

Power of choice review: wholesale and ancillary services markets

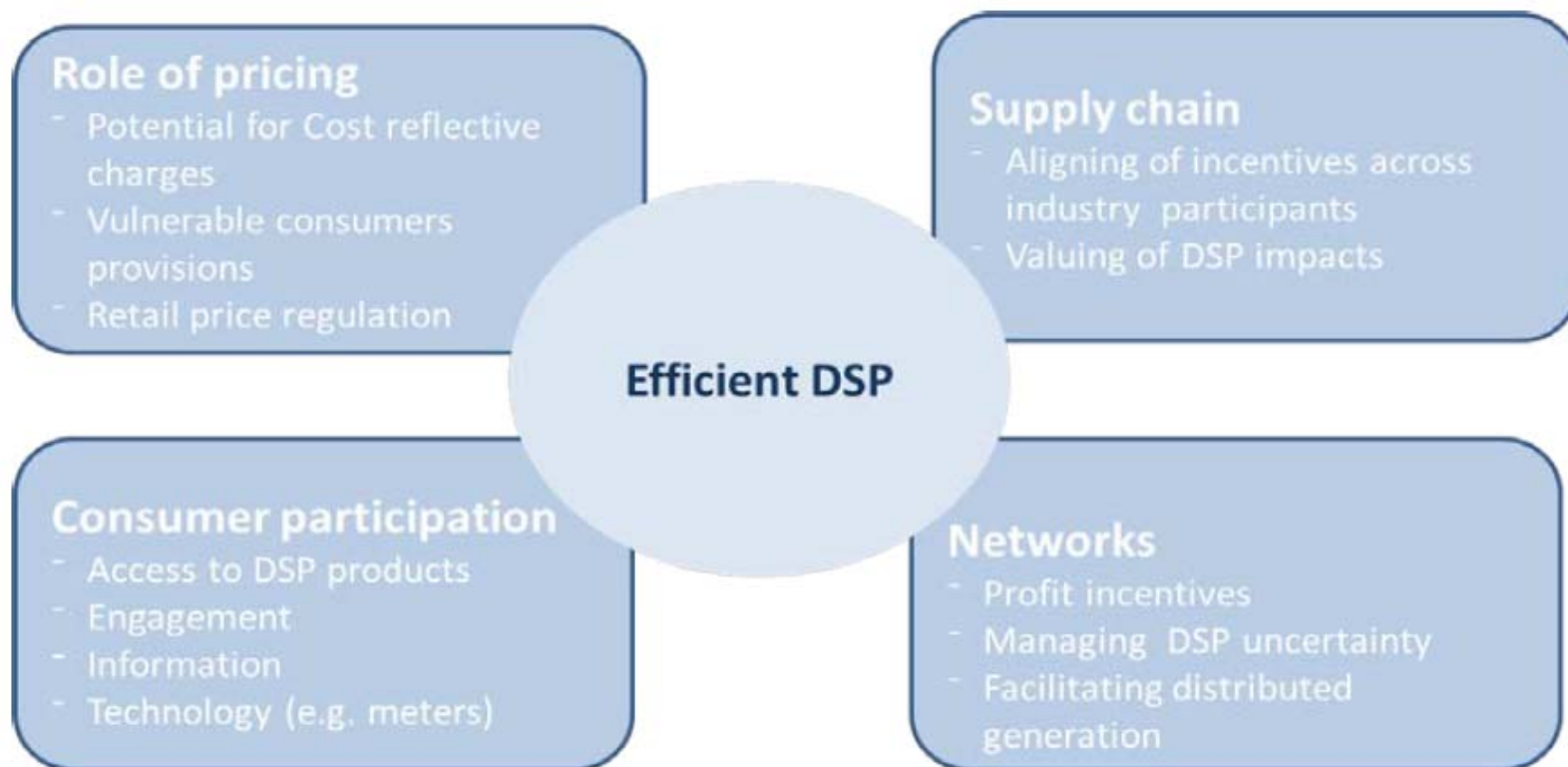
Improving third party load aggregator access to the wholesale and ancillary services markets

MELBOURNE
27 APRIL 2012

AEMC

Power of choice review

- Directions paper



Purpose of today's workshop

- An issue discussed in the directions paper was the role of the wholesale and ancillary services market in facilitating efficient DSP:
 - Are the current market conditions appropriate and if not, how can they be improved?
- Moving into the next stage of the review we are considering:
 - Ways to better facilitate the role of aggregators and the ways in which they may directly access the wholesale market and ancillary services market
- Follows from issues raised in the DSP 2 review as well as the 2010 rule change on the aggregation of ancillary services loads

Purpose of today's workshop

- Today is an opportunity to make progress on the issues (technical and rules based) associated with reducing barriers to third party access to the wholesale market and market for ancillary services
- Solutions focussed
- Focus on today's workshop:
 - Common understanding of key issues
 - Pathways for resolving this issue
 - Understanding the pros and cons of policy solutions
 - Technical and information considerations

Today's agenda

- Introduction to issues and policy approaches
 - Electra Papas, AEMC
- Presentation
 - Dr. Paul Troughton, EnerNOC
- Discussion:
 - Common understanding of key issues
 - Pathways for resolving this issue
 - Understanding the pros and cons of policy solutions
 - Technical and information considerations
 - Other matters
 - Summary and way forward



What is the issue?

- Aggregation of ancillary services loads: 2010 rule change
- Power of choice directions paper

AEMC

DSP in the wholesale electricity and ancillary services markets

- Potential area to improve market conditions to facilitate efficient demand side response is in the wholesale electricity and ancillary services markets
- End-use customers do not want to be exposed to the potential volatility of the wholesale spot price for electricity:
 - Preference is to manage risk through a retailer or third party such as aggregator
- How can third parties improve efficient DSP in each of these markets?
 - Act as scheduled demand response in the energy market
 - Increase pool of FCAS in market for ancillary services
 - Provide increased resources for financial hedging instruments for retailers and network businesses

Aggregator access to the wholesale electricity and ancillary services markets

- Currently to access the wholesale electricity or ancillary services market an aggregator must become a registered participant and take on responsibilities of a retailer:
 - Register as a Market Customer
 - Costs: registration, on-going fees
 - Prudential and organisational capabilities in order to manage a range of potential risks associated with the sale of electricity to end-use customers
- An aggregator's access to the market may be limited to the arrangements it has in place with a retailer
- Key issue for this workshop: how to improve third party load aggregator access to the wholesale electricity and ancillary services market

2010 rule change

- Attempted to remove barriers to the aggregation of ancillary services loads for Market Ancillary Services (MAS)
- Has this resulted in registrations of Market Customers to provide ancillary services?
- AEMC recognised that there may be wider issues associated with ancillary services that may not have been resolved through the rule change:
 - Disincentive for Market Customers (i.e. retailers) to arrange for market load to provide ancillary services if appropriate systems to participate are not in place
 - Associated demand response may have negative financial implications for the retailer
 - Difficulties for an aggregator to register as a Market Customer

Power of choice directions paper

- Power of choice directions paper we asked:
 - Is there a need to create a new category of market participant?
 - If so, are they subject to the same risks and liabilities as other market participants?
 - Effectively, do not participate in buying electricity from the wholesale market to on-sell to end-use customers so may not need same level of prudential requirements as traditional retailers

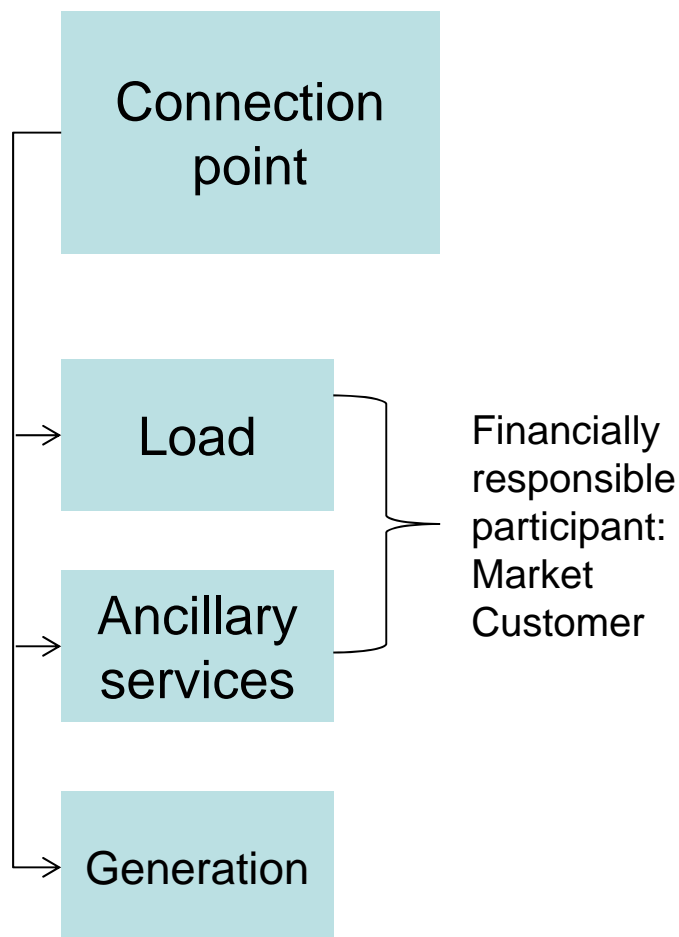


Market Participant Classification

Rules based framework for classifying and registering market participants

AEMC

Services provided at a connection point



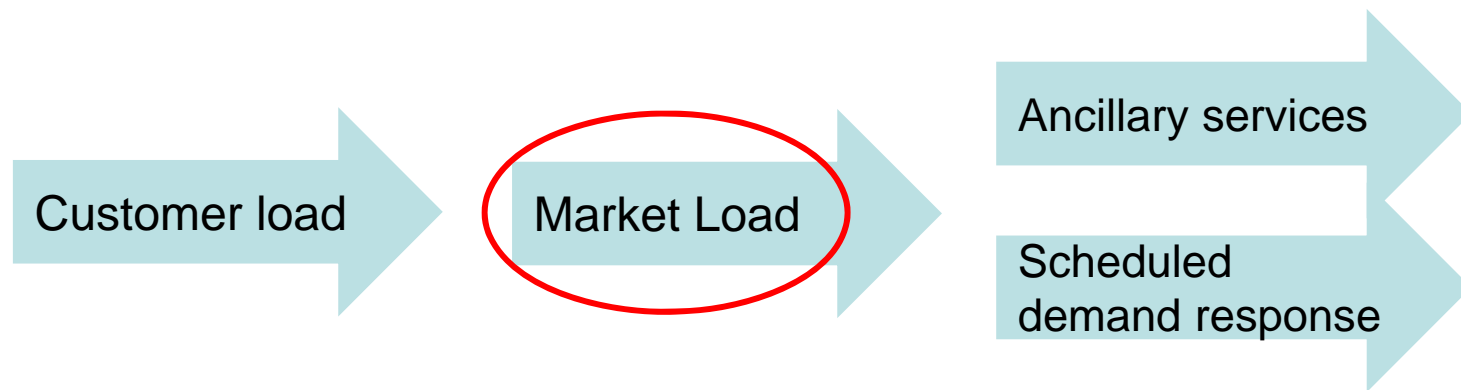
- Three types of services typically provided at a connection point
- Market Customers (i.e. retailers) traditionally single provider of electricity to end-use customers and ancillary services to AEMO from end-use customers. The rules are constructed to reflect this relationship
- DSP, embedded generation, electric vehicles etc changing nature of traditional financially responsible participant for these services

Market Customers

- For end-use customer to be registered as scheduled load to be dispatched by AEMO they must be registered as Market Load
- Market Customers are single interface between end-use customer and spot markets for registering Market Load and providing ancillary services into MAS
- Aggregator can only access ancillary services or load by either becoming a Market Customer or through off-market arrangements with a retailer
- To become a Market Customer must meet registration costs, on-going fees, prudential and organisational capabilities in order to manage a range of potential risks associated with the sale of electricity to end-use customers

Market Customers

- For third party load aggregators to access wholesale electricity or/both ancillary services market the nexus between Market Customer and Market Load needs to be reconsidered



Approaches within current framework

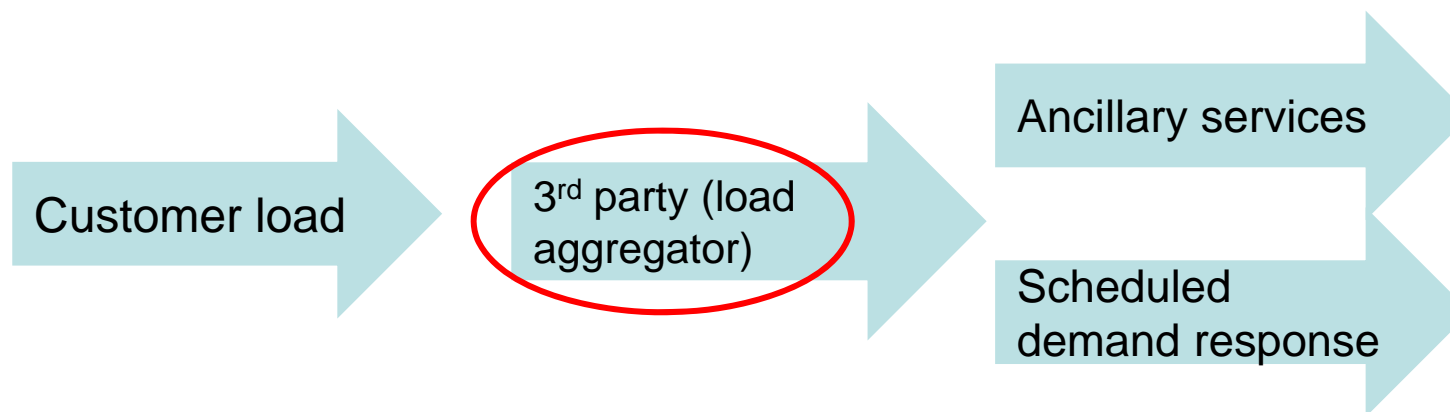
- Approach for improving access to wholesale market and market for ancillary services:
 - Exemptions for Market Customer prudential and organisation requirements?
 - How would AEMO treat load aggregators for the purpose of determining the appropriate prudential level?
 - Other regulatory and compliance barriers that can be amended to encourage load aggregation? Participant fees, communication equipment, Austaclear membership...
 - Should exemptions vary between wholesale market and market for ancillary services?

New category of market participant?

- Approach for improving access to wholesale electricity and ancillary services markets:
 - Remove exclusive relationship between Market Customer and end-use consumer that prevents third party access to end-use customers
 - New category of market participant for third parties (such as aggregators) that is able to access end-use customer for either the provision of scheduled market load or market ancillary services

New category of market participant

- Should the requirement for registration vary between the wholesale electricity and ancillary services markets?
- This approach break the nexus between Market Customers and end-use consumers as the only provider of scheduled demand response and/or ancillary services



New category of market participant

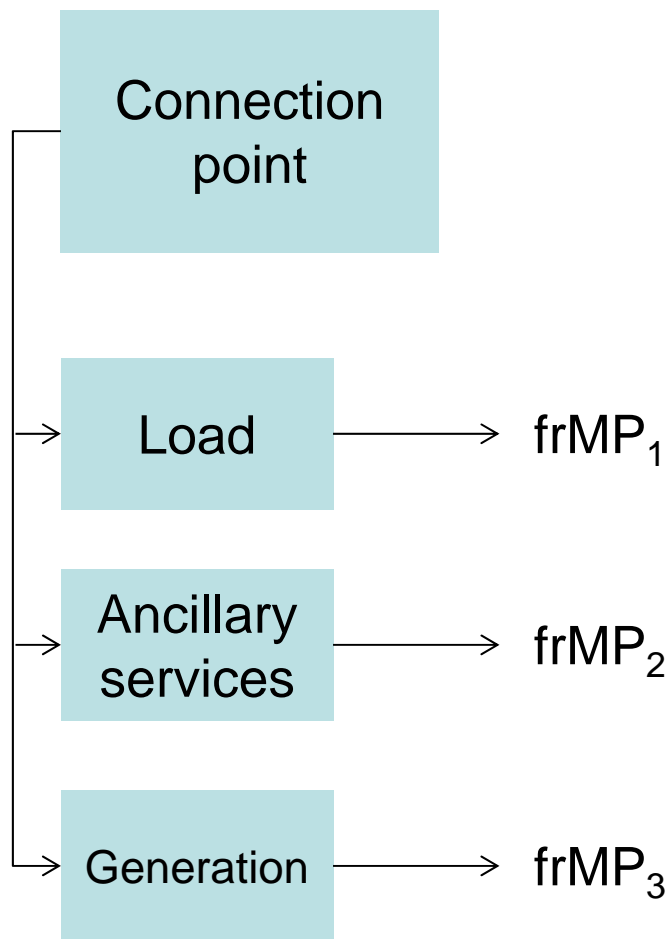
- Summary of issues for consideration at today's workshop:
 - Is a new category of market participant required to address barriers to entry for businesses specialised in load aggregation?
 - If so, should the new category of market participant apply to both the spot market for electricity and the market for ancillary services?
 - What types of provisions or registration requirements should be imposed on a new category of market participant in each of these spot markets?
 - Should existing prudential requirements apply to businesses specialised in load aggregation? If so, why and how should they differ?



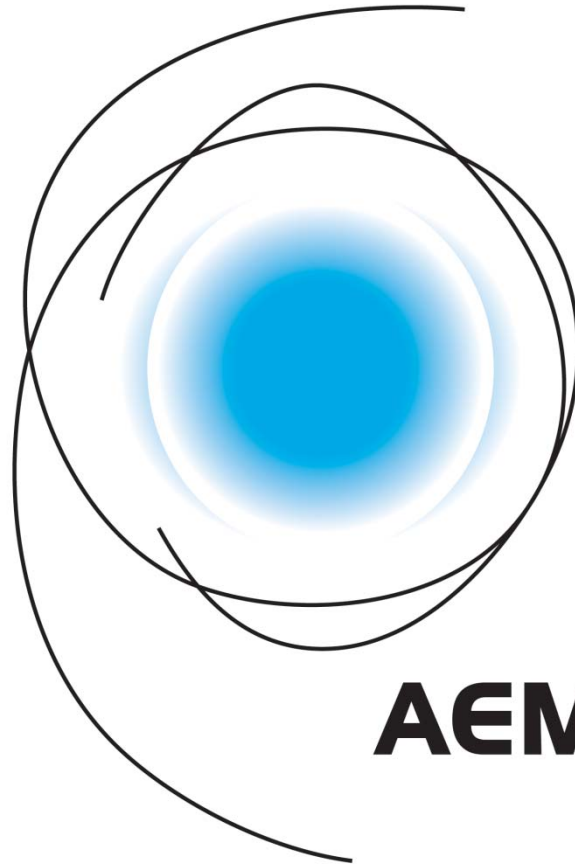
Technical and informational issues

AEMC

Technology and informational issues



- Information provisions to identify connection points with separate financially responsible market participants?
- How to allow two market participants to have access to metering data?
- AEMO systems to accommodate ancillary services transfer?
- More generally, market management systems to separate markets?



AEMC