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# DE Markets – Views of Regulators and Utilities

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**Distributed Energy Markets - Stakeholder  
Workshop**

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## Outline

- Research Methodology
- Regulator views
- Utility views

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## Interview Process



- Structured interview questions developed
- Short discussion paper outlining DE market options
- State and Australian regulators (5), network operators and electricity retailers (14) were contacted
- Phone interviews were held with 5 utilities and 2 regulators, though general discussions were held with others
- Reasons given for regulators not participating formally:
  - AER was now responsible for regulatory determinations
  - State agencies were responsible for policy settings
  - Lack of time
  - The need to gain formal approval for any opinions offered
  - Preference for options to be canvassed via their own consultative processes

## Revenue Caps



- A Revenue Cap mechanism used in QLD and now being extended to other States
  - expected to promote businesses looking at options to network upgrade and also to reduce windfall profits and capex approvals due to previous temptations to understate demand.
- Use of shorter determination timeframes may also assist.

## Stand-alone options



- Stand-alone supply should be an option in high grid cost areas
  - previously built in line with social development policy not cost effectiveness
- Island networks have been examined and may evolve as technology improves or becomes more accepted
- Viewed as outside of the scope of most utilities

## Utility competition



- In principle, the market should be open to anyone
- Shared asset guidelines, including leasing to 3rd parties, could provide customer benefits.
- Competition as it stands, is not highly effective

## IRP



- Various IRP models have been examined
  - key issue is role of government regulation versus letting businesses decide on the best strategy
- An evolutionary process is needed to get from the current to a new regulatory model
  - need to change organisation culture
- Regulatory Investment Test for Distribution is an embryonic version of IRP and should see DSM uptake, even if demand increases again
- Service reliability remains a key issue, with new options not as well understood or trusted

## One-way ring fencing



- The current status of network businesses is under consideration.
- Where distributed energy, including demand management, provides a financial advantage to distributors, this should lead to reduced cost of the regulated asset.

## Observations on Regulator perspectives (1)



- Regulators responsible for grid and associated market operation
  - no jurisdiction over 3rd parties or other energy supply options.
  - focus is to facilitate the efficient operation of the incumbents, not necessarily to consider other ways of delivering energy services, unless this would provide a more efficient way for the existing system to operate.
  - when new options considered (TOU metering , DE) focus is on cost and efficiency impacts on existing system, not necessarily whether they may provide a more efficient approach overall.
- Regulators have established formal processes for consideration of issues or options
  - initiated by governments or internal processes
  - not readily able to respond or contribute to processes being run by others.
  - Recent processes, including the Power of Choice review and others, have begun to address some of the issues around distributed energy markets, but within the confines of the above.

## Observations on Regulator perspectives (2)



- Regulators aim for a level playing field within existing system and expect all options to be considered on their merit.
  - Inherent preference for maintaining existing structures and institutions,
  - New entrants need to overcome significant hurdles to enter the market, including proving that they do not add cost for other users of the system.
- Processes of regulatory change are slow,
  - have not been able to adjust rapid PV uptake and will likely be lagging future changes.
- In reality, regulatory change can only be made with political agreement.
  - TOU meters and tariffs recommended by regulators but not implemented



150kWp Tyree Energy Technology Building, UNSW



## UTILITY PERSPECTIVES

### Energy Demand



- Most respondents agreed that energy and peak demand growth would return to previous levels and that the recent softening was a short term trend.
- Considerable variation in current growth trends around the country
- Complex human behavioural dynamics at play which can result in short and or long term changes and skewed results.
- Peak remains the biggest driver of price

## Costs and tariffs



- Complex mix of investment return and the implicit cycles in spending
- Tension between the regulatory conditions which control price setting and the sovereign risk associated with returns for the State owned entities
- The majority of respondents expect a softening of price (rises) in the near to medium term and a return to increases around the level of CPI
- Increases to fixed charges under discussion, but challenging

## Regulatory change



- Huge issue, lots of change being discussed
- Regulation for electricity utilities is Government controlled and is thus intrinsically linked to much broader political issues than just cost recovery and efficient operation.
- The majority felt that their roles were primarily restricted to operating their business and broadly advising on the ideal outcomes, but that ultimately political outcomes would determine regulatory conditions.
- “not really our job”

## IRP



- Generally, most respondents felt that they used some (varying) elements of Integrated Resource Planning already but that they had very limited power to define what methods they used
- Several are provided with models that they are required to use by state regulators

## DEM opportunities



- Generally, most respondents felt that they were largely prevented from participating in any meaningful way in DSM activities by regulatory conditions (involved at the fringes).
- Longer return time frames were an issue, saw themselves as having a very tight defined scope of work and expertise; which excluded DSM activities from being anything but a minor activity.
- Most saw the logic and rapidly increasing cost effectiveness of many DSM activities, only the private entities appear willing and able to implement such projects

## Storage and PV



- Generally, most respondents were restricted in their ability to gain any reward from the deployment of PV or storage but agreed that increased uptake was highly likely.
- All were facing erosion of their profits, increased cost and increased technical issues to some degree
- PV is expanding so rapidly, understanding its impact (good or bad) remains challenging and ongoing
- Storage remains too expensive and complex; 2-5 years