

# Proposed pricing structure – Network Regulatory period 2004 - 09

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GM - Sustainability



# Agenda

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- 1. Introduction
- 2. Recent Experience
- 3. Business Model
- 4. Pricing issues
- 5. Discussion & Questions

20 mins

10 mins



# Existing determination

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## 1. Introduction

## 2. Recent Experience

## 3. Business Model

## 4. Pricing issues

## 5. Discussion & Questions

### ❑ Revenue under-recovery

- ▶ Estimated 15% AARR under at June 04

### ❑ Costs

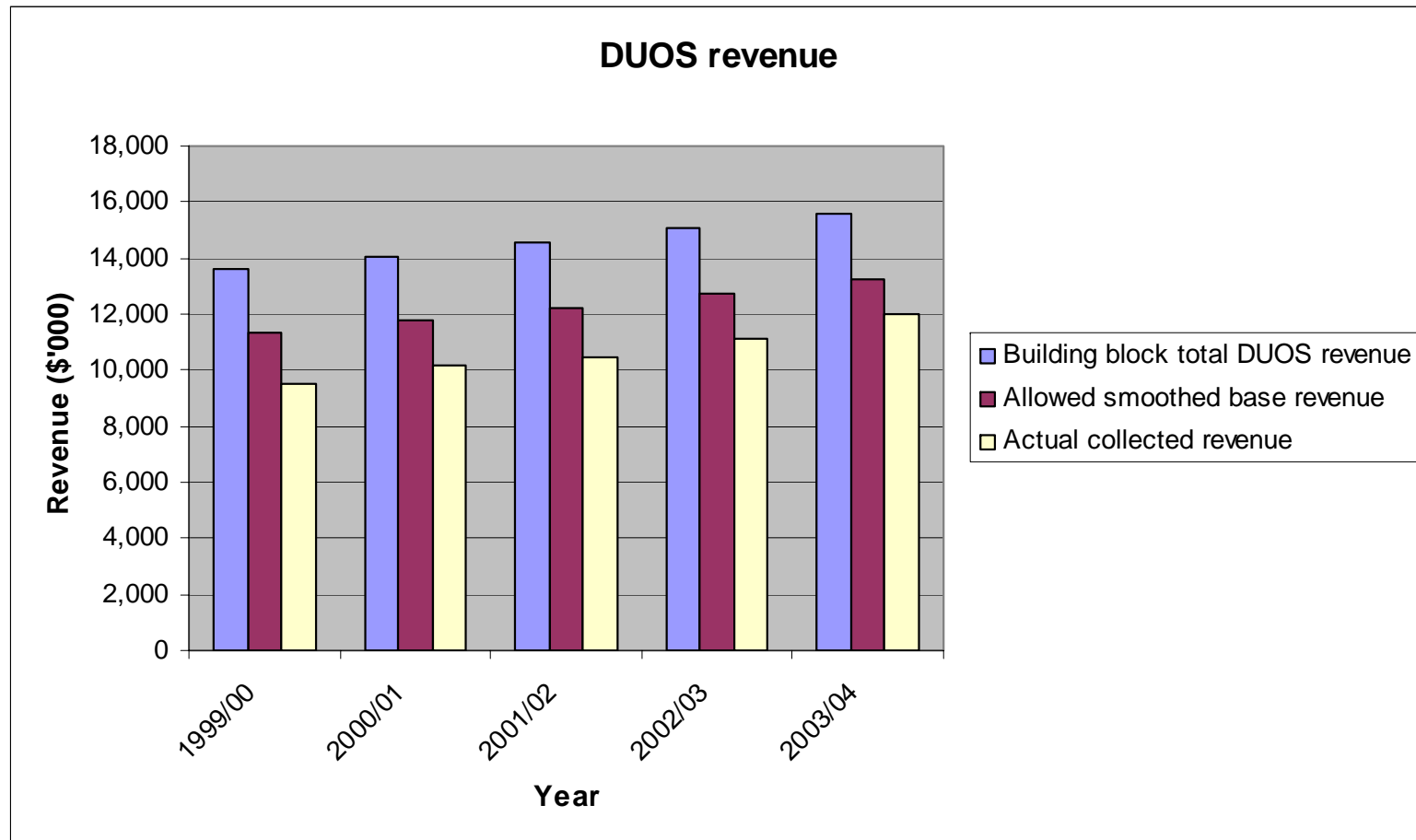
- ▶ Increasing Opex
- ▶ Capex higher than forecast
- ▶ Significant TUOS increase 2002/03

### ❑ Growth

- ▶ Average 1.5% per year over last 10 years
- ▶ Annual sales volatility
- ▶ One large mine in Broken Hill consumes 33% energy
- ▶ Impact of mining – flat outlook assumed

# Existing revenue collection

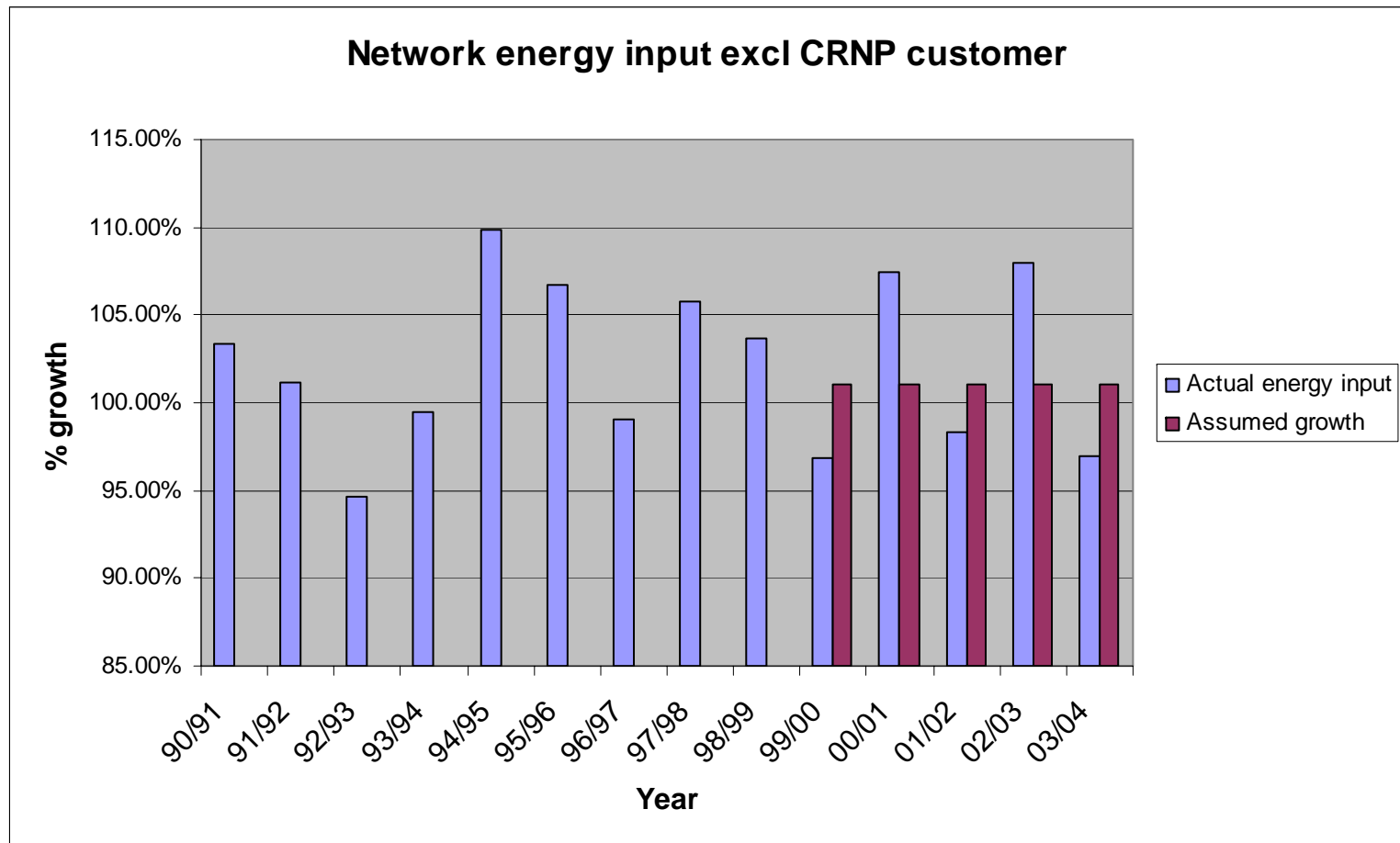
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# Sales volatility

- 1. Introduction
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# Current Pricing

- 1. Introduction
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## ❑ Pricing cross subsidies

- ▶ Under-recovery of tariffs
- ▶ Urban subsidise remote
- ▶ Business subsidise domestic

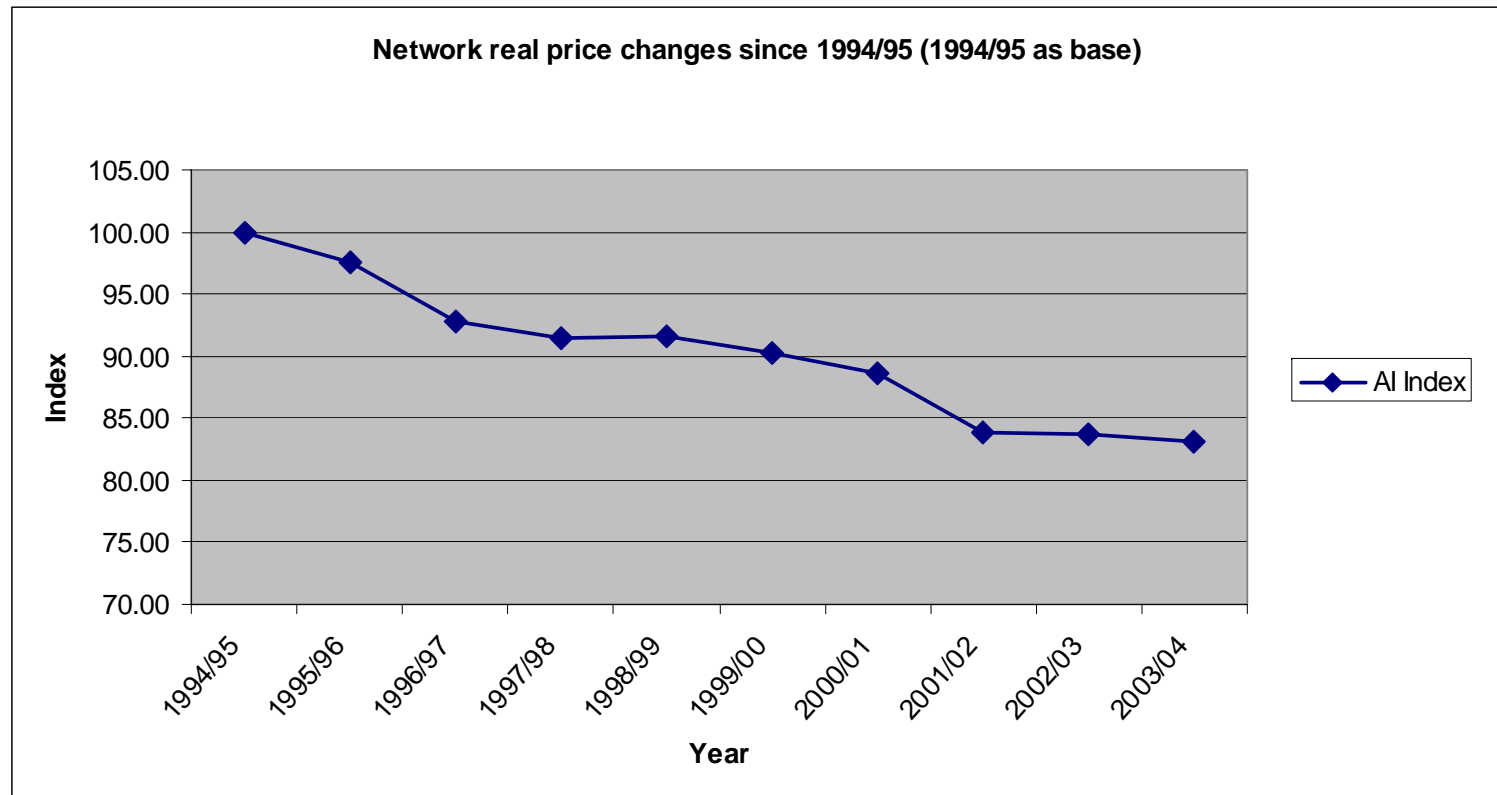
	Total Monthly Bill
Business	\$82
Residential	\$53
*450 kWh/mth	

## ❑ Increases since 1995

- ▶ Transmission increases passed through
- ▶ AI chosen no real network distribution increases.

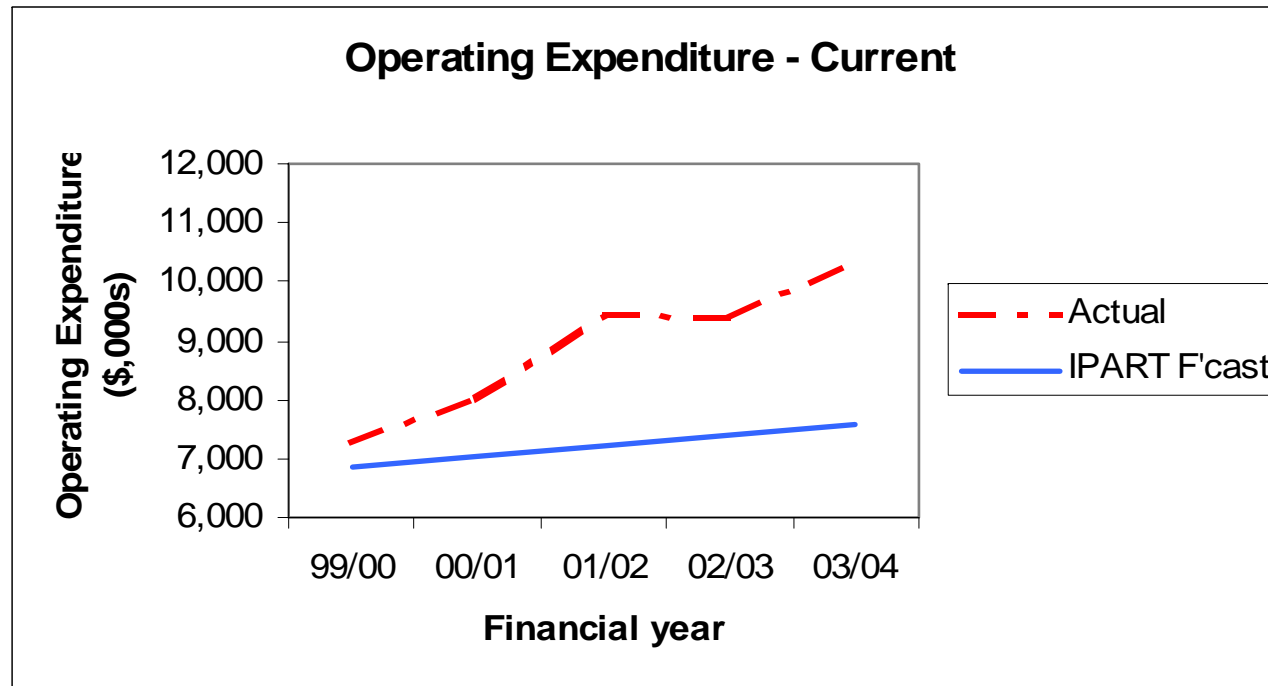
# Network price changes

1. Introduction
2. Recent Experience
3. Business Model
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# Operating Expenditure

1. Introduction
2. Recent Experience
3. Business Model
4. Pricing issues
5. Discussion & Questions

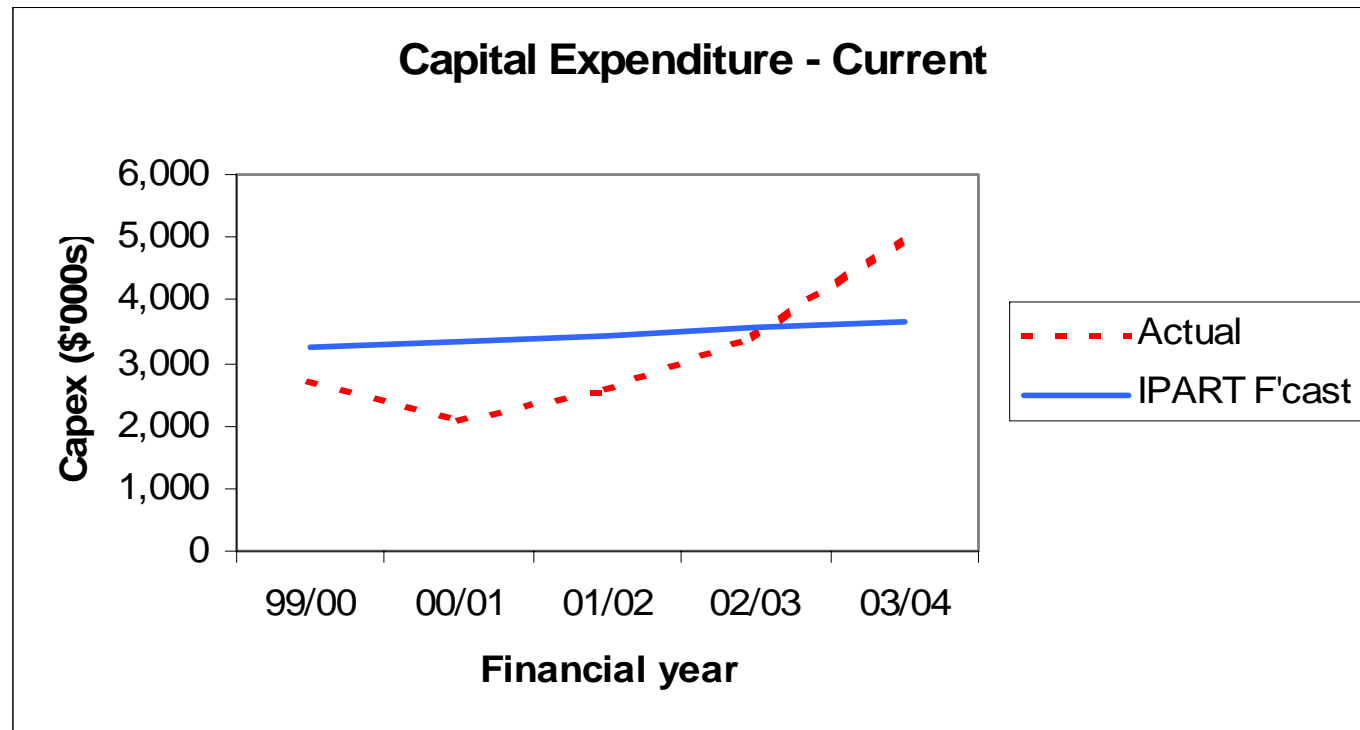


- Increased focus on maintenance
- Increased asset management and regulatory costs



# Capital Expenditure

1. Introduction
2. Recent Experience
3. Business Model
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5. Discussion & Questions



- Historical CAPEX volatile
- Targeted reliability improvements reduce customer outage minutes by increased monitoring, protection and switching systems



# Commercial Needs

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- 1. Introduction
- 2. Recent Experience
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## ❑ Goal: Pursuit of an efficient and sustainable business

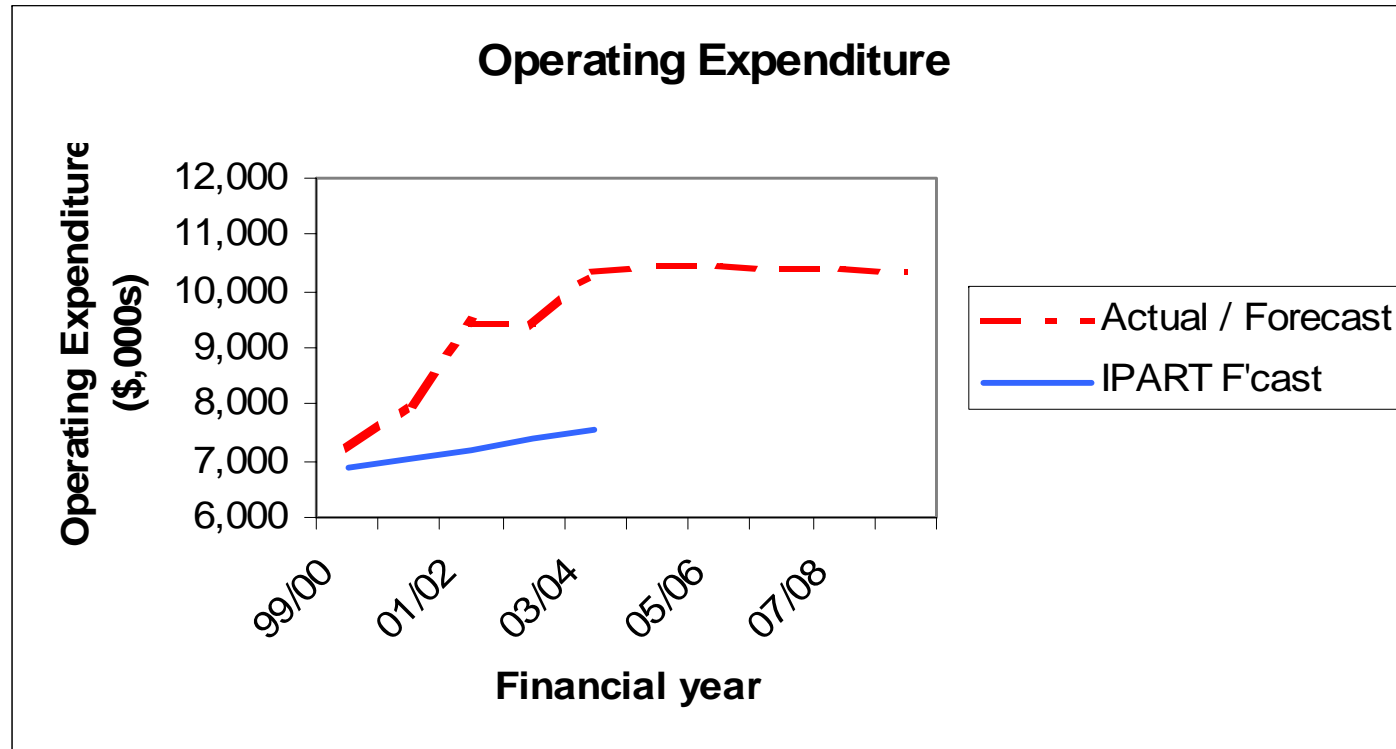
- ▶ Compliant
- ▶ Reliable
- ▶ Competitively priced
- ▶ Maintaining & Investing for future

## ❑ Drivers of Proposed Price Changes

- ▶ Network asset valuation \$57.8 million
- ▶ Weighted average cost of capital 7.8%
- ▶ Annual operating costs
- ▶ Annual capital expenditure
- ▶ Annual sales growth

# Operating Costs - Forecast

1. Introduction
2. Recent Experience
3. Business Model
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5. Discussion & Questions

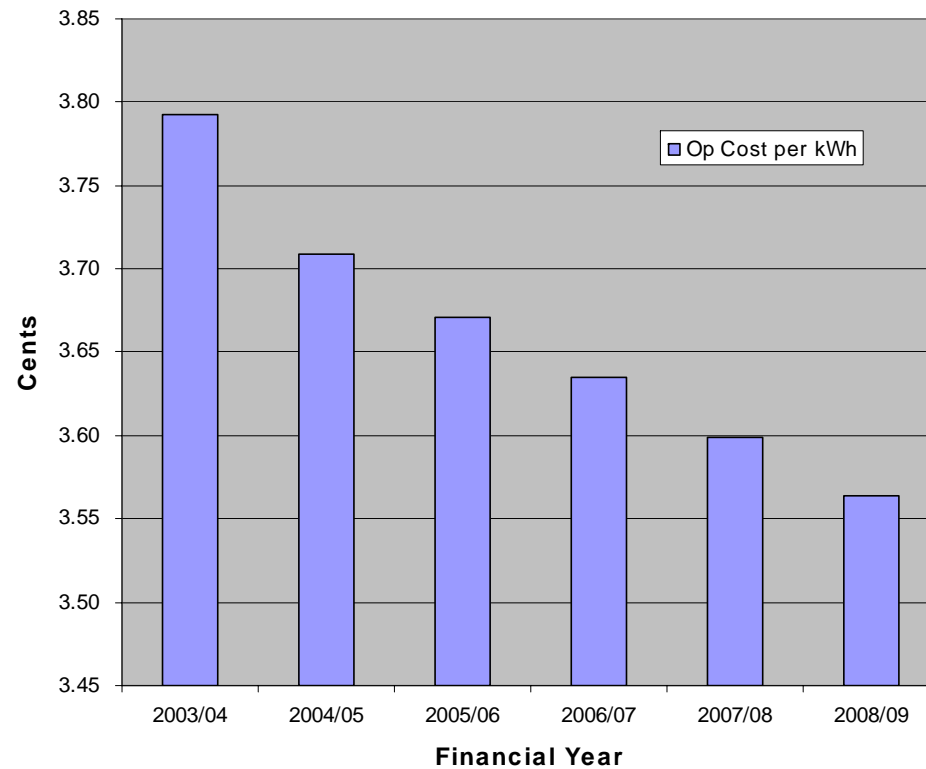


- Historical: Non typical base year; Priority with Customer funded works resulted in low opex
- Current: Increasing cost of compliance & Improved reliability
- Targeted 1.5% pa productivity improvement

# Operating costs - forecast

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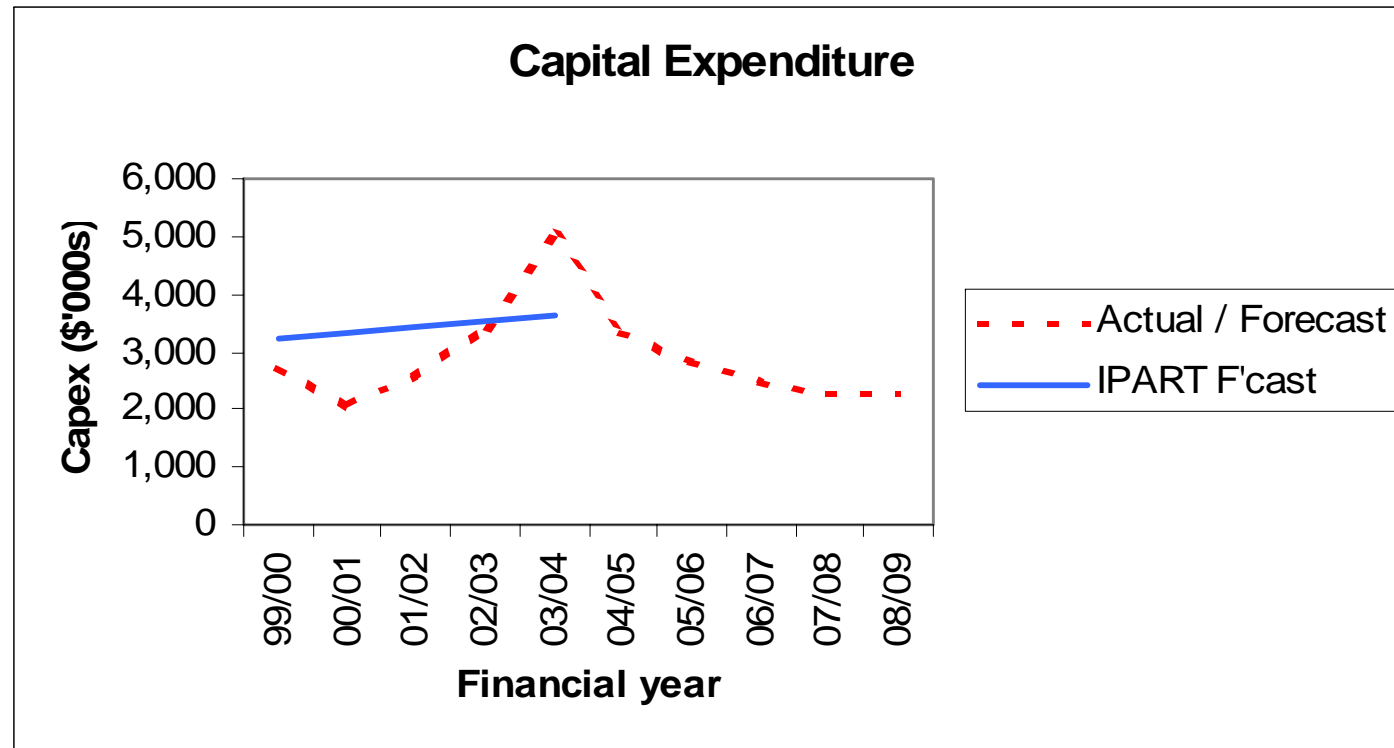
Real Operating Cost per kWh





# Capital Expenditure - Forecast

- 1. Introduction
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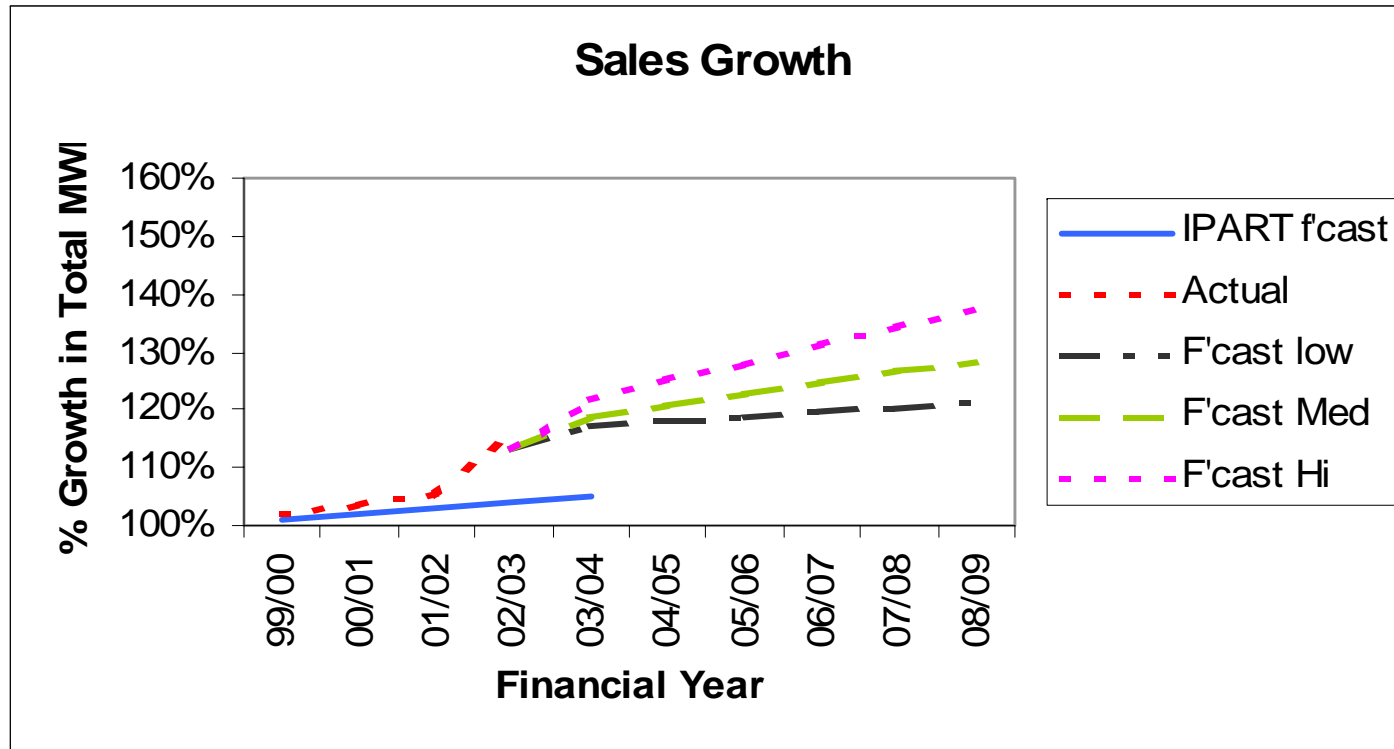


- Targeted reliability improvement – SCADA, Maintenance Management
- Targeted 25% Improvement in Customer Minutes Off Supply



# Sales Consumption - Forecast

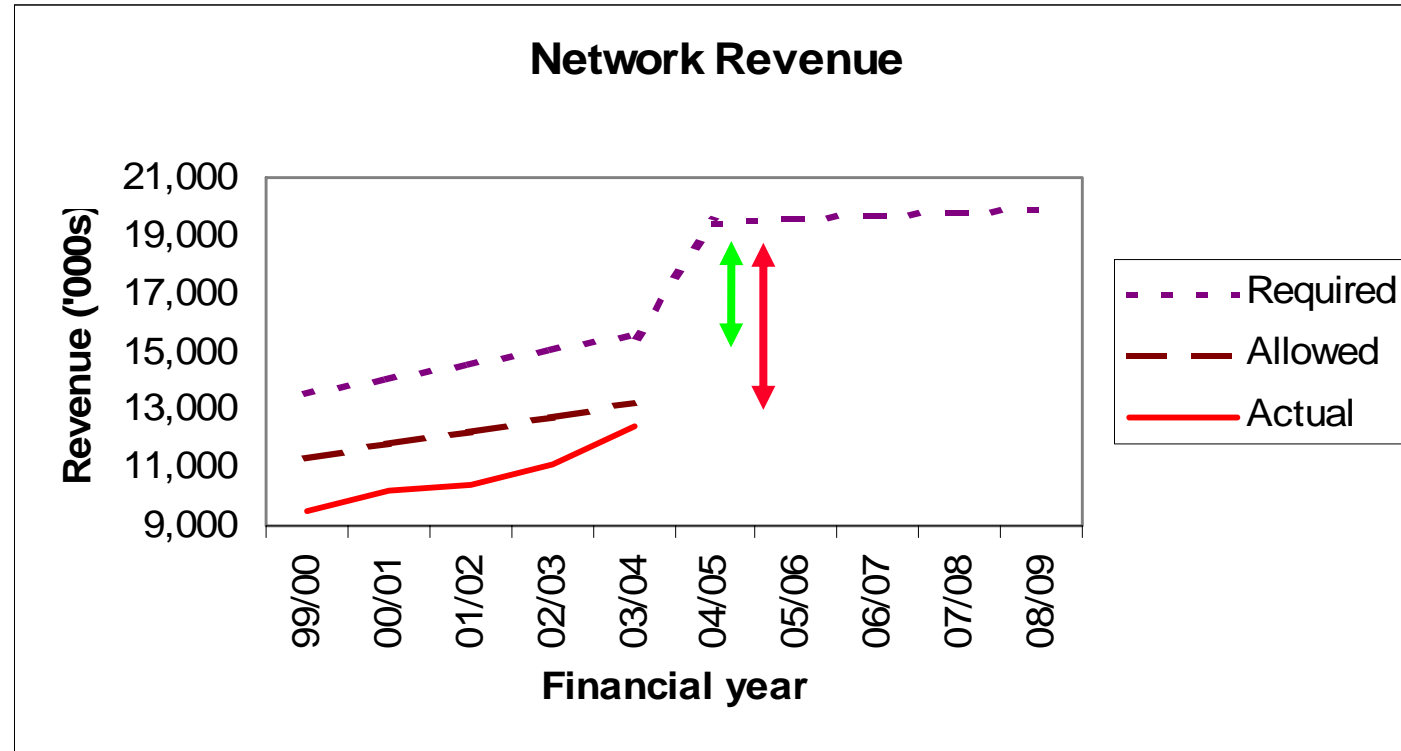
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- ❑ Post Drought: -3% drop forecast
- ❑ 1.5% pa growth long term trend
- ❑ Influence of Mine = 33% energy

# Revenue – Increasing Shortfall

- 1. Introduction
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- ❑ Required revenue increases from \$12m to \$19.3m in 04/05
- ❑ Total shortfall (Required – Actual): \$7.3m



## Summary - Drivers for Price Changes

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- ❑ **Board ensures weights on Management to avoid gold plating:**
  - ▶ 1.5% pa operating productivity
  - ▶ Capital investment – short term investment in monitoring, protection and switching then 50% reduction
  - ▶ 15 year Asset Management Plan – define performance, maintenance and investment
- ❑ **Historical under recovery on asset value**
- ❑ **Under recovery increases with**
  - ▶ Improved reliability requiring targeted maintenance and capital investment.



# Concerns

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## ❑ Price Impacts

- ▶ On top of Drought & marginal economic outlook
- ▶ Intense Board discussion - Community ability to absorb price increases

## ❑ Transmission Charges

- ▶ \$3m increase last year - significant price shock for Customers

## ❑ Service Levels

- ▶ Emerging from under recovery & under investment
- ▶ Reliability **MUST** improve
- ▶ Customers **MUST** see benefits

# Service Levels

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## ☐ Forecast Improvements

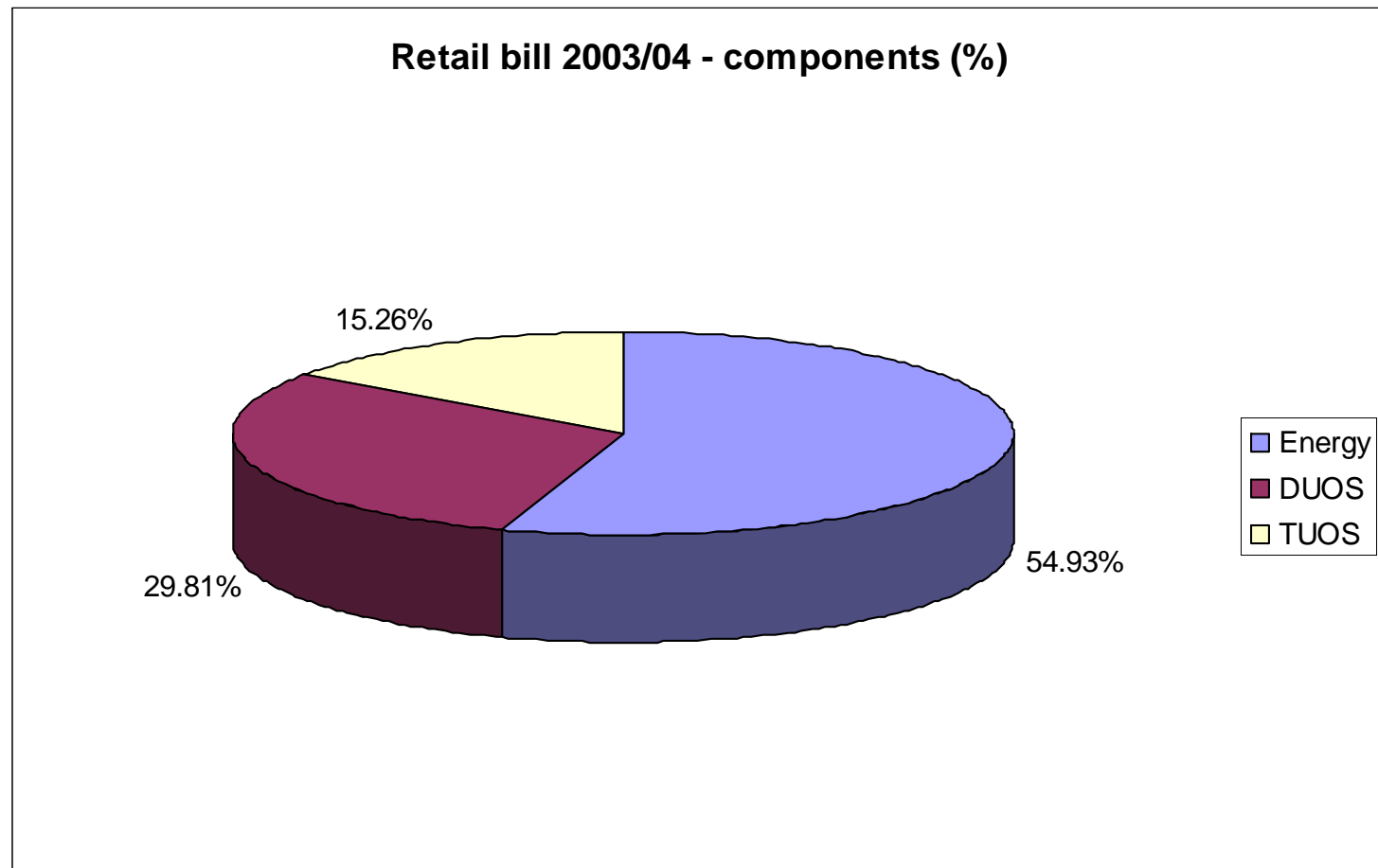
- ▶ SCADA to improve monitoring and response times
- ▶ Voltage control & switching upgrades

## ☐ 25% improvement in reliability for Customer

- ▶ SCADA is estimated to provide a 13% reduction in customer outage minutes for rural customers
- ▶ Target to reduce outage minutes by 10% because of improvements in protection systems

# Retail bill components

1. Introduction
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# Options to Bridge the Revenue Gap

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## ❑ Price Increase 60% (Some Forgone Revenue)

- ▶ Price shock for customers – some total bills up >30%
- ▶ Board concerns on community impact; unknown impact of additional difficulties eg drought

## ❑ Recoup Full Increase in 'Future Value' Terms Over 5 Years

- ▶ 5 years of high price increases for customers
- ▶ Community incapacity to pay during difficult years ahead

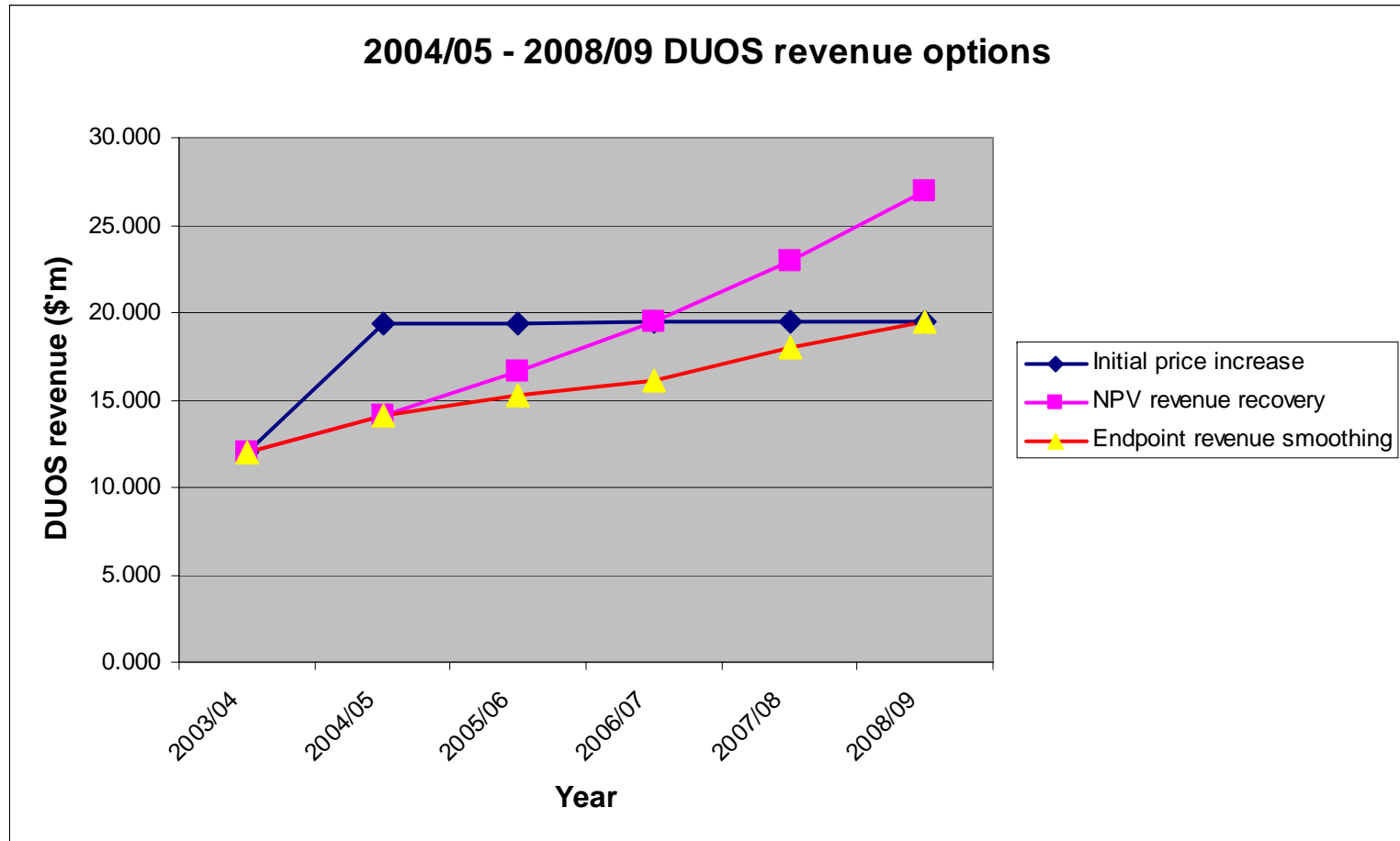
## ❑ Graduate Increases; Forgo Some Revenue

- ▶ Difficult decision – Australian Inland will not recover all revenue
- ▶ Minimise price shocks to customers
- ▶ Acknowledge the revenue shortfall
- ▶ Clearly a discussion for Shareholders



# Revenue options to 2008/09

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## Price Impacts – Monthly Total Bill (2002/03 NUOS)

- 1. Introduction
- 2. Recent Experience
- 3. Business Model
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	Current Total Monthly Bill	Network Charges	Increase Network Charges by %	Apply % Increase to Network Charges	Change in Bill	
			15.60%			
<b>Typical Residential - North Region</b>						
Low (400/mth)	\$49.34	21.93	25.35	\$52.76	6.9%	\$3.42
Medium (600/mth)	\$71.12	31.13	35.99	\$75.98	6.8%	\$4.86
High (800/mth)	\$92.90	40.33	46.62	\$99.19	6.8%	\$6.29
<b>Typical Residential - South Region</b>						
Low (400/mth)	\$47.44	21.93	25.35	\$50.86	7.2%	\$3.42
Medium (600/mth)	\$69.34	31.13	35.99	\$74.20	7.0%	\$4.86
High (800/mth)	\$91.24	40.33	46.62	\$97.53	6.9%	\$6.29
<b>Typical Business - North Region</b>						
Low (50/mth)	\$16.13	10.285	11.89	\$17.73	9.9%	\$1.60
Medium (450/mth)	\$73.10	37.605	43.47	\$78.96	8.0%	\$5.87
High (5000/mth)	\$662.32	348.37	402.72	\$716.67	8.2%	\$54.35
<b>Typical Business - South Region</b>						
Low (50/mth)	\$25.11	10.285	11.89	\$26.71	6.4%	\$1.60
Medium (450/mth)	\$82.08	37.605	43.47	\$87.94	7.1%	\$5.87
High (5000/mth)	\$748.44	348.37	402.72	\$802.79	7.3%	\$54.35
<b>Rural Business</b>						
Low (50/mth)	\$17.21	12.25	14.16	\$19.12	11.1%	\$1.91
Medium (450/mth)	\$88.20	36.97	42.74	\$93.96	6.5%	\$5.77
High (5000/mth)	\$823.02	318.16	367.79	\$872.65	6.0%	\$49.63



## Price Impacts – Monthly Total Bill (2002/03 NUOS)

- 1. Introduction
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	Current Total Monthly Bill	Network Charges	Increase Network Charges by %	Apply % Increase to Network Charges	Change in Bill	
			6.60%			
<b>Typical Residential - North Region</b>						
Low (400/mth)	\$49.34	21.93	23.38	\$50.79	2.9%	\$1.45
Medium (600/mth)	\$71.12	31.13	33.18	\$73.17	2.9%	\$2.05
High (800/mth)	\$92.90	40.33	42.99	\$95.56	2.9%	\$2.66
<b>Typical Residential - South Region</b>						
Low (400/mth)	\$47.44	21.93	23.38	\$48.89	3.1%	\$1.45
Medium (600/mth)	\$69.34	31.13	33.18	\$71.39	3.0%	\$2.05
High (800/mth)	\$91.24	40.33	42.99	\$93.90	2.9%	\$2.66
<b>Typical Business - North Region</b>						
Low (50/mth)	\$16.13	10.285	10.96	\$16.81	4.2%	\$0.68
Medium (450/mth)	\$73.10	37.605	40.09	\$75.58	3.4%	\$2.48
High (5000/mth)	\$662.32	348.37	371.36	\$685.31	3.5%	\$22.99
<b>Typical Business - South Region</b>						
Low (50/mth)	\$25.11	10.285	10.96	\$25.79	2.7%	\$0.68
Medium (450/mth)	\$82.08	37.605	40.09	\$84.56	3.0%	\$2.48
High (5000/mth)	\$748.44	348.37	371.36	\$771.43	3.1%	\$22.99
<b>Rural Business</b>						
Low (50/mth)	\$17.21	12.25	13.06	\$18.02	4.7%	\$0.81
Medium (450/mth)	\$88.20	36.97	39.41	\$90.64	2.8%	\$2.44
High (5000/mth)	\$823.02	318.16	339.16	\$844.02	2.6%	\$21.00

## Price Impacts – Monthly Total Bill

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Propose 26% graduated increase over 5 years

- ▶ Year 1 increase by 10.5%
- ▶ Years 2-5 increase by 3.6% per year
- ▶ Excludes annual CPI inflation adjustment

<b>Total Residential Monthly Bill Impact</b>							<b>Total Increase</b>
<b>kWh / mth</b>	<b>Current</b>	<b>Yr 1</b>	<b>Yr 2</b>	<b>Yr 3</b>	<b>Yr 4</b>	<b>Yr 5</b>	
<b>Low 400</b>	49.34	54.60	56.58	58.55	60.53	62.50	\$ 13.16
<b>Med 600</b>	71.12	78.59	81.39	84.20	87.00	89.80	\$ 18.68
<b>High 800</b>	92.90	102.58	106.21	109.84	113.47	117.10	\$ 24.20
<b>Total Business Monthly Bill Impact</b>							<b>Total Increase</b>
<b>Consumption</b>	<b>Current</b>	<b>Yr 1</b>	<b>Yr 2</b>	<b>Yr 3</b>	<b>Yr 4</b>	<b>Yr 5</b>	
<b>Low 50</b>	25.11	27.58	28.50	29.43	30.35	31.28	\$ 6.17
<b>Med 450</b>	82.08	91.10	94.49	97.87	101.26	104.64	\$ 22.56
<b>High 5,000</b>	748.44	832.05	863.40	894.75	926.11	957.46	\$ 209.02

- Revenue forgone by delaying increase from 1 to 5 years is **\$11 m** borne by Shareholder in reduced EBIT.



# DUOS price determination

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- 1. Introduction
- 2. Recent Experience
- 3. Business Model
- 4. Pricing issues
- 5. Discussion & Questions

- 2003/04

$$\text{DUOS} = \text{NUOS} - \text{TUOS}$$

- 2004/05 ONWARDS

$$\text{NUOS} = \text{DUOS} + \text{TUOS}$$



# Indicative 2003/04 DUOS charges

- 1. Introduction
- 2. Recent Experience
- 3. Business Model
- 4. Pricing issues
- 5. Discussion & Questions

		Indicative 2003/04 DUOS charges					
Network tariff Classification	Code	Monthly	Total	Peak	Shoulder	Off Peak	Demand
		Standing Charge (\$)	Units Rate (c/kWh)	Units Rate (c/kWh)	Units Rate (c/kWh)	Units Rate (c/kWh)	Rate 1 (\$/kVA/month)
Domestic	D	3.71	2.95				
General Supply	GS	7.22	5.20				
General Supply - Irrigation	GSI	7.22	3.60				
Off Peak - Tariff 1 (Residential)	OPR	0.61	0.22				
Off Peak - Extended (Residential)	OPRE	0.61	0.72				
Off Peak - Tariff 1	OP	0.61	0.22				
Off Peak - Extended	OP1	0.61	0.72				
Institution	IS	4.80	3.36				
Rural (residential)	RU	9.62	4.62				
Rural (Business)	RUB	9.62	4.61				
Time of Day - LV Demand	TLD	168.27		3.43	2.75	0.90	8.16
Time of Day - HV Demand	THD	1,201.95		1.39	0.04	0.21	5.82
Time of Use - General LV	TLV	120.20		8.52	4.26	2.07	
Time of Use - General HV	THV	1,201.95		6.76	4.43	2.70	
Time of Day - BH Irrigation	TBI	120.20		8.52	4.26	2.07	
2-rate TOU - WW Irrigation	TI2W	120.20		8.52	8.32	2.07	
Water Pumping - WW	WP	120.20		10.82	0.00	6.76	
Sewage Pumping	S	120.20		10.82	0.00	6.76	
Street lighting	SL	16.82	3.75				
Floodlighting	FL	16.82	5.28				
Process Heat	PH	16.82	3.46				



# Indicative 2003/04 TUOS charges

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		Indicative 2003/04 TUOS charges					
Network tariff Classification	Code	Monthly	Total	Peak	Shoulder	Off Peak	Demand
		Standing Charge (\$)	Units Rate (c/kWh)	Units Rate (c/kWh)	Units Rate (c/kWh)	Units Rate (c/kWh)	Rate 1 (\$/kVA/month)
Domestic	D		1.8794				
General Supply	GS		1.9675				
General Supply - Irrigation	GSI		1.6719				
Off Peak - Tariff 1 (Residential)	OPR		1.3002				
Off Peak - Extended (Residential)	OPRE		1.7098				
Off Peak - Tariff 1	OP		1.3002				
Off Peak - Extended	OP1		1.7098				
Institution	IS		1.9194				
Rural (residential)	RU		1.8704				
Rural (Business)	RUB		1.8794				
Time of Day - LV Demand	TLD			1.9837	1.9837	0.7946	1.4563
Time of Day - HV Demand	THD			1.9837	1.9837	0.7946	1.3931
Time of Use - General LV	TLV			2.2977	2.4993	1.3002	
Time of Use - General HV	THV			2.2977	2.4993	1.3002	
Time of Day - BH Irrigation	TBI			2.2977	2.4993	1.3002	
2-rate TOU - WW Irrigation	TI2W			2.2977	2.4993	1.3002	
Water Pumping - WW	WP						
Sewage Pumping	S						
Street lighting	SL		1.5235				
Floodlighting	FL		1.5235				
Process Heat	PH		1.8165				

## Pricing issues

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- Off-peak 1 negative DUOS tariff
- TUOS allocation to off-peak tariffs > DUOS allocation
- TUOS fixed charges allocated to energy (fixed charges allocated to fixed results in more negative DUOS charges)
- Domestic TOU tariff requirement
- TOU tariffs require overhaul
- Cross-subsidies to be addressed
- DUOS revenue/kWh from CRNP customer << other customers



# Discussion & Questions

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