

ActewAGL Distribution Regulatory Proposal

Presentation to the AER Public Forum

Michael Charlton – General Manager Networks

David Graham – Director Regulatory Affairs and Pricing

29 July 2008



# Connecting with customers

David Graham -Director Regulatory Affairs and Pricing



"Our core business is the distribution and retailing of energy and the management of water and wastewater services."

- Canberra based
- Serving the ACT and the capital region
- Group employs around 1530 people (ActewAGL, TransACT and Ecowise Environmental)
- ACT's largest non-govt employer



#### Corporate structure

- Distribution and Retail partnerships
- Distribution partners ACTEW Corporation
   Singapore Power International
- Scale enhanced through shared services
- Electricity Networks business earns revenues of ~\$160m pa and employs 349 people



## Regulatory profile

- ICRC 2004-09 electricity networks decision
- Access Arrangement for ACT and Greater
   Queanbeyan gas network expires 30 June 2010
- ICRC 2008-13 ACTEW water and wastewater decision
- TFT for retail electricity



#### Electricity Network decision

- 2004-09 EN decision by ICRC
  - Revenue/unit capped at CPI-6.8% in 2004/05 and CPI thereafter
  - Capex (except poles) reduced by 5%
  - Opex imposed a 1% compounding efficiency



#### In the 2004-09 period

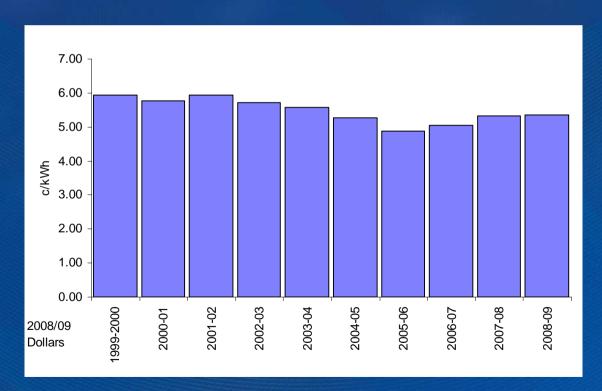
Major capex project - pole replacement

\$ million (2008/09)	2004/05	2005/06	2006/07	F2007/08	F2008/09	Total
ActewAGL Distribution Total capital expenditure	24.3	25.6	31.3	38.9	42.7	162.7
ICRC 2004 decision	24.1	23.8	26.4	22.9	23.9	121.1
Expenditure above decision	0.1	1.8	4.9	16.0	18.8	41.6
Over (under) spend excluding pole related	(5.4)	(3.9)	(4.4)	6.7	12.4	5.5

 Opex major influences - poles and vegetation management, apprentices



#### Average real residential network charges



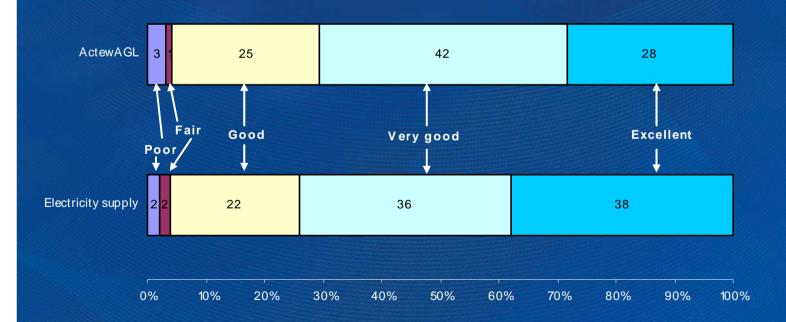


# We provide services that customers need at the quality they want

- NERA and ACNielsen established that customers
  - are willing to pay for existing service levels
  - do not prefer lesser quality with reduced price
  - some would pay more for higher service levels
  - Overall, are satisfied or very satisfied with ActewAGL and their electricity supply



#### Residential customer satisfaction





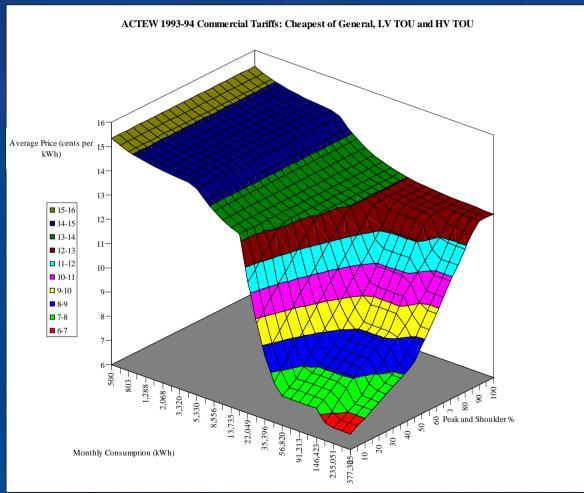
#### Demand management & green measures

- Tariff based demand management
- Network losses considered in network planning currently ~4.5%
- Multi-utility smart metering trial
- Feed-in tariff
- Five-star rated corporate HQ

"ActewAGL's vision is to be the leading provider of environmentally responsible energy and water services."

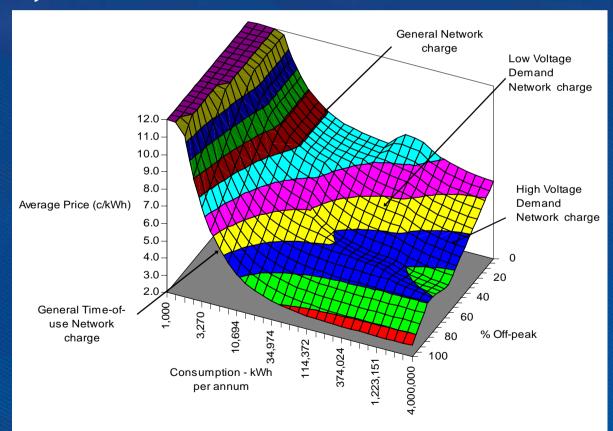
#### Pre price reform





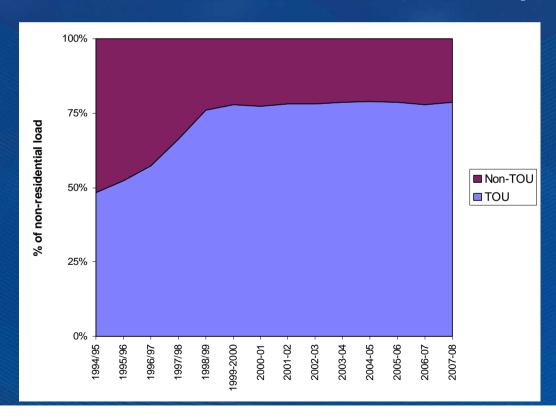


# Average Network Charge for commercial customers with a good load factor



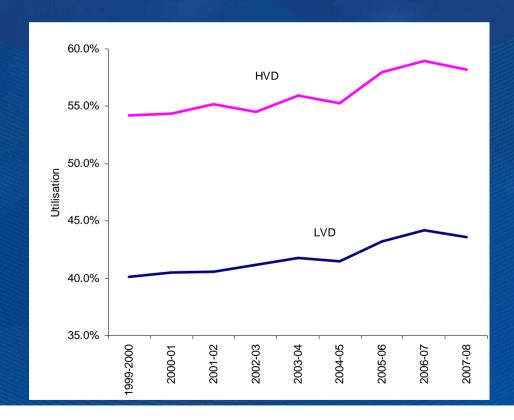


## Non-residential time-of-use pricing





#### Network utilisation





#### Domestic time-of-use charges

- Interval meters installed as standard since March 2007
- 7700 installed to date ~5% of meters
- TOU network charge available for all domestic customers



## Smart metering trial proposal

- Prepare for MCE smart metering timetable
- Evaluate operation of a multi-utility solution
- Assess impact on demand management
- Identify network performance and customer service benefits



#### Building blocks parameters

- Proposed WACC of 10.7% nominal vanilla
- Opening RAB of \$593m (excluding metering asset base)
- Net capex \$277.7m (08/09\$)
- Opex (including UNFT) \$305.5m (08/09\$)



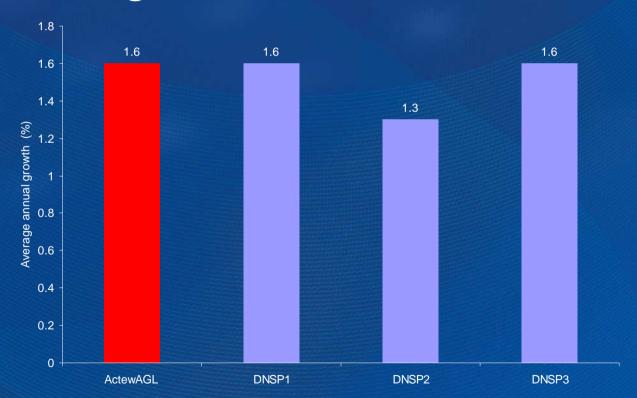
#### Demand forecasts

- Forecasts independently verified at system level and zone substation level
- Zone substation demand is a key driver of the augmentation capex program



20

# Forecast growth in sales





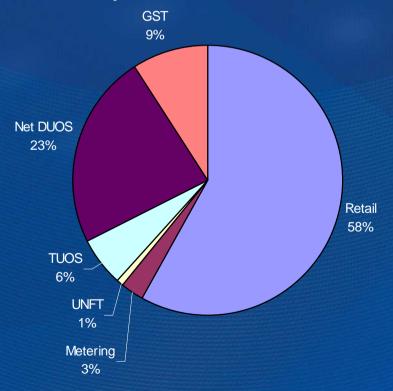
#### Revenue requirement

	2009/10	2010/11	2011/12	2012/13	2013/14
Revenue Requirement (\$m nominal)	145.3	154.4	164.0	174.2	185.0
X factor (%)	20.37	2.00	2.00	2.00	2.00

P<sub>0</sub> includes 4.1pp impact of change in UNFT treatment



#### Components of 2008/09 residential bill





# Impact on the average ACT residential electricity bill 2009/10 (real)

- Overall 4.4% or \$1.80/week (including GST) total increase includes
  - 3.2% increase for network service
  - Remaining 1.2% increase for metering service
- the proposed network charge adds 1.4% to the nominal price of electricity to the customer in each remaining year

Calculated for a consumer on the *Always Home @ ActewAGL* plan consuming 8,000 kWh per annum



#### Pass through of uncontrollable risks

- Rules include
  - Regulatory change event
  - Service standard event
  - Tax change event
  - Terrorism event
  - An event nominated by the DNSP



#### Nominated additional events

- Major natural disaster
- Transitional period event
- Smart meters event
- Input price event
- Supply curtailment event



#### Curtailment event

**Openstand Gas** enting of private ining ahead with the sale, b negotiations were continuing ers are looking infrastructure," Mr with trade unions. Mr Jemma 600-megawatt pov The Government has indi-water with a portance of a nade in Dec cated that NSW faces power ality study. en. Morris l shortfalls from as early as 2013 industry ne power stat gotthern tooks of the das without additional baseload elece future ele dincial suppo tricity power stations, which can entrin term ra certain. 00-megawatt greenhous operate 24 hours a day. ./ about 500.0 with electricity for station operational by 2012, begas-fired baselood coal-fired power, fore the likely supply shortfall be the first built in be compared The planned:

SMH 28 May 2008 p5



## Undergrounding proposal

- Proposal for possible pass through of net costs of with undergrounding existing overhead reticulation
- Backyard reticulation has clear costs including
  - financial
  - loss of public amenity
  - safety risks
- Initial analysis has shown that there may be a net benefit
- 50-year timeframe



## Feed-in tariff

- Legislation passed
- Impact indeterminate
- Likely to be direct and indirect costs



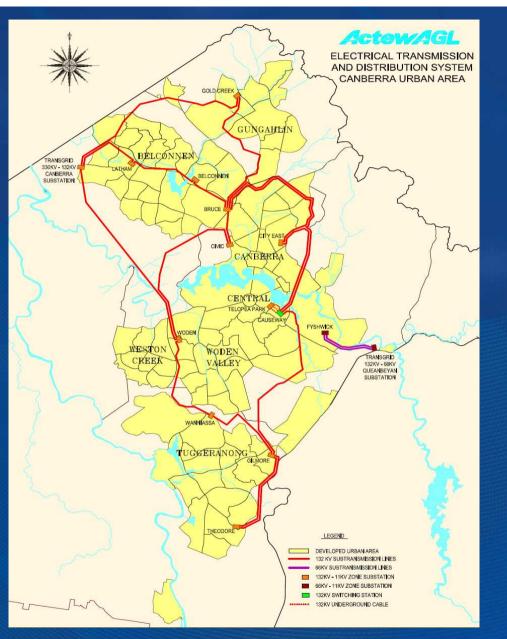
# Ensuring future reliability

Michael Charlton -General Manager Networks



#### Network characteristics

- 11 zone substations and 2 switching stations –
   1 ZS built 1994, all others before 1990
- ~5,000 km of lines nearly half underground but overhead LV lines largely in backyards
- ~50,000 poles almost 50% natural hardwood
- 160,000 customers 91% residential







## Unique challenges

- Reliability requirements of the national capital
- Requirement for uncluttered streetscapes
- Separation of residential and commercial loads
- Vegetation issues
- Lowest average load per customer









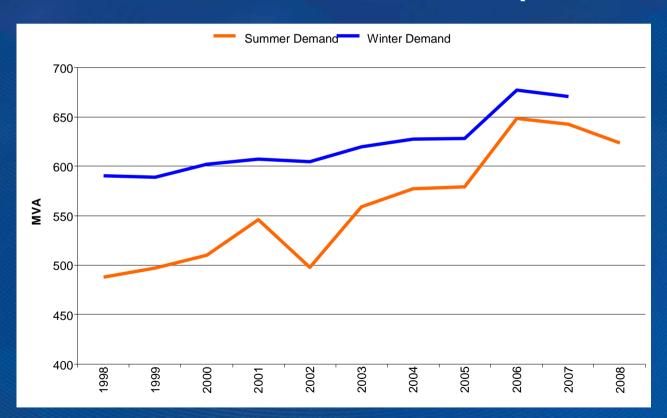


# Actev/AGL Always.

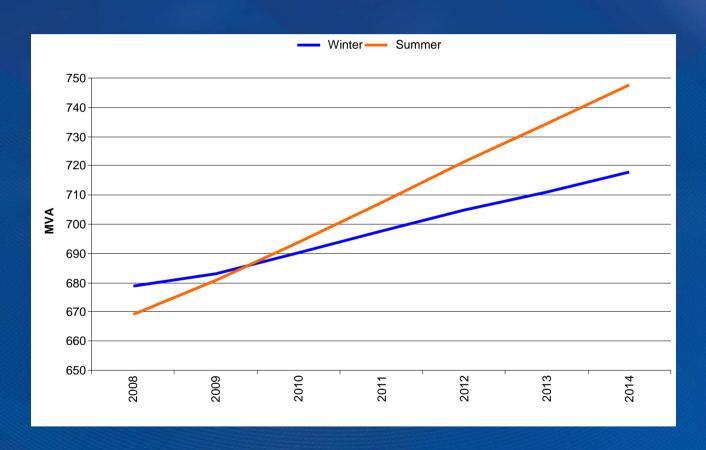




# Growth in summer demand peak









#### Business environment

- Increasing labour and materials costs
- Skills shortages
- Prescriptive existing and new planning requirements
- Commercial and residential growth

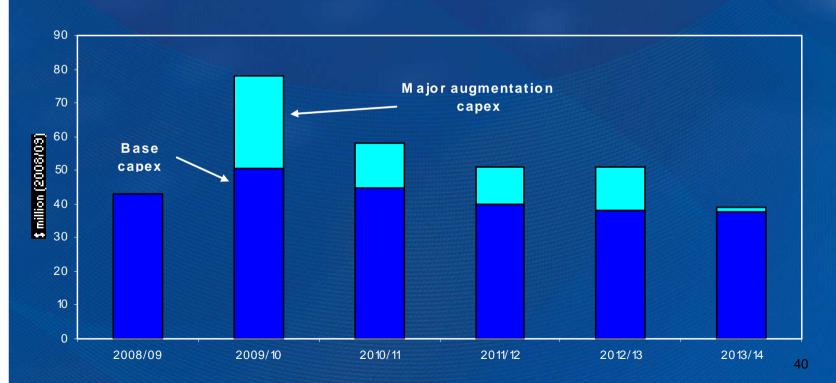


#### Safety and productivity performance

- Lost time injury frequency rate decreased over 10 years from 30.7 to 4.8
- Employee numbers forecast to remain stable



#### Impact of 4 large augmentation projects





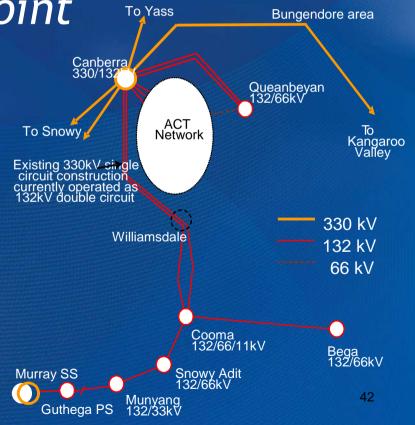
## Major capital projects

- Augmentations for security and growth
  - Connection to Southern Supply Point
  - 2 new zone substations
  - Civic ZS third transformer
- Network reliability and safety
  - Pole replacement



### Southern supply point

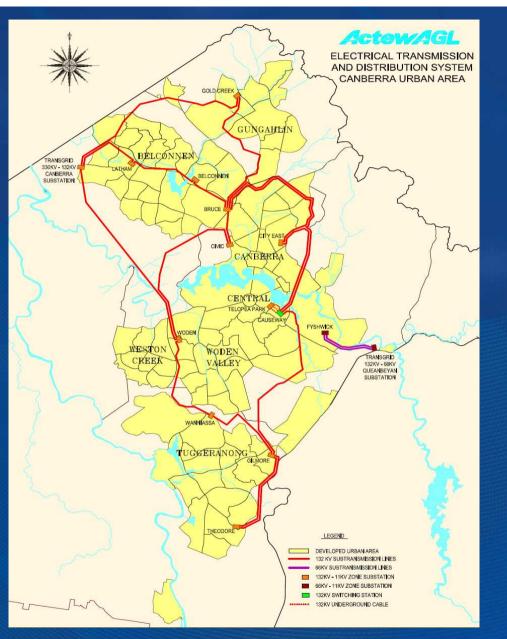
- Complies with regulatory obligation
- Increases ACT security of supply





#### Meeting expected demand

- Eastlake ZS
  - capacity at Fyshwick ZS
  - secure supply to Defence and Parliament House
- Molonglo ZS
  - supply to new Molonglo District
  - capacity for Woden ZS







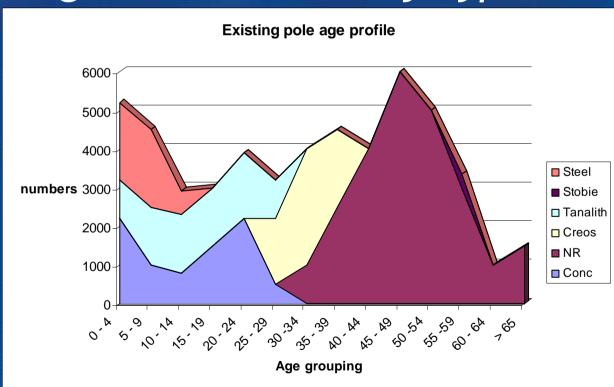
# Maintaining security of supply

- Civic third transformer
  - Driven by development in Civic
  - Postpones augmentation of City East ZS
  - Also switchboard replacement
- Pole replacement
  - Supported by SKM modelling
  - Offset by reduction in pole reinforcement





### Pole age distribution by type





# Pole condemning rates

Condemning Rates	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13	2013/ 14
Natural Rounds - Not Nailed	45%	45%	35%	35%	35%	35%	30%	30%
Creosote - Not Nailed	10%	10%	10%	10%	10%	10%	10%	10%
Tanalith - Not Nailed	2%	2%	3%	3%	3%	3%	3%	3%
Natural Rounds - Nailed	8%	10%	5%	5%	5%	5%	8%	8%
Creosote - Nailed	2%	2%	1%	1%	1%	1%	3%	3%
Tanalith - Nailed	1%	1%	0%	0%	0%	0%	1%	1%
Concrete	0%	0%	0%	0%	0%	0%	0%	0%
Steel	0%	0%	0%	0%	0%	0%	0%	0%
Stobie	0%	0%	0%	0%	0%	0%	0%	0%



## Operating expenditure objectives

- Maintain required levels of average network reliability
- Meet current and known future regulatory obligations
- Achieve good asset management practices

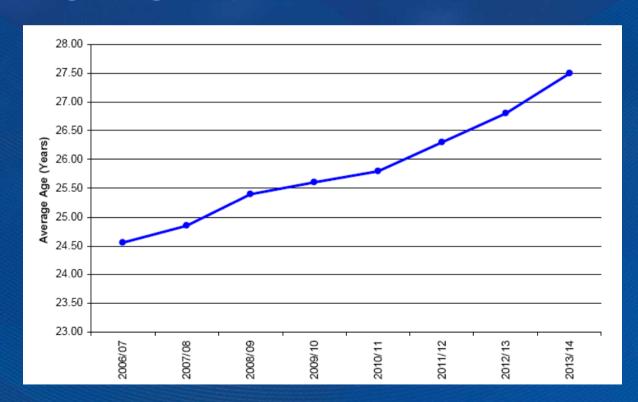


### Operating cost factors

- Ageing network assets
- Labour market skills shortages apprenticeships
- Materials costs CPI increases



# Average age of the network





## **Key Points**

- Emerging capacity constraints
- Summer peak to overtake winter
- Small number of large projects drive capex
- Responses to skills shortages