Demand side participation
“an untapped resource”

19 April 2012
Critical peak demand
Typically more than 10% of the capacity is required less than 1% of the time

DSP is an untapped resource that can provide a value for the energy supply chain and economy.
Factors to enable supply chain interaction

- Awareness and education
- Standards
- Reliability tests
- Enabling technology
- National co-ordinated planning
- Regulatory support to foster a competitive market
- Discuss the role of regulated and non-regulated markets to invest in demand management infrastructure
Point of view

- A competitive market will enable existing and new entrants to provide choice and new services

- Success:
  - DSP offered as “first response” strategy with significant benefits to the economy.
  - Customers have access to multiple markets
  - Co-ordination with other schemes to reward participants who reduce demand (e.g., NABERS, DM incentive schemes etc)
  - New entrants offering services to overcome skill, knowledge and technology barriers.
Utility specialists backed by the resources of a global Fortune 100 company, with services provided to over 10 million utility customers
Auto DR Programs

Today's Untapped Potential

Power Supplier

OpenADR

Power Users - Demand Response Event

Automatic Response to Peak Demand Events Delivers Optimum Peak Reduction
Customers are an untapped resource

• Energy management strategies are becoming more sophisticated and dynamic.

• Customers understand that there are times when the cost to supply is far greater than the cost to curtail.

• Customers “will change their behaviour when they are given a predictable and reliable signal”

• For Auto DR
  – Customers want to remain in control.
  – Automation is essential to avoid fatigue.
  – Customers want access to many markets.
Achieving Shed Goals One Building at a time

**SMEs Shed Schemas**

- Raise global temperature during Critical Peak event (32 kW)
- Forklift battery charging of forklifts to off-hours during SCE Critical Peak Pricing events (38 kW)
- Control lighting in production areas during non-production hours (48 kW)
- Shut off exhaust fans in production areas during non-production hours (6 kW)

**Expected shed 96 kW**
**Actual shed was 146 kW**
**First Event of 2011: > 200Kw (June 21, 2011)**
What we would like to see?

- A market for all participants to innovate
- Discuss the role of regulated and non-regulated markets to invest in infrastructure
- Review of the timeline challenges
- National plan to address the rise in peak demand
- National guidelines for all forms of demand side participation
- Recognition of peak demand reduction in NABERS
Questions / Comments?