



public interest
ADVOCACY CENTRE



TOTAL
ENVIRONMENT
CENTRE

The **Australia
Institute**

Research that matters.

> Climate & Energy.

renew.

QCOSS Queensland Council
of Social Service



**SMART ENERGY
COUNCIL**

SOLAR, STORAGE, SMART ENERGY

**Joint submission to AEMC
Wholesale demand response mechanisms
Consultation paper**

21 December 2018

Overview

Our organisations represent a breadth of energy consumer and public policy interests.

While we have a range of views on the detailed design options, we have come together stress the urgent need to introduce a Wholesale Demand Response (WDR) mechanism into the NEM that allows consumers to participate irrespective of whether or not their retailer offers DR products or services.

We welcome the opportunity to provide feedback on the AEMC's consultation paper (CP) on the WDR rule change (RC) request proposed by the Public Interest Advocacy Centre, The Australia Institute and the Total Environment Centre (ERC0247 / RRC0023) as well as those from the South Australian Government and the Australian Energy Council (ERC0250 / RRC0027 and ERC0248 / RRC0025).

In broad terms, we support ERC0247 and the principles behind it. In this submission we will also summarise our views on the competing rules (ERC0250 / RRC0027 and ERC0248 / RRC0025).

Rather than respond to all 26 questions and sub-questions in the CP, this submission focuses on some the most important issues. Many of the matters raised in the CP were fully canvassed in the AEMC's Reliability Frameworks Review, and a number of our organisations expressed our views in that process as well.

Considering the WDR rule change proposal alongside the other two RC requests, it is clear there are two core principles at stake:

- **Wholesale access.** Demand response should be able to truly compete in the energy market on level pegging with generation, as originally conceived in the Parer Review.
- **Consumer choice.** All consumers, ranging from information-poor households and farms to small and large businesses, should have the option to participate in demand response, whether or not their retailer offers it to them.

The market objective

The PIAC, TEC and TAI rule change request is designed with a clear objective: to open up the wholesale market to competition from demand response. The AEMC defines this objective simply:

Demand response providers should be able to be recognised on equal footing with generators in the wholesale market and so be able to more readily offer wholesale demand response in a transparent manner to AEMO.

DR is an integral part of the energy system, and the energy market cannot be considered efficient without DR being optimally utilised in every part of the energy supply chain: wholesale energy and ancillary service markets, system security and reliability arrangements, distribution and transmission networks, and behind the meter. While the amount of DR in the wholesale energy market is not well understood due to the lack of transparency of current arrangements, its use by retailers is far below its efficient level.

The ability to participate in DR under current arrangements is effectively limited to the largest commercial and industrial energy consumers, and even they report barriers.

We concur with the ACCC, AEMC, Finkel Review and COAG Energy Council, that the NEM needs a DR model that supports third party aggregation and provision of wholesale market DR.

Competing rules, need for consolidation

There are now three rule change requests before the AEMC relating to wholesale demand response. This multiplication of process makes it impossible for small, consumer organisations or market participants to fully participate in the AEMC's process.

The three rule demand response rule change sets before the commission are:

1. PIAC, TEC and TAI: proposes a market-based solution to remedy the current low level of DR in the NEM, by introducing a new category of market participant, the demand response service provider (DRSP), able to offer scheduled single or aggregated reduced loads or 'negawatts' into the wholesale market, with the primary objectives of lowering wholesale prices and consumer bills.
2. South Australian Government (SAG): supports the core principles behind the PIAC, TEC, TAI rule and should be supported in broad terms. The SAG rule also proposes the introduction by AEMO of a transitional, separate wholesale demand response market.

3. Australian Energy Council (AEC): concedes that third parties should have wholesale DR market access but proposes to maintain retailers' control over the DR market while introducing a WDR register.

Since all the proposals attempt to more or less provide alternative solutions to the same problem, we see no reason why all three rule change requests should not be considered as part of the same AEMC process.

The SAG proposal is complementary

The SAG rule change is best thought of as a complementary proposal to the PIAC, TEC and TAI proposal. It has an additional feature; a transitional framework. We support the intention of the transitional arrangement to support the timely introduction of the WDR mechanism, but think there are preferable ways to achieve this, and encourage further consideration of the most efficacious measures to achieve this. We note that PIAC's submission to the CP is considering some options for this transition.

The AEC proposal is counterproductive and ineffective

The AEC proposal accepts the need for more wholesale DR—a major concession by retailers—but offers only a tokenistic reform in this direction (ie, the creation of a WDR register), while still giving retailers a veto power over customer involvement in the DR market. The register proposed may be an unnecessary red tape burden for energy solutions companies and thus create a cost for consumers, while having questionable benefits.

While the proposed AEC model lacks much of the detail required to understand how it would work in practice, it is clear that it fails to achieve four of the benefits of the PIAC, TEC, TAI and SAG proposals:

- It does not remove the existing distortion to the market created by the absence of a level playing field between demand response and generation businesses.
- It does not promote the availability of DR throughout the supply chain and among all consumers, as participation would be limited to consumers that are with participating retailers. This also presents geographic limitations to using DR for network services.
- It does not support real consumer choice and confidence. Under the proposal, consumers who want to do DR will be required to accept the DR terms and any energy contract terms of their current retailer, and will be unable to move their combined DR and energy contract to any retailer that does not have the same business model.
- It does not allow DR to be offered by the demand response aggregators who are best equipped to provide it, while allowing retailers to focus on delivering energy retail services.

Load shedding mechanism

In the CP the AEMC canvasses another option, a “load shedding compensation mechanism” (LSCM). This “would require retailers to provide compensation to their customers (i.e. end consumers) in the event that those customers are involuntarily load shed because there is insufficient generation to meet demand.”

In our view this option does not address the core principles, since it limits DR to emergency load shedding events, perpetuating the marginal status of DR and limiting the potential consumer benefits.

We will now focus on some of the main issues raised in the consultation paper.

Issue 5.1: Extent of the issue being addressed

The PIAC/TEC/TAI rule change request provides evidence of the low level of DR in the NEM relative to other jurisdictions. In addition, we note that it is currently extremely difficult for residential and other consumers to participate in WDR. Currently, retailers are responsible for facilitating consumer participation in WDR. In PIAC's experience, they have not done so.

Given the lack of demand response options offered to residential consumers, all groups have difficulty in accessing them. In early 2018, PIAC conducted a research project that involved ‘mystery shopper’ calls to retailers active in NSW asking whether the offered demand response programs for residential consumers. Of the 23 retailers contacted, only one, boutique retailer offered WDR. This indicates that, even if consumers are aware of what to ask for and are happy to change retailers to access WDR, it is very unlikely that they will be able to find a retailer that is willing to offer DR.

Low income and other disadvantaged consumers have the most difficulty accessing affordable energy services in the competitive market. This may stem from a variety of reasons including being less numerically or financially literate, having a language barrier, or a disability or being on hardship plan or prepayment arrangement which would limit their ability to change retailers.

Large energy users also report a lack of suitable DR products from retailers, noting the even when their retailer does offer WDR, the payments offered are a very small fraction of the wholesale market value.

There has been a recent burst of DR offerings from a small number of retailers. We consider this to be an attempt to head off this reform process, and that the AEMC should not view this as sufficient progress in increasing WDR services. Rather, as noted by the AER in its recent Wholesale electricity market performance report, WDR by retailers actually decreased in the last year: “For summer 2017–18, AEMO estimated there was only 207 MW of expected demand response to different wholesale price levels.”

Issue 5.2: Benefits of making a change

We largely concur with the AEMC’s characterisation of how efficient wholesale demand response would improve outcomes in the wholesale market. The AEMC points out there is a theoretical “efficient market incentive” for retailers to offer and engage in WDR. However, as noted in the PIAC/TEC/TAI rule change request, the roles and benefits of DR far from being fully realised.

As market bodies and many independent analysts have observed, current arrangements have led to a sub-optimal level of DR in the NEM compared with other energy markets. This may be due to a raft of factors including that third parties are unable to participate directly in the wholesale market, along with practical commercial issues for retailers and cultural factors such as a lack of knowledge about or bias against demand-side behaviours and technologies. Above all, at present WDR providers can only benefit by offering their services to a retailer to manage the load of the customers of that retailer. There are many barriers to developing these partnerships.

Issue 5.3: Costs of making a change

During the previous DRM rule change process, retailers proposed grossly inflated and unsubstantiated estimates of the costs of changes to billing and IT systems. We caution the AEMC to closely interrogate whatever estimates retailers come up with this time around, particularly considering the AEMO and retailers will be already implementing the five-minute settlement and global settlement reforms in the next three years, both of which involve significant and costly changes to market operations.

Even if it were accurate, the inflated cost estimate provided by retailers is not grounds for rejecting the reform at this time, given the far higher potential benefit to the market of DR, and the matters of principle considered.

Nevertheless, there are several measures to reduce the upfront costs of introducing the WDR mechanism (see PIAC submission for details). These measures are designed to reduce the burden on AEMO and retailers, both of which will be required to undergo some system changes to implement the reform.

Issue 5.4: Baselines

An adaptable, robust baselining methodology is obviously critical to the successful implementation of WDR. As ARENA and AEMO and their industry partners learned during the 2017-18 RERT trials, this is not a simple process, and requires refining over time. We therefore propose a principles-based approach whereby the objectives of baselining would be included in the Rules, with AEMO having responsibility for developing and refining the methodology as the WDR evolves. AEMO should also be capable of responding to the issue the AEMC raises about the potential for inaccurate WDR baselines to cause problems with the NEM dispatch engine (NEMDE).

It is also important to note that much demand response is likely to be automated, making it easier to measure and control and somewhat simplified baselining compared to entirely manual DR. In the case of the more advanced demand response markets in the US, only 0.7GW of over 18.3GW of enrolled demand response capacity in the US is behavioral, compared with the mostly manual curtailment processes found in the RERT demand response pilots over 2017-2018.

Issue 5.5: Retailer participation

It is not necessary to place an obligation on retailers to participate in WDR. Rather, it is necessary to place an obligation on retailers that they may not use their non-participation as a barrier to their consumers participating. By allowing third parties to offer WDR directly to consumers, the PIAC/TEC/TAI mechanism does not require participation by retailers to ensure success. Third party DRSPs can form a functioning WDR market by working directly with consumers, and retailers may still seek to enter that market in a way they mostly have not to date. This would improve competition, but it is not necessary for the success of the mechanism.

Issue 5.6: Thresholds for participation

Consumers of all sizes should be able to participate in wholesale DR in the way that meets their needs. Therefore, we strongly oppose excluding any consumers from participating. We agree with the AEMC that a large portion of the benefits of the WDRM is likely to come from expansion of WDR opportunities for small consumers. We understand that some stakeholders are concerned about the consumer protections implications of allowing small consumers to participate, and we consider that with careful consideration of these issues and amendments to the NERR as well as the NER, it is entirely practical to address these concerns. This issue is addressed in greater detail in PIAC's submission, including a proposed transitional consumer protection relating to the use of airconditioners.

Further, no consumer should be *required* to participate in WDR, regardless of size. Some large users (i.e. above 30MW) consider bidding DR directly into the wholesale market is too complex. These consumers should have the option of doing so if they wish, but should also retain the ability to contract with a DRSP instead, or not participate at all. Therefore, the AEMC should not introduce a MW threshold above which consumers are required to directly participate in the WDR mechanism.

Issue 5.7: Implementation timeframes

The July 2017 COAG Energy Council meeting agreed that a WDR mechanism should be introduced in time for summer 2018-19. Previously, a slow implementation process had been considered for the convenience of retailers. However, given the impact on consumers that has resulted from the lack of DR for over a decade, it is not appropriate to delay the introduction any further. We recommend that a WDR be put in place no later than the summer of 2019/20. To minimise implementation costs for retailers and AEMO, it may be appropriate to put in place some transitional measures for settlement, metering and scheduling until global settlement is introduced in February 2022.

While no consumers should be restricted from participating in the WDR, it may also be appropriate to put transitional consumer protection arrangement in place when the mechanism is first put in place, ahead of the development of other protections such as AER guidelines and industry codes.