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A Tale of Two Tariffs

Engaging the Customer: Victoria's Flexible Pricing Initiative and SP AusNet's Critical Peak Demand Tariff

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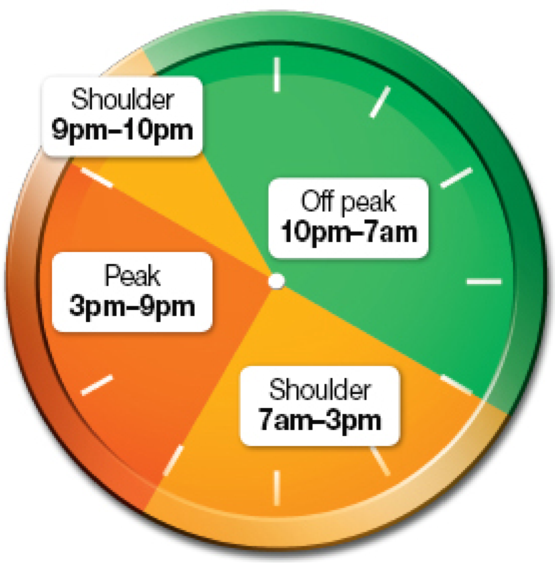
Victoria's Flexible Pricing Initiative

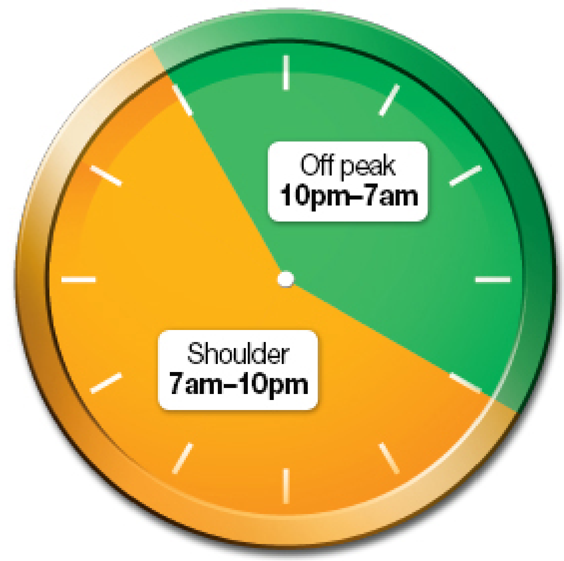
- An initiative of the Victorian government to introduce time-differentiated pricing
  - Load shifting and consequent bill and total electricity supply cost savings had been seen by Commonwealth and Victorian governments as a major benefit of smart meter deployment)
  - Mandated movement of residential customers to static ToU network tariffs had been put under a moratorium
- Main features
  - All electricity retailers must offer a Flexible Price tariff
  - Customer must have a remotely read smart meter
  - All participation is voluntary
    - Opt-in (also results in network tariff re-assignment)
    - No penalties for exit until Mar 2015 (conditions can apply to market-based Flexible Pricing offers)

Flexible Pricing tariff structure

Weekdays



Weekends



Times shown are **local** times
Summer: 1 October through 31 March, inclusive
Non-summer: 1 April through 30 September, inclusive

Prices for each of the periods can vary by season

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Example of a Flexible Price market offer

AGL Select 18% - United Energy distribution area

Flexible AMI Retail tariff	Summer	Non-summer
Peak (c/kWh)	35.82	29.05
Shoulder (c/kWh)	24.06	23.78
Off-peak (c/kWh)	19.07	19.07
Supply charge (c/day)	91.77	91.77

Single rate (domestic general)	All months
All consumption (c/kWh)	25.82
Supply charge (c/day)	104.01

- Same price levels as in the gazetted offers
- Difference is that both market offers have
  - Guaranteed discount (12% - on energy charge only)
  - Pay on time discount (6% - on energy charge only)
  - Direct debit discount (2% - on energy charge only)
  - Both also have fees for early termination (some slight variation), payment dishonour and payment processing
  - Flexible has disconnect/reconnect charges

Take-up in first 7 months (Sep 13 thru Apr 14)

	Customer segment			
No Customers	Non-concession	Pensioner	Hardship	Total
Flexible Pricing	641	118	72	831
Total AGL	294,610	129,179	30,708	454,497
Take-up by segment (%)	0.22%	0.09%	0.23%	
Segment as % of:				
Total customers	64.8%	28.4%	6.8%	
Flexible Pricing take-up	77.1%	14.2%	8.7%	

Very early days, but:

- Take-up to date is minimal
- Non-concession and hardship customers over-represented; pensioners under-represented

Some observations

- Saving money on the tariff will be easier and harder for different customers
- But application of the tariff to average daily load profiles of various AGL customer segments showed each would save

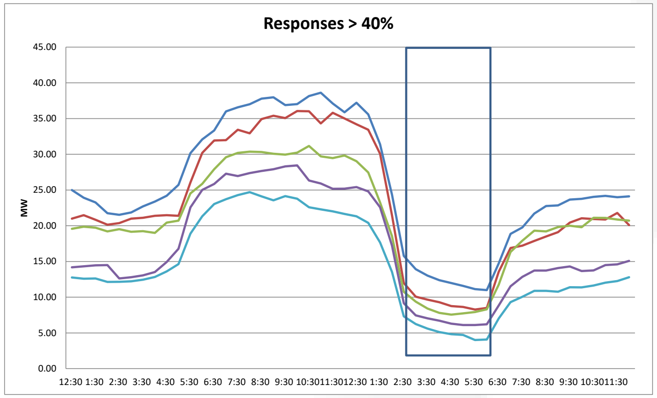
Segment	Average MWh pa	Load factor
Working couple, no children	3.8	52.8%
Working couple, no children, both parents work	5.0	54.5%
Working couple, no children, 1 parent at home	5.7	58.4%
Hardship	5.6	66.7%
Concession	3.6	62.3%
All residential customers	4.2	60.2%

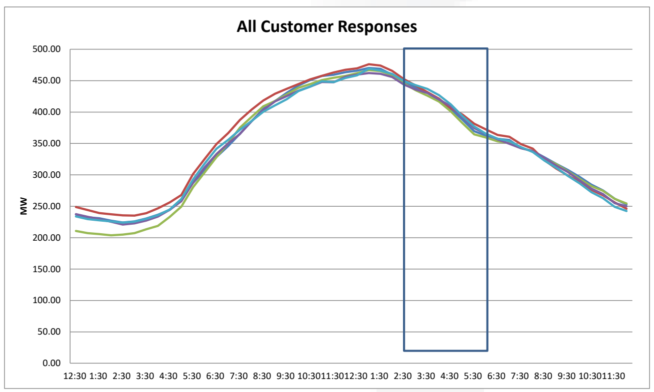
- VIC government has tools for
  - Seeing how changing appliance use can reduce costs
  - Comparing tariff offers
  - https://www.switchon.vic.gov.au/flexible-pricing

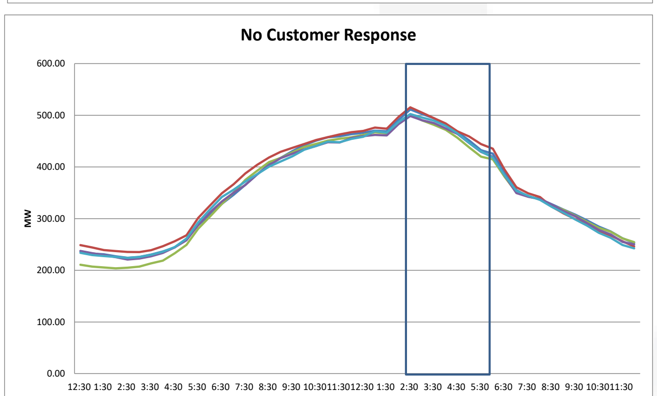
SP AusNet's Critical Peak Demand (CPD) Tariff

- Introduced in 2011 to replace the Any Time Demand tariff; objectives are to:
  - Decrease demand on the network at times when demand could exceed design capability
  - Reduce investment requirements
  - Increase supply reliability
  - Provide an opportunity for customers to reduce their electricity costs
- Mandatory for all customers (~ 2000) with annual consumption greater than 160 MWh
- Average demand between 2 & 6 PM (AEST) on five days (Dec – Mar only)
  - Sets the critical peak demand component of the customer's tariff for the following 12 months (Apr - Mar)
- SP AusNet provides up to 7 days advance notice of a 'potential' CPD day, based on BOM forecast of extreme or consecutive days of hot weather
- Firm declaration by 2PM (AEST) the day prior

Results (Summer 2012-13)







- In terms of demand response
  - Just over 9% of customers reduced their demand on the 5 nominated days by 40% or more
  - Just over 25% reduced their demand by 10% or more
  - Average total demand reduction over the 5 days:
    - between 50MW and 60MW
    - ~ 7.3% of total group demand
  - 67% of customers experienced no increase in their CPD as compared to their ATMD
  - Average increase in CPD for remaining customers was 6.7%
    - for 52.5% of these the increase was less than 5%
    - note that the CPD component of the tariff comprises between 15% and 20% of the annual bill of these customers
- Admin costs to SP AusNet have been low

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Customer & market reaction

- Customer reaction has mostly been positive
  - Those with on-site generators and re-schedulable loads have found it easy to respond
  - A few have installed on-site generation
  - Provides better certainty for the customer
    - Demand component is set for the following 12 months - previous ratchet which could change at any time
- Some customers have remarked that they understand the reason for the tariff but do not feel they have much if any flexibility to respond
- More importantly, the market has begun to provide services around the tariff:
  - Several consultants to these customers provide additional notification and operational and equipment advice
  - Some evidence of equipment providers who are working on very innovative solutions for responding to this tariff
- SP AusNet has been pleased with the results
  - Notes that it is now very important to support the tariff and provide certainty to the market to continue to develop products and services

Some thoughts

- Time will tell:
  - How many and what types of customers take up the flexible pricing offer, whether they save and whether they stay on it
    - What level of customer engagement takes place from the industry
    - What level of support and development of products and services comes forward from consumer advocates and private sector 3rd parties
  - Whether and to what degree that take-up changes generation and local network load profiles, peak demand and fuel use
- US trials of dynamic pricing options indicate that when CPP has been offered:
  - On an **opt-out** basis, 80% (or more) stay on the tariff
  - On an **opt-in basis**, 20% (or fewer) take it up (and even then generally only with incentives or assurances)

Some more thoughts

- The two tariffs have very timeframes in which customers are subject to a higher price:
  - 1,560 hours for the Flexible Price (17.8% of the year)
  - 20 hours for the CPD (0.2% of the year)
- They are giving very different price signals – what type of consumer response are they trying to engender
- Will retailers and distributors continue to develop other bundled pricing offers that provide more efficient pricing signals?
- Is there a limit to how efficient a bundled price can be and is there a role for separate pricing signals?

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