

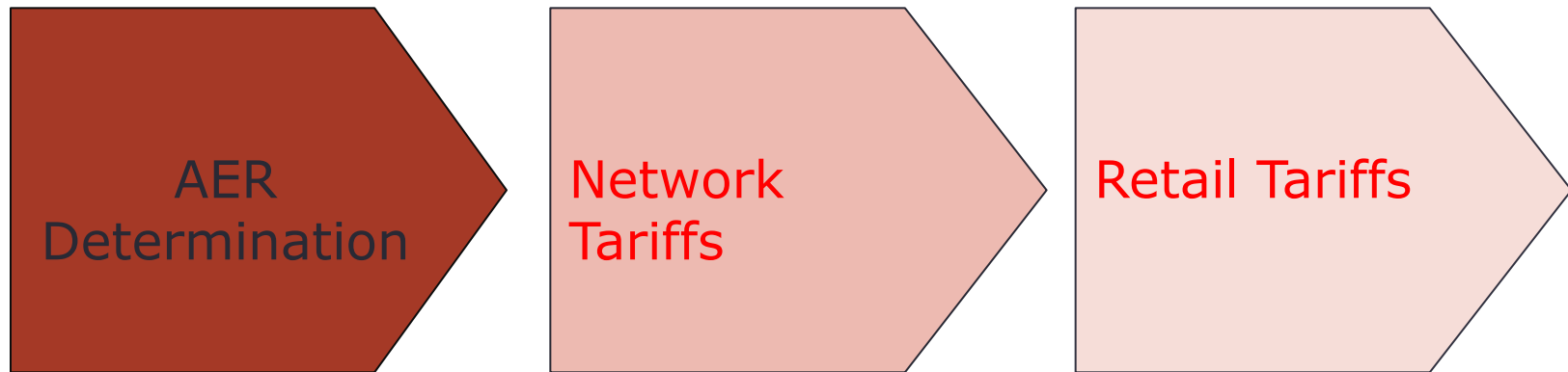
How Funding Translates into UOS tariffs and other charges

Presentation to Energy Distribution Master Class

24 August 2011

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From AER Determination to Retail Prices



Consumers only see the retail price



The Regulatory Framework

- DUOS/NUOS tariffs are constrained by:
 - General principles in the NEL
 - Specific requirements in the NER
 - The relevant AER Determination(s)
 - Jurisdictional interventions
- However, DNSP still has a significant degree of discretion in setting tariffs:
 - *Subject to above constraints*, each DNSP is able to develop their own strategy re cost allocation & tariff design
- Wide variety of approaches & outcomes:
 - Difficult for retailers and customers alike



NER DNSP Pricing Rules

- Chapter 6.18 of the NER:
 - General obligation for DNSP to submit a *pricing proposal* to AER for *direct control services*:
 - Standard control services
 - Alternative control services (e.g. special reads)
- *Pricing proposal* must:
 - Set out proposed *tariff classes, tariffs & charging parameters*
 - Demonstrate compliance with:
 - AER determination on weighted average price/revenue
 - **NER Rules in general**
 - **NER Pricing Principles & Side-constraints in particular**
- Notification & publication requirements for DNSP tariffs:
 - Submit tariffs proposal to the AER:
 - In First year (Po) – within 15 BD after the Final Determination
 - Subsequent years – 2 months before start of the regulatory year
 - Publication of the tariffs & tariff strategies
 - 20 BD before start of regulatory year “if practicable”

NER Side Constraints - (6.18.6)

- Side-constraints limit increases in annual average revenue for a *tariff class* to a *permissible percentage* (PP).
- The NER sets PP to be the greater of:
 - $(1+CPI) \cdot (1-X) \cdot (1+2\%)$, or
 - $(CPI+2\%)$
- **However:**
 - no constraints on individual *tariffs* or *pricing parameters* (e.g. a supply charge) other than “taking account” of the LRMC;
 - Explicitly, does not limit variation in AMI tariff elements
 - Excludes TUOS charges & other approved pass-through amounts & any over/under adjustments; and
 - Does not appear to apply to the first year (Po) of a 5 year determination ???

NER Pricing Principles (6.18.5)

- For each *tariff class*, the expected revenue recovered should lie between:
 - An upper band - the stand alone cost of serving that class of customers alone; &
 - A lower band - the avoidable cost of not serving those customers; and
- For each *tariff & tariff charging parameter*, take account of:
 - LRMC for the tariff service & each of the parameters
 - Transaction costs
 - Whether customers are able or likely to respond to price signals

Compliance with NER PP

Comparison of DNSP Compliance with NER 6.18.5 (a)					
DNSP	Unit	Avoided Cost	Expected Revenue	Stand-Alone Cost	ExpRev/ Stand-alone
Citipower (a)					
Small customer (Resi)	\$M	26	57	171	33%
Large sub-transmission	\$M	0	1	41	2%
Powercor (a)					
Small customer	\$M	161	182	333	55%
Large sub-transmission	\$M	1	4	110	4%
Jemena (a)					
Small customer	c/kw	1	6	11	56%
Large sub-transmission	c/kw	N/A	0	1	26%
United Energy (a)					
Small customer (Resi)	c/kwh	0.30	5.32	8.63	62%
Large sub-transmission	c/kwh	0.07	0.38	2.36	16%
SP AusNet (a)					
Small customer	N/A				
Large sub-transmission	N/A				
Energex (b)					
Small customer	\$M	57	937	966	97%
Large sub-transmission	\$M	7	30	32	92%
AusGrid (b)					
Small customer	\$M	245	1692	1695	100%
Large sub-transmission	\$M	4	5	639	1%
Endeavour Energy (b)					
Small customer	\$M	663	724	939	77%
Large sub-transmission	\$M	15	32	190	17%
ETSA (b)					
Small customer	\$M	205	314	516	61%
Large customer	\$M	4	8	74	11%
(a) 2011 AER Approved Pricing Proposals for Victorian DNSP					
(b) 2011/12 AER Approved Pricing Proposals for Qld, NSW & SA DNSP					
Source: www.aer.gov.au/content/index.phtml/itemId/728438					

Is there a cross-subsidy?

Detailed Review of AusGrid Compliance with NER 6.18.5 (a)					
DNISP: AusGrid	Unit	Avoided Cost	Expected Revenue	Stand-Alone Cost	ExpRev/ Stand-alone
Low Voltage	\$M	244.7	1692.4	1694.6	99.87%
High Voltage	\$M	5.6	39.1	1029.6	3.80%
Sub-Transmission Voltage	\$M	3.8	4.8	638.9	0.75%
Unmetered	\$M	0.8	11.9	1542.5	0.77%
CRNP	\$M	14.4	46.3	1267.9	3.65%

Source: www.aer.gov.au/content/index.phtml/itemId/743328

The AusGrid Tariff Proposal for 2010/11 demonstrates the greatest discrepancy between small and large customers in allocation of revenue.

However, the proposal still complies with the NER *tariff class* constraints ($ER > AC$ & $< SAC$)

Some Initial Thoughts...

- Limited obligations on DNSP's (or the regulator) to engage external stakeholders in the tariff process
 - Exacerbated by short time frames for any wider engagement
- AER's role is limited to assessing if the DNSP proposal:
 - Satisfies NER *Pricing Principles*
 - Complies generally with NER 6.18
- No consistent strategy, rationale or modeling behind network pricing proposals:
 - Limits prospect of effective co-ordination with policy makers & retailers
 - Of particular concern re new DM tariffs

Some Initial Thoughts...

- Customers have & will continue to pay more as a result of the long delay between:
 - Identifying the growth in peak demand & the increase in revenue to fund additional capex; *and*
 - The implementation of effective price & non-price DM programs
- In **2002**, Tom Parry, then Chairman of IPART, warned:
*“It is the Tribunal’s strong view that there is **significant untapped potential for efficient demand management**. To a large extent, one of the major obstacles continues to be a culture ... which pays little more than lip service to alternative options.*
*The Tribunal is very concerned about the **potential for substantial increases in capital expenditure ... , with adverse consequences for costs faced by end-users**. ...Potentially massive increases in network expenditure to meet demand growth highlight the importance of getting demand management right.”*

PART 2:
RETAIL PRICING

& its Relationship to NUOS tariffs

Background to Retail Pricing

- Retail price regulation – & deregulation – remains under the control of each state regulator/government
- Very different outcomes
 - Victoria: retail price deregulated (AMI?)
 - SA: Moved to “market based” price regulation in 2011
 - NSW: Price constraints set by IPART still in effect
 - Qld: Retail tariffs continue to be set by the QCA under Ministerial direction
- Retail price controls have restricted efficient pass through of DNSP UOS tariffs
 - Growing recognition of this problem
 - Particularly for effective DM pricing.

Retail & Network Tariffs – QLD

- Qld retail tariff structures little changed for >15 years
- In 2011 the Qld Minister directed QCA to investigate & implement new retail tariffs for 2012/13 that are:
 - Cost reflective, signal peak demand costs & encourage load shifting
 - Pass through network charges directly (the “R + N” approach)
- Given historical inertia, this reform - while necessary:
 - Creates the potential for price shock
 - Comes too late to limit significant network investment & price increases
- QCROSS submission to QCA pointedly states: *“...ironically, this approach (R+N) seeks to build a regulated (retail) tariff from a set of (network) tariffs that are essentially unregulated”*.
- In particular, QCROSS highlights that neither the QCA or consumers have a direct opportunity to influence these network tariffs (August 2011)



Traditional Approach

Residential Pricing - Standard Contracts

- An important feature of standard contracts is that they must be available to any customer in the relevant geographical area
- A “bundled price based on a simple cost-build up with no/little time variation in prices
- ***Ideally*** include a fixed (\$/premise) & variable (c/kwh) that:
 - Captures the fixed & variable network charges (45- 50% of costs)
 - Recovers energy & renewable variable costs (but usually not time dependent) (40-45% of costs)
 - Recovers retail costs & reasonable commercial margin (10%)
- Effective DSM tariffs, however, challenge this simple approach

TOU Retail Pricing

- Fixed charges:
 - Starting point same as traditional retail pricing; but
 - How should network “smart meter” DUOS charges be recovered by retailer
 - Economic versus market & equity issues
- Variable Charges:
 - 11 DNSP’s in NEM have 11 different TOU charges
 - Peak/off-peak time and price differences?
 - Seasonal charges?
 - Demand charges?
 - Energy costs can also be differentiated on time basis
 - Will this correspond to the DNSP?
- Given the variation in NUOS tariffs, how/can retailers pass these through to customers while capturing time related energy costs???

TOU Network Tariff Variations?

Proposed Network TOU Structures				
DNSP	Season	Period	Time	Day Type
SP AusNet 2011	Summer <i>(Dec - March)</i>	Peak	2pm - 6pm	Weekdays
		Shoulder	12pm - 2pm	Weekdays
	Off-peak	6pm - 8pm 8pm - 12pm All day	Weekdays Weekdays Weekends	
Winter <i>(June - August)</i>	Peak	4pm - 8pm	Weekdays	
	Off-peak	8pm - 4pm All day	Weekdays W/end	
All other months	Off-peak	All day	Every day	
AusGrid	All Year	Peak	1pm - 10pm	Business days
		Shoulder	7am - 1pm 8pm - 10pm	Business days Business days
		Off-peak	7am - 10pm 10pm - 7am	W/end & PH Every day

Source: Network Annual Pricing Proposals

Some Reform Priorities



- Reform network pricing arrangements:
 - AER currently developing Rule Change proposals
 - But will these address issues raised re network tariffs?
 - Removal of economic barriers to DSM initiatives
- Improve co-ordination between DNSP's & retailers:
 - Remove prescriptive retail price regulation
 - Provide a clearer policy framework – what are the policy priorities
 - Better understanding of end-to-end cost drivers – seek win-win.
- Engage customers in the process &
- Empower customers to address issues impacting energy prices

AEMC: Demand Side Participation Stage 3 Review

- To identify opportunities for **consumers to make informed choices** about the way they use electricity, and
- provide incentives for network operators, retailers and other market participants to **invest efficiently to capture the value of flexible demand**
- **Alignment of incentives** so that the value of demand response can be seen by consumers
- The review recognises that giving consumers options in the way they use electricity requires **consideration of the *entire electricity supply chain*** and goes beyond the Rules.

AEMC presentation 8 June 2011