

## **AEMC** Review: Power of choice

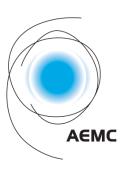
2<sup>nd</sup> Meeting: Stakeholder Reference Group



Dr Brian Spalding, Commissioner AUSTRALIAN ENERGY MARKET COMMISSION

# Welcome and purpose of today

- 1. Recap on assessment approach and framework taking into account stakeholder comments and submissions
- 2. Update SRG members on issues arising from stakeholder submissions and consultations
- Seek SRG feedback on issues and confirmation of set of issues for the review
- 4. Present and engage SRG on preliminary evidence material based on consultant work engaged to date
- 5. Roundtable discussions with SRG members to inform set of key issues



# Methodology and Assessment Criteria



# Methodology and assessment criteria

- Objective is to achieve efficient demand and supply balance in the electricity market
- Requires consumers (or their agents) to be able to compare the value they
  place on electricity services with the costs incurred in providing those
  services
- Demand Side Participation is efficient when the benefits to the market arising when a customer decides to manage or reduce its electricity consumption are more than the loss in customer value

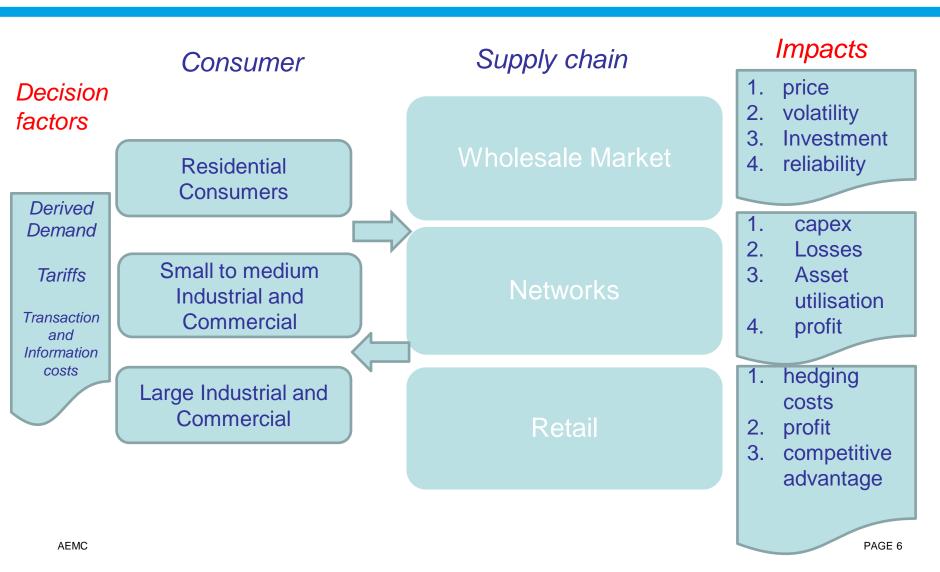
## Methodology and assessment criteria

#### Review will assess:

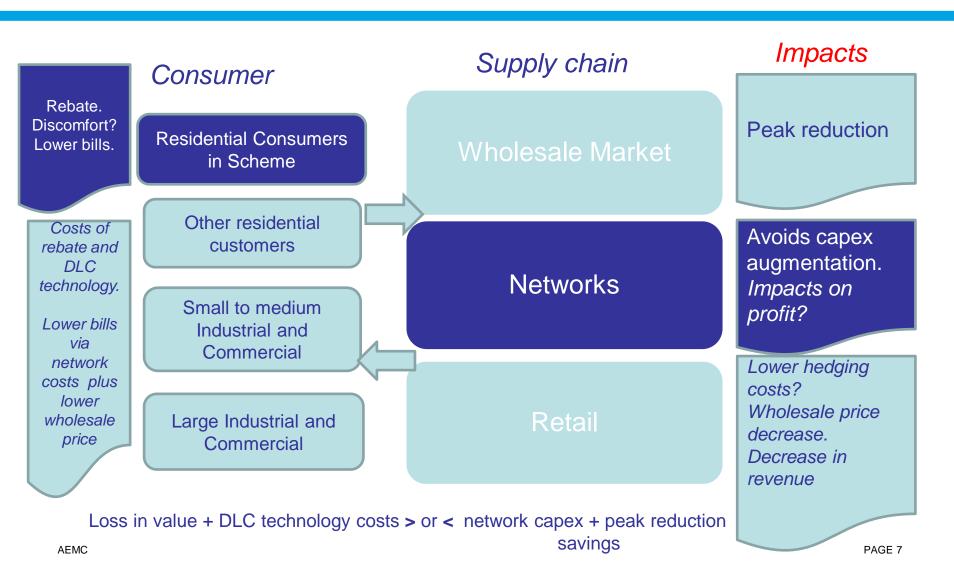
- Given that, consumers value the services that electricity provides ("derived demand"), what types of DSP actions would consumers value
- What market conditions needed to support consumers choice
- The various impacts costs and benefits along the supply chain of a DSP decision
- How such costs and benefits are <u>valued</u> and <u>captured</u>
- The motivation and incentives of the various participants along the supply chain
- How to enable efficient participation of demand side

#### Will draw on evidence from current pilots and trials

# Supply – demand interaction and DSP impacts

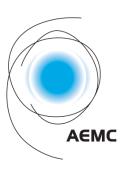


# Example: Residential consumers uptake of DNSP rebate scheme of direct load control of air-conditioners



## Methodology and assessment criteria

- Identify possible areas where the market conditions could be improve to better facilitate consumer choice and participation in the energy market
- Assess whether there are gaps in how the various segments supply chain interacts and support such consumer choice (e.g., difficulties in how DSP costs and benefits are identified and valued)
- Develop a range of reforms to market and regulatory arrangements which would address the identified issues. Assess the cost and benefits of such reforms against the NEO
- Recommend a desired, consistent range of market and regulatory arrangements and develop an implementation plan



# Stakeholder views and key area/issues emerging for consideration



#### Stakeholder submissions and consultations - overview

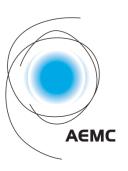
- 47 submissions received to Issues paper available on AEMC website
- AEMC staff have also held a series of stakeholder bilateral meetings
- Views have also been incorporated from submissions to the AEMC Strategic Priorities Paper
- Submissions generally positive and provided good supporting evidence
- Comments focused on:
  - Assessment approach and framework
  - > DSP options
  - Market conditions and issues for uptake and capturing value of DSP

Background papers circulated provided overview of stakeholder comments.

#### Stakeholder views: market conditions and issues

Number of key areas/issues emerging...can be split into two groups:

- 1. Confirmation of market conditions and issues for consumer uptake of efficient DSP:
  - consumer engagement and information
  - pricing structures and signals
  - infrastructure and technology
- 2. Issues across supply chain to capture value of efficient DSP:
  - Supply chain interactions
  - > wholesale market
  - > networks
  - > retailers
- Next set of slides provide summary of main points raised in submissions/consultations and then identifies the issues for consideration across these key areas. Identifying the issues for consideration will be focus of discussion at this SRG meeting.



# 1. Market conditions for consumer uptake of efficient DSP



#### Consumer engagement and information - issues for consideration

#### **Education**

- Difference between "education" (prior to decision) v "information" provisions
- Approach to and establishing social norms
- Need for differences approaches between residential and I&C consumers
- Stakeholders' understanding about current market rules and frameworks (e.g. access to wholesale markets)

#### Information

- Consideration of what information consumers/third parties need and whether current information can provide this?
- Specific issues:
  - energy consumption and costs/payback periods (i.e. appliances/equipment)
  - bills quarterly v monthly
  - o consumption data arrangements for better access. Privacy
- Transparency of market information on value of DSP decision
  - network planning annual reports and AER determinations
  - predictability/certainty of payments
  - pricing offers (tariffs) available

#### Pricing structures and signals - issues for consideration

# Efficient operation of price signals

# Pricing structures/signals

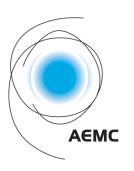
- Are current prices efficient? Effectiveness of current retail and network tariffs at signalling efficient costs
- Consideration of likely consumer response to changes in prices (evidence from trials)
- Review of the range of possible price structures and signals (or arrangements) that may be needed to across the supply chain to encourage consumer response and uptake/capture efficient DSP:
  - ToU including DP and CP pricing
  - daily fixed supply charge v variable charges.
  - capacity (demand) charging versus volume charging
- Issues that need to be considered when considering these options:
  - o protections for "vulnerable" consumers
  - balance between cost reflectivity and admin/transaction costs
  - role of technology and systems to support price signals

### Infrastructure and technology - issues for consideration

# Role of infrastructure and technology

# Service provision and market framework

- Level of consumers' understanding of potential opportunities?
- Who should pay for the technology and how to allocate costs across the supply chain?
  - Consumers investing in DSP infrastructure (split incentive problem)
  - Short payback periods being required
- Framework required for existing and future services enabled by smart grid/smart meter and other load control technologies.
  - role of interval v smart meters, billing and IT systems, communications capability
  - competition of services (including technology) who pays, interface between parties, access provisions



# 2. Issues across supply chain: capturing value of DSP



#### Supply chain interactions - issues for consideration

#### **Split incentives**

- Is it difficult for a consumer/demand response aggregator to negotiate with both a DNSP and retailer at the same time?
- What are the opportunities for both a retailer and DNSP to come together and work jointly to capture value of DSP?
- Would better price signals (which correctly value DSP action) overcome this disaggregated supply chain problem? Or this is a need for a regulatory solution?
- Possible "single actor" model for the regulatory solution:
  - should this be one of the existing participant types or should a new role be created? (Ausgrid submission present reasons why DNSPs are the appropriate party)
  - Framework governing single actor decisions
- Usefulness of having deemed standardised value/s of DSP savings across the supply chain
- Once a demand response action is triggered what should be the information flows across the supply chain (networks - retailers - AEMO)?

#### Wholesale market - issues for consideration

# Access to wholesale/FCAS market

- Large consumer sector access to wholesale market (pricing risk). Specific issues:
  - o costs to participate are they necessary:
    - registering as a market participant
    - registration costs
  - aggregation of loads third party issues (aggregator/ESCO's)

#### **Information**

DSP potential is properly included in demand forecasting information by networks and AEMO

# Note - review will not be undertaking a detailed investigation of the design of the wholesale market.

## Networks - issues for consideration

DNSP role	<ul> <li>Current business model and possible role for increase consumer engagement</li> </ul>
Economic framework	<ul> <li>Existing economic framework in practice. Effectiveness of profit incentives:         <ul> <li>capex v opex bias/price cap v revenue cap/five year regulatory period (productive versus dynamic efficiency)</li> <li>incentive schemes - appropriateness, level of funding, complexity</li> </ul> </li> </ul>
Planning	Network planning: "Firmness" of DSP projects
Information	Consideration of extent AEMC Distribution Planning and Expansion Rule Change may address information needs.
Distributed Generation	<ul> <li>Connection process and charges, technical standards, cultural attitudes and progress of current reforms.</li> </ul>
Transmission	Sharing of DSP related costs

#### Retailers- issues for consideration

# Retailer role for DSP Incentives for retailers to do DSP

- Current business model consistent with DSP?
- Specific issues:
  - lack of innovative tariffs/products competition, standing offers v regulated prices
  - nature and portability of contracts ability of customer to contract with parties beside existing retailer supplying energy
  - provision of services and information engagement with consumer
  - Retailers role as "gate-way" for engagement with consumers

# Note – there is a separate AEMC process for undertaking detailed review of competition in retail market. Hence, will not form part of this review.

### Energy efficiency policies and measures

#### Stakeholder submissions/consultation views:

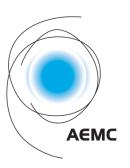
- Wholesale recognition need for better-coordination between existing energy efficiency policies, schemes and the framework for demand response.
- Some noted that EE may not necessarily lead to better peak demand outcomes (e.g. electric boosted solar hot water systems)
- Generally considered that consumers do not get the right information on impacts on electricity tariffs when purchasing an appliance - can be a long delay (years) between a purchasing decision and the eventual network cost increase.
- Some consider need for minimum standards for specific energy intensive appliances. Reference to Equipment Energy Efficiency (E3) Committee of Aus Gov, state, territory and NZ – oversees Trans-Tasman labelling and minimum energy performance standards (MEPs) program.
- Some noted concern that the numerous and differing requirements of State based schemes present a barrier to entry to new retailers and providers of demand side solutions.
- Some support for phase out of federal and state based programs phased once carbon price introduced - ease the regulatory burden on organisations and allow market drive activities.
- General support for a National Energy Saving Initiative. Some support for scheme to include peak demand reduction measure.

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## Energy efficiency policies and measures – next steps

- Oakley Greenwood have been engaged to provide report on MCE ToR's key area energy efficiency measures and policies that seek to integrate or impact on the NEM.
- Two stages of work:
  - Stage 1 stocktake of regulatory arrangements of energy efficiency measures and policies that impose direct obligations or incentives on market participants.
  - Stage 2 cost/benefit analysis of measures identified for review.
- Directions paper will provide discussion and outcomes of stage 1.

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# Questions for roundtables



# Roundtable questions

- Key set of questions. One question per table (30 mins each). SRG members will be allocated a colour and tables a question at SRG meeting on the day.
- Summary by rep from each table and open discussion (10 mins each)

#### **Questions:**

- 1. What would be a best practice approach for improving pricing signals and structures to trigger responses by consumers? What factors should be considered in achieving it?
- 2. What specific actions could be taken to improve existing energy consumption and cost information to consumers or third parties? Are there changes that could be made to the Rules/NECF to support better access for consumer's to their consumption data?
- 3. Under what commercial arrangements do retailers have an incentive to take up efficient DSP? To what extent do such arrangements exist now?
- 4. How should DNSPs take DSP into account when considering planning/investments, including to meet reliability obligations?
- 5. Should there be a single actor for DSP in the supply chain? What factors should be taken into account in considering such a model?

# **Price Signals**

- What would be a best practice approach for improving pricing signals and structures to trigger responses by consumers?
   What factors should be considered in achieving it?
  - How far should tariffs go in reflecting costs of supplying electricity?
  - To what extent are consumers able to respond to price signals?
  - What type of tariffs do they respond to?
  - How does that vary across customer types?
  - Would more efficient prices always make lower income or vulnerable consumers worse off?
  - Are there practical and technical limitations on efficient pricing?

### Information

- What specific actions could be taken to improve existing energy consumption and cost information to consumers or third parties? Are there changes that could be made to the Rules/NECF to support better access for consumer's to their consumption data?
  - What is it that consumers need to know about their consumption in order to make informed decisions?
  - How much data do they need and how often?
  - Do they need historic data, real time data, forecast data?
  - What is the most effective way for them to access the data? Internet? Their bills? IHDs?
  - Are there technical limitations on consumers or third parties obtaining consumption data? Is there anything in the rules or NECF which restricts it?
  - What privacy provisions are needed to protect consumers?

#### Retailer incentives

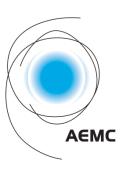
- Under what commercial arrangements do retailers have an incentive to take up efficient DSP? To what extent do such arrangements exist now?
  - Are retailers' incentives about selling more electricity or attracting more customers?
  - Do they want to maximise revenues or profits?
  - How do the regulatory framework and the level of competition affect those incentives?

## **DNSP** planning

- How should DNSPs take DSP into account when considering planning/investments, including to meet reliability obligations?
  - To what extent is DSP a substitute for network assets?
  - How do the time frames of the investments differ?
  - How should DNSPs weigh up the relative costs and benefits?
  - How should DSP be factored into Reg tests?

## Supply chain

- Should there be a single actor for DSP in the supply chain?
   What factors should be taken into account in considering such a model?
  - Where do the costs and benefits of DSP lie in the supply chain? Are they aligned?
  - If not, can they be aligned through contracts/pricing structures?
  - Or would it be more efficient for one actor to provide DSP to the consumer? Should that be the role of an existing type of participant (if so, which one) or is there a role for a new type of market player to come in?
  - What factors should govern how a single actor would make decisions?



# Next steps



# Actions, SRG input and timelines

Key actions/steps	SRG input	Timelines
Directions paper	Input to assessment approach/methodology Consideration of issues and any directional comments Embargo copy of Directions paper	Publish Dec 2011
Public Forum	Possible presentation from members	Feb 2012
3rd meeting SRG	Input into CBA analysis, methodology and assumptions Update on summary of stakeholder submissions to Directions paper Input into possible solutions for reform	March 2012
4th meeting SRG	Input/confirmation of possible solutions for reform for Draft Report	April 2012
Draft Report	As above Embargo copy of Draft Report	May 2012

