? Please provide evidence or data to substantiate these views where possible.

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

Further, PIAC supports the recovery of costs on a cost-reflective and user-pays basis. DRSPs should be required to pay fees to AEMO that, over time and as far as practicable, reflect the costs incurred by the market operator in implementing and operating a WDRM. This way, such costs are effectively recovered from participating consumers rather than the market.

(b) Will demand response providers have sufficient information regarding expected revenue to make commercial decisions regarding the cost/benefit trade-off of incurring upfront costs in order to participate in the mechanism?

DRSPs will be exposed to a number of risks, particularly with respect to contractual arrangements requirements and uncertainty about spot prices, and are best placed to manage these risks.

PIAC supports comments made by Enel X, in its submission to the Consultation Paper, on this topic

Question 10: Reducing extent of upfront costs

Do stakeholders have suggestions for ways these upfront costs could be minimised? For example, is it possible for there to be savings by making changes at the same time as other systems changes?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

Question 11: Indirect costs of proposals

(a) What is the likely extent of any indirect costs imposed through these proposals?

Please note responses to cost-related and baselining-related questions in this submission and PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

PIAC also understands the reasonable concern that any reform may have a distortionary effect on the market. PIAC agrees with the AEMC's observation that a mechanism to facilitate DR should not distort efficient market outcomes. PIAC would go further to observe that the market is currently somewhat distorted, owing to underutilised demand response and resultant overreliance on more expensive generation sources.

Levelling the playing field between generation and demand response, by allowing demand response to participate in the wholesale market independently of retailers, is the only way to remove this distortion altogether. Any indirect costs incurred in realising this benefit are likely to be trivial.

(b) How could any such costs be minimised?

Please note responses to cost-related and baselining-related questions, in particular the transitional measures proposed in response to question 10, in PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

Question 12: Risk allocation for baselines

Do stakeholders have views on how risks and costs can be best allocated under a baseline used for demand response?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

Question 13: Retailer participation

(a) Is it necessary to place an obligation on retailers to participate in the mechanism for it to address the issues raised by the proponents?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

(b) Are there additional obligations these proposals would place on retailers, and do they differ between the proposals?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

Question 14: Embedded generation and storage

(a) Do stakeholders have preliminary views about the ability for the proposed mechanisms to accommodate embedded generation, in the form of reduced consumption of electricity from the grid in high price periods?

Please refer to question 14 (b) following, regarding baselining and settlement, and to question 18 (e) in PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper, regarding metering and accurate baselining options to support the inclusion of sites with embedded generation and batteries.

(b) Do stakeholders have preliminary views about the ability for the proposed mechanisms to accommodate, as demand response, increased consumption during low price periods (whether due to charging batteries, increasing production or any other action by the customer)?

PIAC agrees with the AEMC's observations in part 5.6 of the Consultation paper.

In PIAC's view, it is important that DRSPs are symmetrically exposed to the cost of positive and negative spot prices, as well as consumption above or below baselines, to maintain the integrity to the WDRM. This will avoid cross subsidy resulting from a misestimate of either the load or the value of DR at a given time. These same provisions will naturally accommodate settlement for, for example, increasing load in response to negative prices by charging batteries.

PIAC suggests that the AEMC should consider the nature of metering, and specifically net exported energy, in the context of the WDRM. Net metered consumers with storage and/or embedded generation may have the capacity to export energy during a DR event, by reducing load and/or increasing production to instantaneously produce more energy than they are consuming on site. In PIAC's view, there is a market benefit for this, so it should be supported under the WDRM with appropriate payments, however provisions must be in place so that

consumers exporting energy do not double-dip, by being paid both a Feed-in Tariff and a DR payment for the same energy. There are likely to be a number of potential measures to address this.

Please refer also to question 18(e) in PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper, regarding metering and accurate baselining options to support the inclusion of sites with embedded generation and batteries.

Question 15: Thresholds for participation in mechanism

(a) What thresholds, if any, should apply to participation in the mechanism for individual consumers and aggregated portfolios? For example, large consumers as opposed to small consumers; a MW size threshold?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

(b) Should there be thresholds at which different scheduling obligations apply?

PIAC seeks consistency between the provisions for generation and demand response in the wholesale market with respect to scheduling, but also notes the specific importance of obligations to notify the market of intended DR events.

- To avoid the risk of gaming (by opportune retrospective declaration of DR event that was not intended) all DRSP's should be required to provide AEMO with notification of any DR event no later than at the start of the event.
- Any single (non-aggregated) or aggregated DR participant with capacity up to 5MW (measured by the maximum expected difference between baseline consumption and actual consumption), should effectively be non-scheduled and participate at will, similarly to generators of the same size.
- Any single (non-aggregated) or aggregated DR participant with capacity from 5 to 29MW, should effectively be non-scheduled, similarly to generators of the same size. It may be appropriate to place some obligations for further advance notice, for example with respect to timing, volume and duration, for aggregated DR above 5MW, however these obligations should not be more onerous than those that apply for semi-scheduled generators.
- Any single (non-aggregated) or aggregated DR participant with capacity above 30MW, should be required to bid and be centrally dispatched, similarly to generators of the same size. It may be appropriate to place some obligations for further advance notice, for example with respect to timing, volume and duration, however these should not be more onerous than those that apply for equivalent sized generators.

Unlike generators, the capacity of individual or aggregated DR participants would be expected to grow and contract, and may move between these different size bands. To avoid placing excessive demands on a given DRSP, there should be some elasticity of the bands and timeframes for participation.

Question 16: Implementation timeframes

(a) How long do stakeholders think would be reasonably required to implement the proposals as set out in the rule change requests?

In PIAC's view, it is reasonable to expect that

- a WDRM with some transitional arrangements in place should commence no later than January 1, 2020, and
- the full WDRM, with all associated obligations on market participants, complete AEMO guidelines, processes and procedures, and full consumer participation permitted with appropriate protections in place, should be implemented not later than the implementation of five-minute settlement and global settlement

Please also refer to Question 10 in PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper, and Question 22 in this submission.

(b) How could the implementation timeframe be reduced? What trade-offs may need to be made to the design to achieve this?

Please refer to Question 16 (a) in this submission, and to refer to Question 10 in PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

Question 17: Centrally determined baselines

(a) How important is it to design against the possibility for bias and gaming?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

(b) How can a baseline methodology appropriately align incentives such that the risk of systemic bias is minimised?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

Question 18: Accuracy of baselines

(a) How important is it that the baseline methodology is able to accurately estimate consumption?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

(b) What administrative mechanisms would improve baseline accuracy without imposing excessive burdens? For example, regular review of baseline methodologies by independent experts, or cross-checking against consumption data from customers that are similar to the demand response provider but are not engaging in demand response.

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

(c) Can a baseline accurately account for embedded generation and other dynamic resources that might exist behind the meter?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

(d) Should a wholesale demand response mechanism apply only to the types of customers for which baselines can be accurately set, and if so, what types of customers should be eligible?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

(e) How should long-term or permanent changes in a customer's overall level of demand be addressed in baselines? For example, factories may add or retire production lines; households may increase or decrease in size, and may install or remove equipment such as pool pumps or solar panels.

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

Question 19: Settlement under this proposal

Do stakeholders consider one of the settlement options outlined to be preferable? How would this approach to settlement impose costs and risks on market participants?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

Question 20: Other considerations for the wholesale demand response mechanism

Do stakeholders have views on these other considerations set out above? Are there other considerations not raised here that should also be considered when designing a wholesale demand response mechanism?

Any new consumer protections for WDRM could be developed and delivered through

- An AER guideline, like that for exempt retail, with supporting changes to the NERR and NECF,
- The Behind The Meter code being currently developed, and/or
- Australian Consumer Law, noting this is outside of the AEMC's remit

PIAC proposes, during the transitional period and while specific consumer protections are being developed, to disallow WDR for consumers on life support. In PIAC's view, this will be an important step in ensuring consumers' health and wellbeing is adequately protected, without delaying other households and small energy users from participating in the WDRM.

Please also refer to Question 22 regarding PIAC's further proposed transition arrangements.

The AEMC's Consultation Paper notes that the AEC has characterised the PIAC, TEC and TAI proposal as being a "one size fits all" approach. The AEC proposal, however, seeks to preserve the current arrangements, which is a "one size fits none" approach.

In contrast to the AEC proposal, both the PIAC, TEC and TAI and SAG models

- accommodate most, if not all, types of demand response,
- can be accessed by consumers in any location, not just where a given retailer is active,
- can be accessed by consumers without having to change retailer and retail contract,
- provide certainty to existing and new demand response businesses,
- remove the significant barrier and time requirement to negotiate with a retailer, and
- do all of this while placing fewer obligations on retailers than would be required to make the AEC model effective.

The AEC's assertion that the Wholesale DR Register would have lower costs than the WDR mechanism is highly questionable. For the DR Register to be effective, most (if not all) retailers would need to have contractual arrangements, relationships and transactions with most (if not all) Demand Response Service Providers. This would amount to hundreds of relationships which are avoided altogether in the PIAC, TEC and TAI and SAG models. Retailers would also need to offer consumers services that are inconsistent with their current business models, requiring further hidden costs.

If retailers don't do these things, then the AEC's assertion that the Register would have a low cost would be correct, however it would also fail to give rise to an effective demand response market.

Question 21: Cost recovery for the separate market

What do stakeholders think about the proposed cost recovery arrangements for the separate market?

Question 22: Introduction of a separate market

PIAC supports the intent of SAG's proposed separate market as a transitional option for the DRM, but proposes an alternative transition approach to more effectively

- allow consumers to benefit from the WDRM being introduced at the earliest practicable opportunity,
- give AEMO flexibility to undertake market DR trials without requiring it to develop a separate market to do so,
- minimise the cost impact on retailers, by allowing them to defer any system and metering changes to the same time as those they will make for other significant reforms,
- minimise the resource impact on AEMO over the longer term, by avoiding the step of requiring them to develop a separate market and potentially integrating this with the wholesale market in the future. In PIAC's view, it is important that the introduction of the WDRM does not impose avoidable burden on AEMO, and
- manage risks to vulnerable consumers

PIAC proposes to introduce a transitional WDRM no later than January 2020, with the full WDRM to take effect when the global settlement and five minute settlement reforms, both of which involve significant changes to AEMO's market operations and commensurate changes to various retailer and AEMO systems, are implemented.

The key elements of PIAC's proposed transitional approach are that, during the transition period:

- Retailers would be allowed to settle with both the market and networks on baseline consumption, as distinct from 'split' calculation for settling the wholesale charges on the baseline and network charges on actual consumption. PIAC understands that the main cost for retailers might arise from system changes to facilitate split settlement, where they are required to settle bills with consumers on baseline consumption while settling with networks on actual consumption, which would be material if done in isolation of other changes. Delaying split settlement to the same time global settlement and five-minute settlement are implemented, when the incremental cost of upgrades for a WDRM will be minor, will give retailers time to implement the required systems changes in the least cost manner. Consumers may experience slightly higher costs in the form of network charges on the demand-response component, yet there will be no impact on the retailer or the market if the wholesale and network charges are both settled on the baseline consumption.
- For participating large customers¹ during the transition period, any network charge over-recovery that results from this arrangement could be returned to participating consumers by the relevant network business, in a similar manner to how DNSPs are already required to return over-recovered TUoS charges to embedded generators.
- Retailers should be allowed to undertake manual adjustments to settlement or billing data if required. It is standard practice for retailers and generators to undertake manual adjustments to settlement or billing data when the cost to do so is much lower than the cost of changing an automated system. This allows retailers to better manage their costs by deferring the modification of their systems to a later date while doing other upgrades (such as those that will be required for five-minute settlement and global settlement).
- During the transition period, DRSPs could be required to take on responsibility for meter provision for any participating consumers, if this will avoid additional costs, otherwise borne by the retailer, associated with supplying metering data and services for the WDRM. PIAC has discussed this idea with a number of stakeholders, and has heard mixed views on whether it would be needed, so sees merit in AEMC further considering whether this option would assist reduce costs to retailers (bearing in mind the nature of metering required to undertake WDR, particularly with the advent of 5 minute settlement.)
- In response to concerns about the potential risks to consumers on life support, PIAC proposes, during the transitional period while specific consumer protections are being developed, to disallow WDR for consumers on life support. In PIAC's view, this will be an important step in ensuring consumers' health and wellbeing is adequately protected, without delaying other households and small energy users from participating in the WDRM.

¹ As most retail contracts for small customers have 'bundled' network charges, the benefit of reimbursing over-recovered NUoS in this manner for small customers during the transmission period alone may be exceeded by the administrative cost.

(a) Would the proposal set out in this appendix be faster to implement than the wholesale demand response mechanism discussed in appendix A?

Most elements of PIAC's proposed transitional measures would be faster to implement than the separate market proposal.

(b) If stakeholders do not consider that it would be faster to implement, is there merit in exploring this as an alternative to the other proposed demand response mechanisms? What are the costs and benefits that should be considered in doing so?

For reasons noted herein, the separate market model would be much more effective than the AEC's proposed register (with or without the improvements suggested by the AEMC), but is unlikely to be as efficacious as the WDRM.

(c) Are there any additional mechanisms that could be implemented more quickly than a wholesale demand response mechanism?

None that will realise the benefits of DR from third parties as effectively or efficiently in the longer term.

(d) What are stakeholder views on the feasibility of co-optimising this separate market with the existing wholesale market?

Question 23: Wholesale demand response register mechanism

(a) What are stakeholder views on this option to facilitate demand response?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

(b) What do stakeholders consider the benefits of this option would be?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

(c) What do stakeholders consider to be the costs associated with this option?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

(d) Are there any implications (regulatory or otherwise) that are not raised in the discussion of this option?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

Question 24: Standard wholesale demand response offer and mandatory wholesale price pass through offer

(a) What are stakeholder views on these options to facilitate demand response?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

(b) Do stakeholders consider these options to be preferable to a wholesale demand response register?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

(c) Do stakeholders consider these options to be complementary to a wholesale demand response register?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

Question 25: Issue addressed by LSCM

(a) Do stakeholders agree that reliability related load shedding inefficiently allocates risks to end consumers? Does the proposed LSCM address this issue?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

(b) Would a LSCM facilitate greater levels of wholesale demand response?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

Question 26: Benefits and issues of an LSCM

(a) Do stakeholders agree with the outline of the benefits and challenges associated with the introduction of an LSCM?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.

(b) What other issues would need to be considered?

Please refer to PIAC's Submission to Wholesale Demand Response Mechanism Rule Change Consultation Paper.