

Energy Contract Negotiations

ENERGY CONTRACT NEGOTIATIONS SEMINAR

TUESDAY 13 APRIL 2010

Australian Industry Group Energy contract negotiations seminars

Melbourne, Ballarat, Albury, Sydney and
Brisbane

Looking for ways to
cut your company's
energy bills?

Ai Group's Energy and Sustainable Business Help Desk can help your business with:

- Energy contract negotiations
- Energy efficiency
- Energy audits
- Billing issues





ENERGY CONTRACT NEGOTIATIONS

AI GROUP – APRIL 2010

MARK SEARLE

PRINCIPAL CONSULTANT

KEY ENERGY & RESOURCES

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& Resources
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KEY ENERGY & RESOURCES

- **SPECIALIST ENERGY MANAGEMENT CONSULTANCY**
- **NEGOTIATE ENERGY SUPPLY CONTRACTS**
 - Access arrangements
- **ENERGY PLANNING – ENERGY COST CONTROL**
 - Greenhouse
 - Energy Audits
- **LARGE CLIENT BASE ACROSS AUSTRALIA**
 - Government, semi-government, private sector



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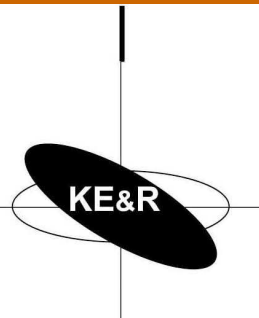


DEREGULATION – SOME BACKGROUND

- ◆ **SEPARATE SALE OF ENERGY FROM DELIVERY OF ENERGY**
 - Retailers sell energy
 - Distributors (poles, wires and pipes) deliver energy

- ◆ **OBJECTIVES**
 - Introduce choice
 - Stimulate competition
 - Increase efficiency

- ◆ **STATUS**
 - Many consumers saw significant savings
 - Long term savings?
 - Infrastructure?



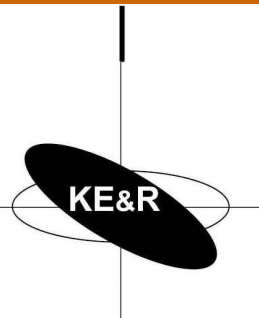
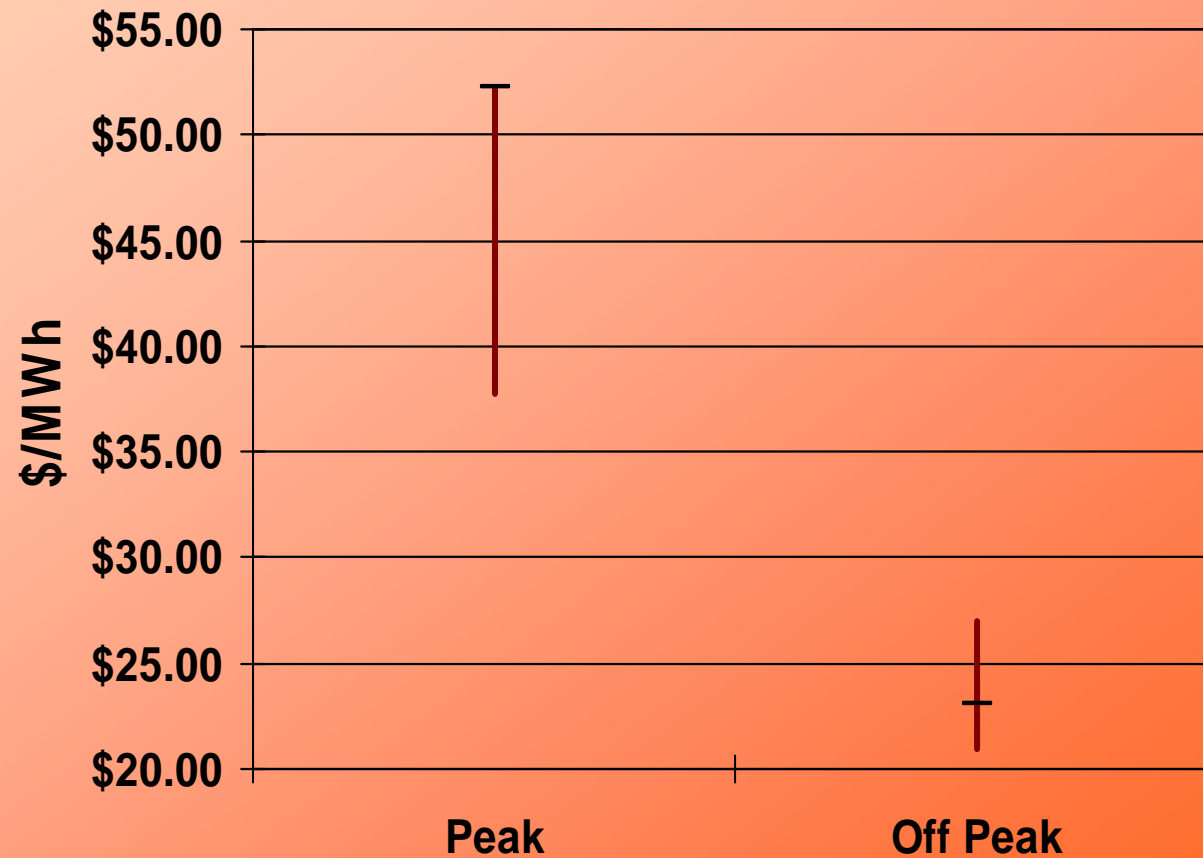
DEREGULATION – THE OUTCOME

- ◆ **ALL ENERGY RETAILERS ARE NOT THE SAME**
- ◆ **ALL ENERGY CONTRACTS ARE NOT THE SAME**
- ◆ **YOU CAN GET ‘GOOD’ DEALS**
- ◆ **YOU CAN GET ‘BAD’ DEALS**

This is a paradigm shift



PRICE SPREAD – REAL DATA (2001)



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ELECTRICITY DE-REGULATION

- ◆ **STATE GOVERNMENT UTILITIES SEPARATED INTO COMPETING GENERATORS, COMPETING RETAILERS AND MONOPOLY TRANSMISSION / DISTRIBUTION PROVIDERS**
 - Competing generators bid for the right to supply electricity
 - Bids accepted in order of least cost
 - Half hourly 'pool price'

- ◆ **MONOPOLY TRANSMISSION AND DISTRIBUTION PROVIDERS DELIVER ELECTRICITY FOR REGULATED PRICES (TARIFFS)**

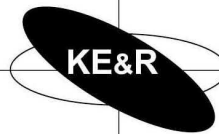
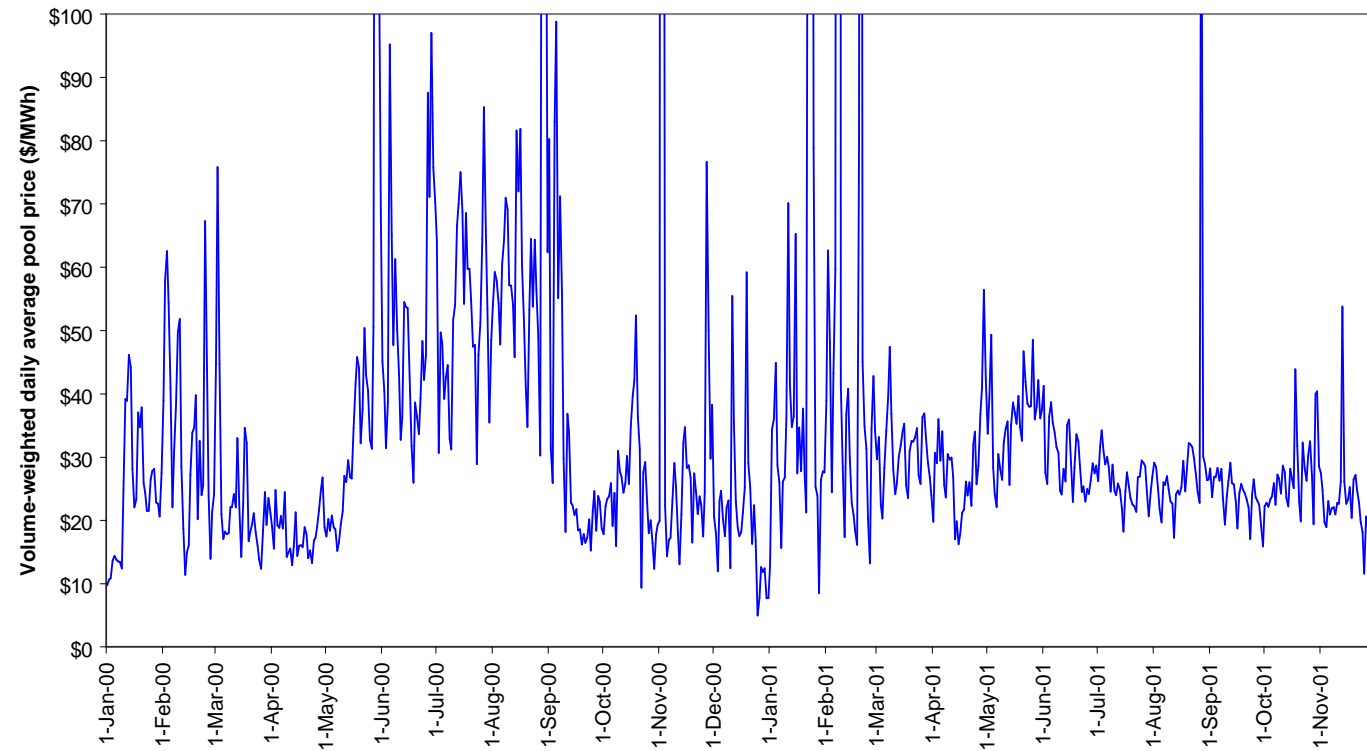
- ◆ **COMPETING RETAILERS BID FOR YOUR BUSINESS**

- ◆ **RETAILERS MANAGE THE PRICE RISK TO GIVE THEIR CUSTOMERS 'PRICE CERTAINTY'**



POOL PRICE - VOLATILITY

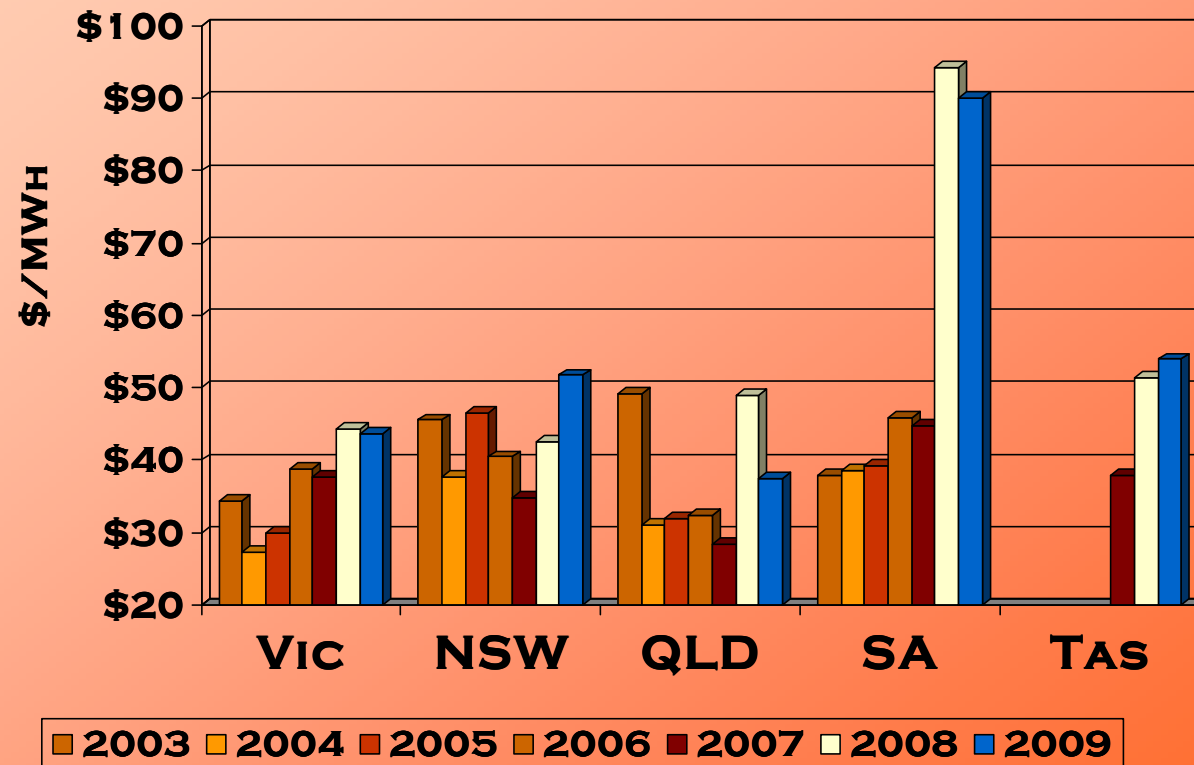
Victorian Average Daily Electricity Pool Prices
(1 January 2000 to 30 November 2001)



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POOL PRICE – PERFORMANCE

FINANCIAL YEAR POOL PRICE



DEREGULATION – BEFORE & AFTER

◆ BEFORE – FRANCHISE CUSTOMER

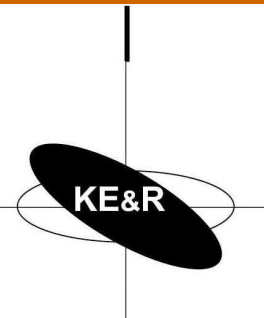
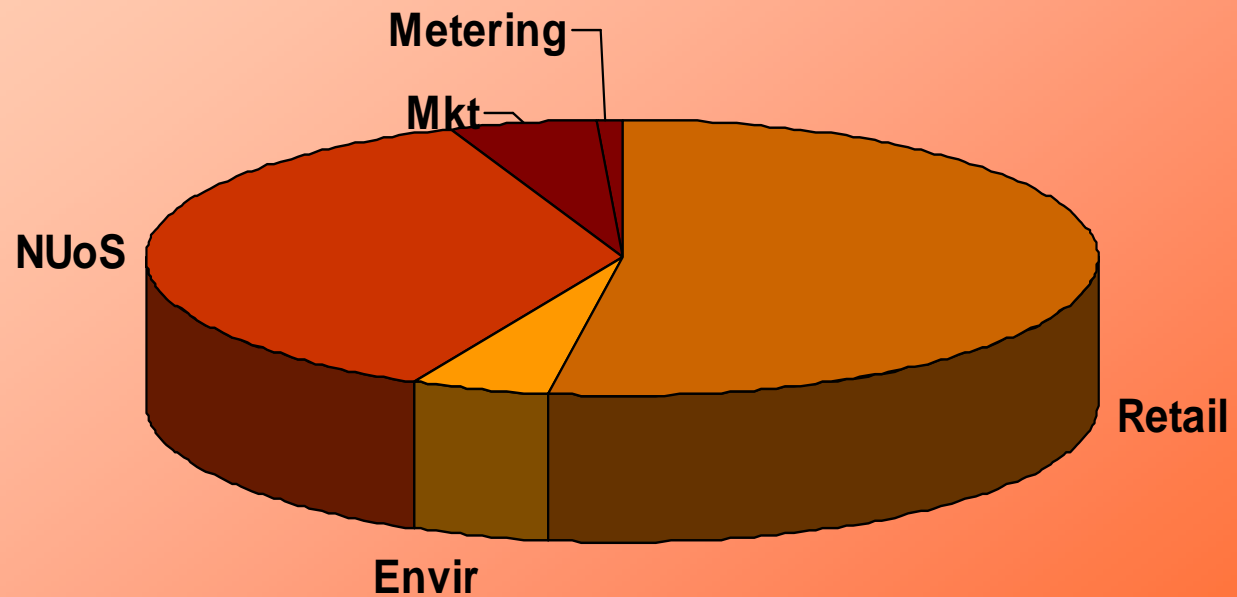
- Franchise tariff to Gov. owned utility
- Common across each state

◆ AFTER – CONTESTABLE CUSTOMER

- Regulated Network Use of System (NUoS) fees to Local Network Service Provider (LNSP)
 - Location dependent
- Market participation fees
- Negotiated retail rates (and metering?)
 - Adjusted for losses
- Environmental Imposts



COST BREAK-UP (ELEC.)



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REGULATED NUoS CHARGES

- ◆ **LOCATION (LNSP) DEPENDENT**
- ◆ **RELATIVELY COMPLEX**
 - Especially electricity
- ◆ **OFTEN A CHOICE OF TARIFF**
 - Choose the most cost effective option
- ◆ **MANY USERS ARE ON THE WRONG TARIFF**
 - Wrong demand charge

Check for Savings
You may be pleasantly surprised



ELECTRICITY NUoS

- ◆ **GENERALLY PUBLISH A BUNDLED NUoS TARIFF**
 - Distribution (DUoS) plus Transmission (TUoS)
- ◆ **VOLTAGE DEPENDENT**
 - Typically
 - Peak Energy
 - Off Peak Energy
 - Standing charge
 - Demand (kW or kVA)
 - Becoming more complex
 - Summer demand
 - Shoulder period



EXAMPLE

MEDIUM LV CUSTOMER

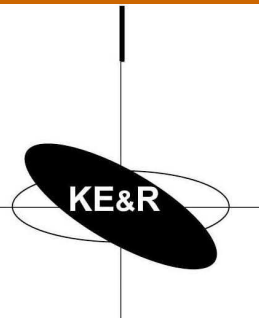
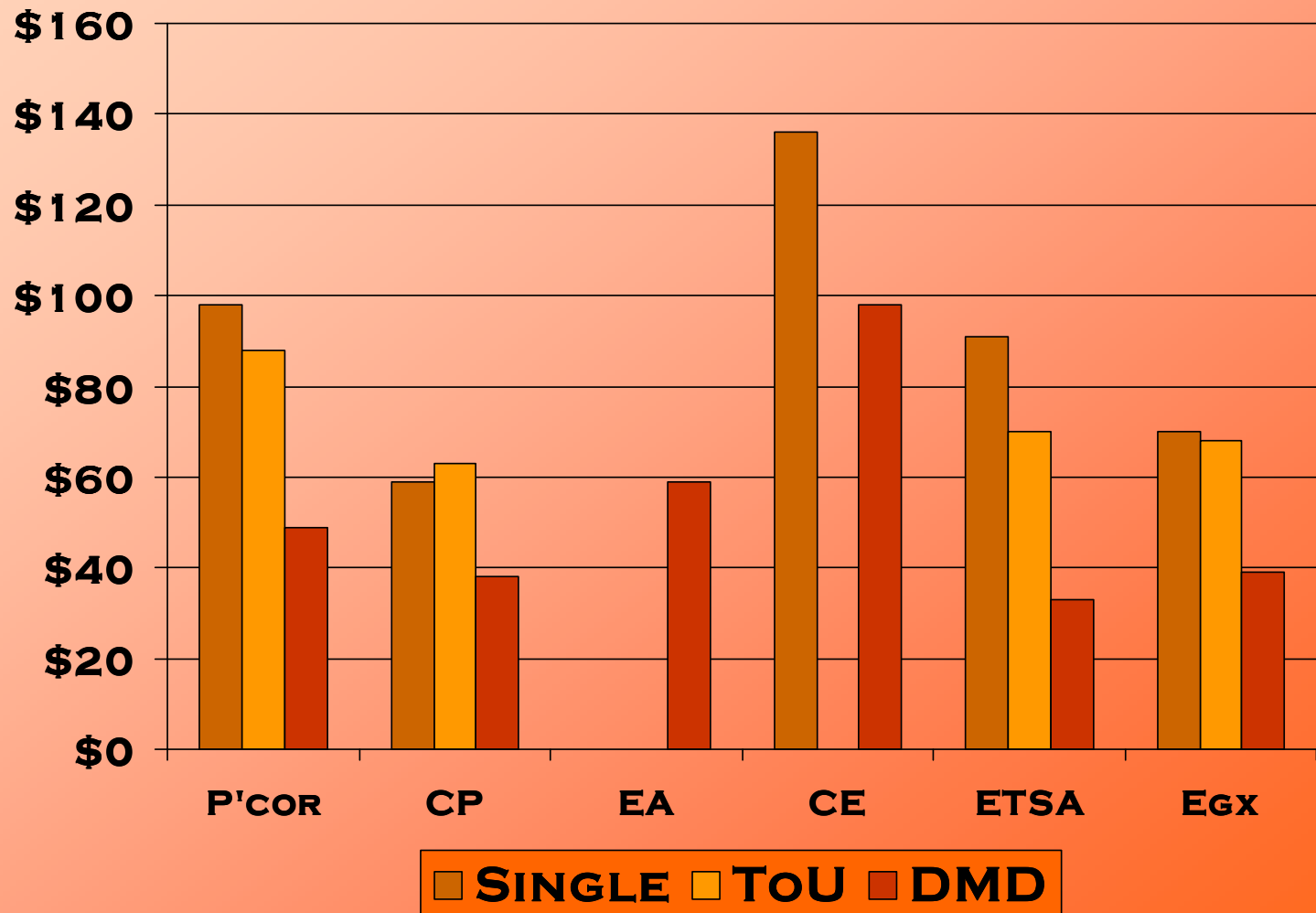
- 2,250 MWh pa
 - 1,500 MWh peak (NEM)
 - 750 MWh off peak

- 500 KW demand

- 0.8 PF



AVERAGE NUoS COST (\$/MWH)



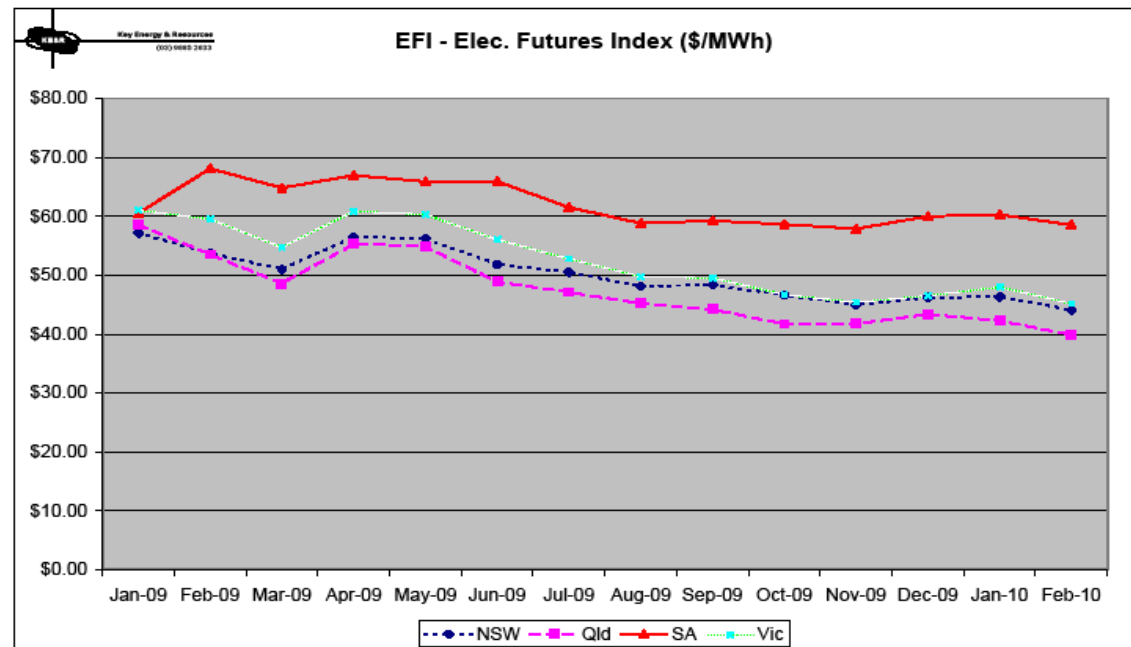
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PRICE – ELECTRICITY

- ◆ **THE DAYS OF >30% SAVINGS ARE GONE**
- ◆ **SOME USERS ARE PAYING MORE TODAY THAN PRE-DEREGULATION**
 - Rural network

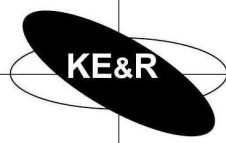
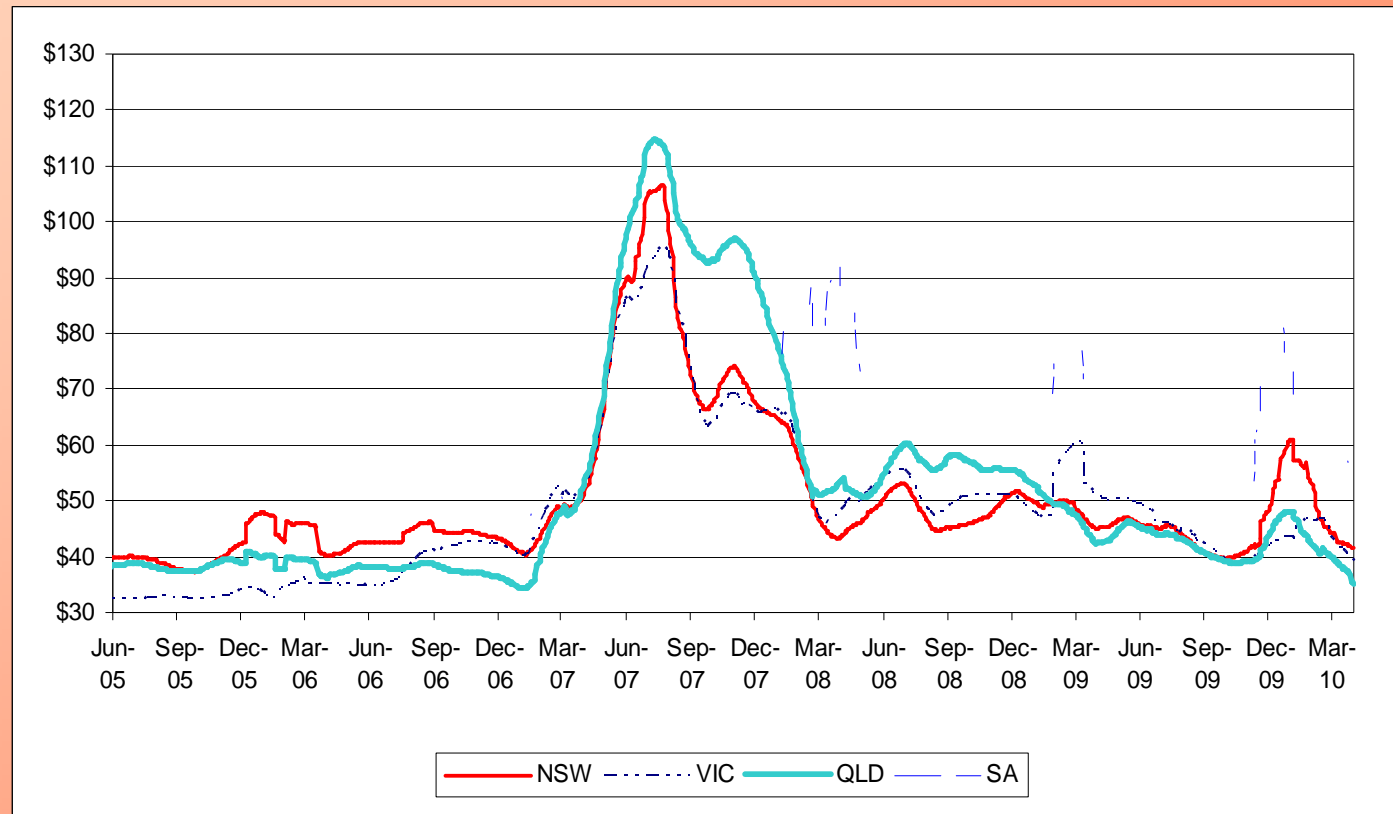


ELECTRICITY FUTURES INDEX



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WHOLESALE ELECTRICITY PRICE INDEX - WEPI



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THE RENEGOTIATION PROCESS

1. UNDERSTAND THE MARKET
2. UNDERSTAND YOUR REQUIREMENTS
3. IDENTIFY RELEVANT VALUE ADDING SERVICES
4. TARIFF REVIEW
5. RFQ
6. EVALUATION
7. CONTRACT MANAGEMENT

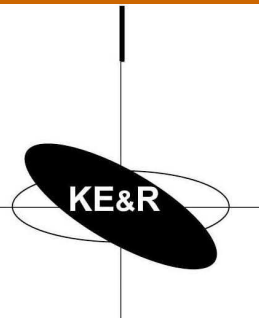


THE MARKET

- ◆ **UNDERSTAND THE ENVIRONMENT**
 - Hence the information already provided

- ◆ **KNOW WHO THE RETAILERS ARE**
 - Up-to-date list from ESC
 - You never know who will want your business

- ◆ **APPRECIATE PRICE TRENDS**
 - Electricity is very volatile and seasonal



REQUIREMENTS

- ◆ **ELECTRICITY, GAS OR BOTH?**
- ◆ **TIMING**
 - How long should the contract be?
 - When do you enter the market?
- ◆ **WHAT IS YOUR LIKELY ENERGY USE GOING TO BE?**
 - Volume flex
 - Site roll in and roll out
- ◆ **RISK APPETITE?**
- ◆ **COMMERCIAL TERMS?**
- ◆ **VALUE ADDING SERVICES?**



REQUIREMENTS – LOAD SCENARIO

1 High St, Beachside

LNSP AGL Solaris

Voltage 22 kV

NMI VDDD1234567

NUoS Trf A400

Con.MD 1,660 kW

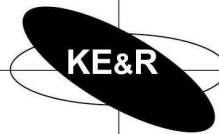
DLF TLF

NLF 3.03%

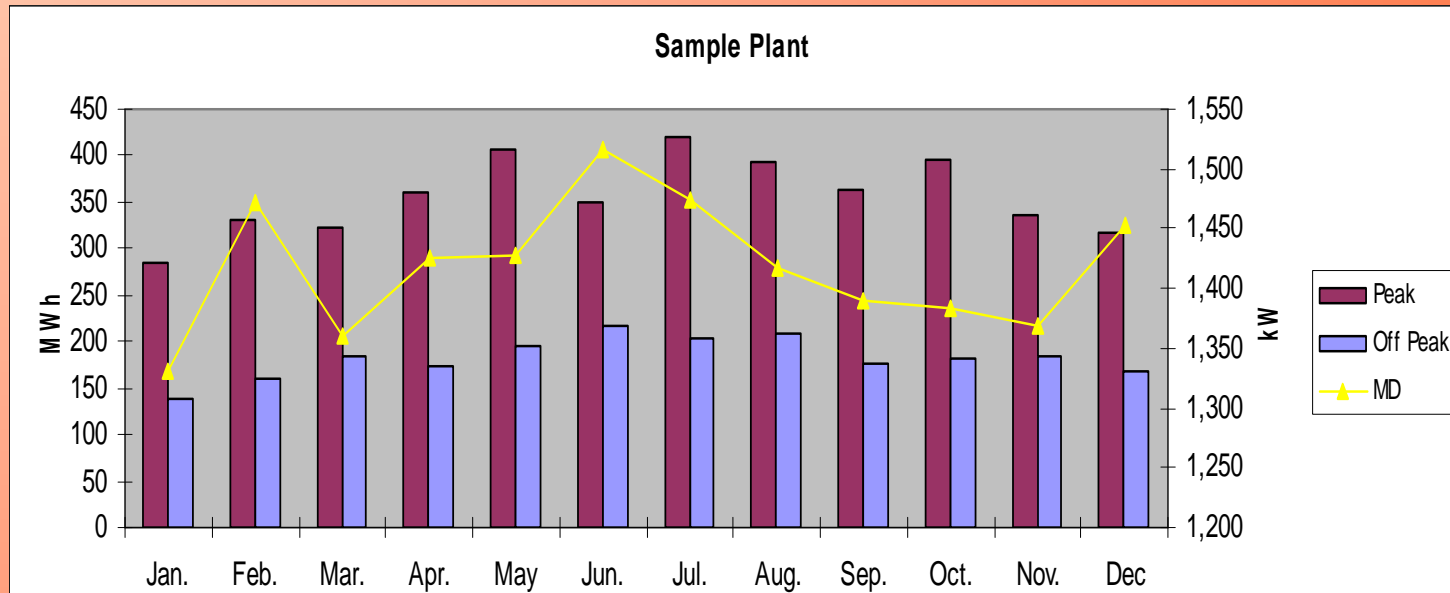
MWh/kW	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec	Tot/Max
Peak	285	330	322	361	406	349	420	392	364	395	337	317	4,277
Off Peak	138	160	184	173	196	218	203	209	177	183	185	168	2,195
Total	424	490	506	533	603	566	623	601	541	577	522	485	6,472
MD	1,330	1,472	1,360	1,426	1,427	1,516	1,475	1,417	1,390	1,382	1,369	1,452	1,516

Peak 7:00 am to 11:00 pm on weekdays

Load Factor 49%



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RISK APPETITE

- ◆ **LIABILITY & INDEMNITY**
- ◆ **VoLL / FORCE MAJEURE**
- ◆ **BILLING ERRORS**
- ◆ **VOLUME FLEX.**
- ◆ **TRANSFER**
- ◆ **SERVICE DELIVERY**
 - Will they deliver the Value Adding Services

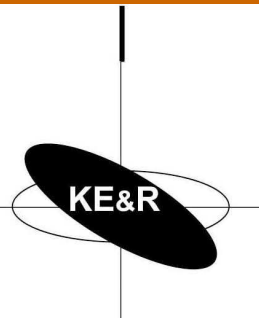
Supply Reliability?

Primarily responsibility of LNSP etc.



VALUE ADDING SERVICES

- ◆ **MINIMIZE 'WHOLE OF LIFE' CONTRACT COST**
- ◆ **WHAT ELSE WOULD YOU LIKE?**
 - Diarised payments
 - Account aggregation
 - Data provision
 - Load profiles
 - Monthly billing data
 - Curtailability
 - BOOT schemes
 - Additional Green Energy



TARIFF REVIEW

◆ CHECK ALL REGULATED FEES

- Are you on the right tariff?
- Are contract demand figures etc appropriate?
- Where can savings be made?
 - Demand control?

◆ CHECK LAST SET OF ACCOUNTS

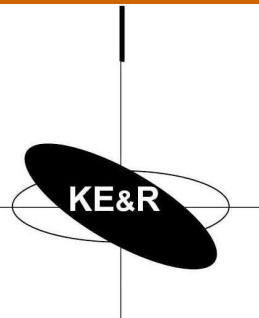
- Are they correct?



RFQ PROCESS

◆ DEVELOP A BRIEF RFQ

- Describe yourself
- Outline essential, important and desirable conditions
- Specify the pricing template
 - Define peak and off peak periods
 - RECs
- Define the process
- Allow sufficient flexibility (and time) for the retailer to be creative
- Distribute to all licensed retailers



EVALUATION

- ◆ **UNDERSTAND THE OFFERS**
 - What is included and what is excluded?
 - What are the risks inherent in each offer?
- ◆ **WHAT ADDITIONAL BENEFITS ARE THE RETAILERS OFFERING?**
- ◆ **WHAT ARE THE PRICES?**
 - Compare apples against apples
 - Meet retailers of interest
 - Listen to what they have to say

Is it only price ?



CONTRACT MANAGEMENT

- ◆ **ARE YOU GETTING WHAT YOU EXPECTED?**
 - Accurate and timely accounts
 - Value Adding Services
 - What is your Account Manager Doing?
- ◆ **WHAT PROCESSES ARE IN PLACE TO PROTECT YOUR INTERESTS?**
- ◆ **WHO IS MANAGING THE ACCOUNT AT YOUR END?**

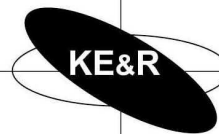
The link that completes the chain



CONCLUSION

- ◆ **A PARADIGM SHIFT**
- ◆ **ALL RETAILERS ARE NOT THE SAME**
 - Price differences of 10% are not uncommon
 - Different commercial terms
 - Different Value Adding Services
- ◆ **EFFORT IS REQUIRED**

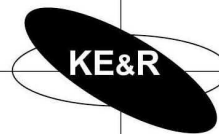
Price and service do not seem to
have any relationship!



QUESTIONS AND DISCUSSION

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Morning tea



ENERGY COST MANAGEMENT

THE AI GROUP – APRIL 2010

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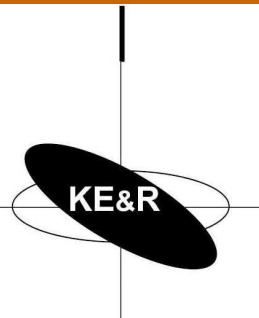
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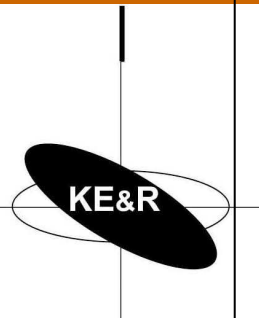
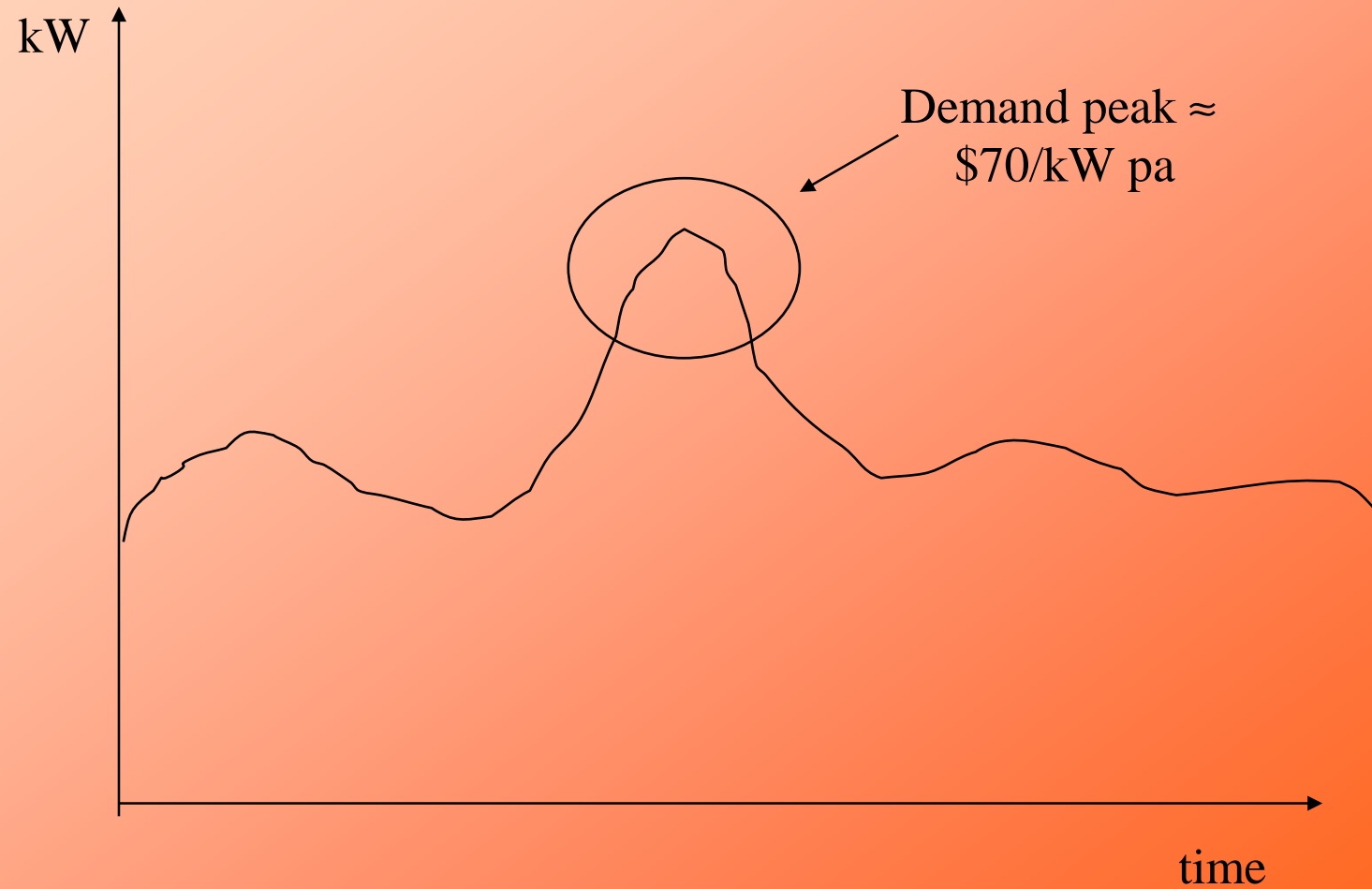
COST MANAGEMENT

- Demand Control
- Load Shifting
- Tariff Management
- Risk Management
- Energy Efficiency



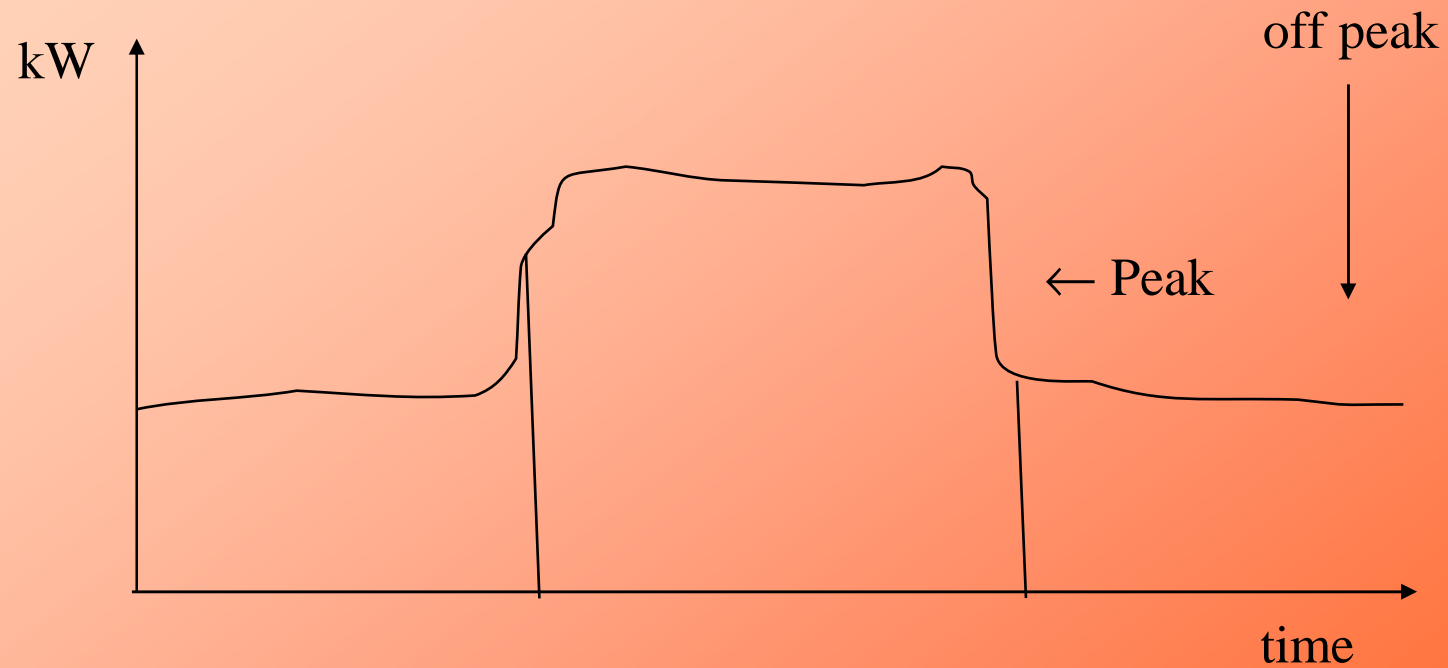
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DEMAND CONTROL



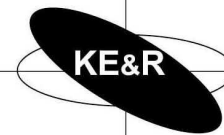
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LOCAL SHIFTING



Peak → off peak
Save ≈ \$45/MWh

Plus demand benefit



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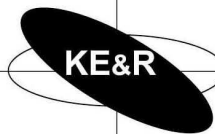
TARIFF MANAGEMENT

◆ CHECK YOUR TARIFF

◆ CHECK YOUR DEMAND

- Actual Demand
- Contract Demand
- Excess Demand
- Moving average

You may be surprised with the savings.....



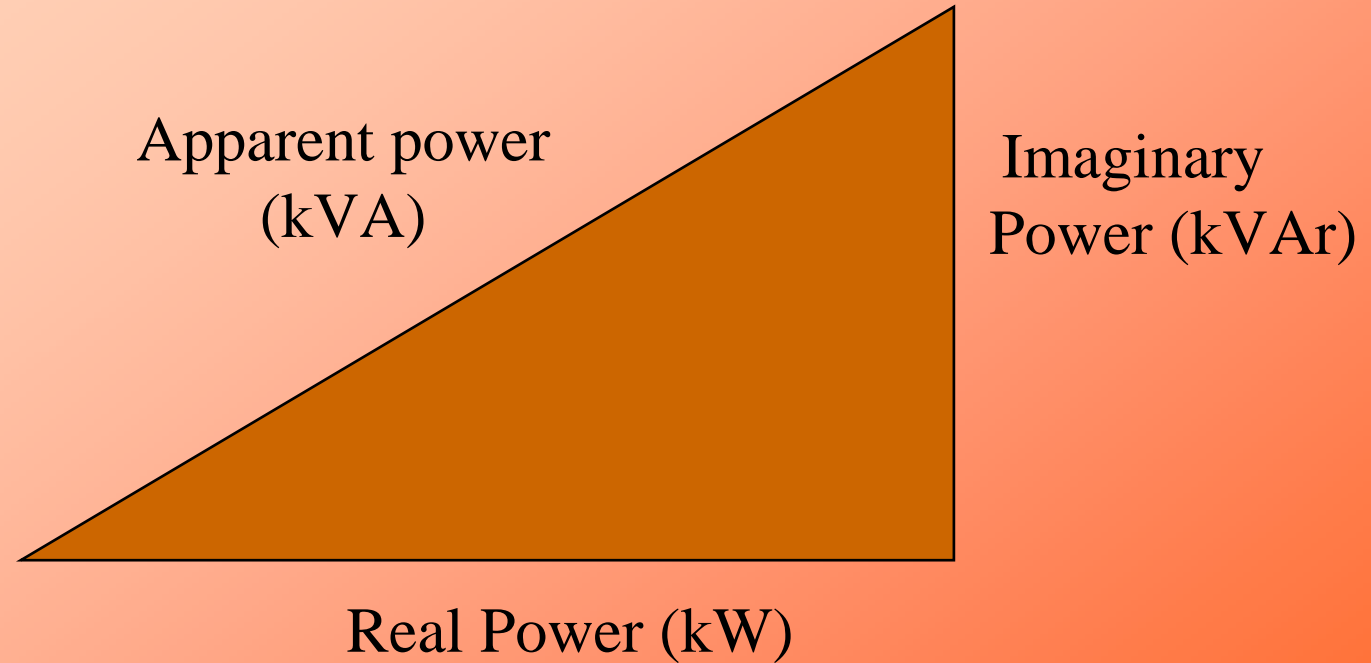
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POWER FACTOR – KVA

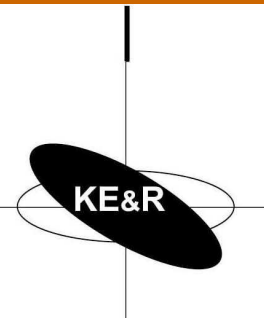
- ◆ **IF YOU UNDERSTAND POWER FACTOR NO EXPLANATION IS NECESSARY**
- ◆ **IF YOU DON'T UNDERSTAND POWER FACTOR THEN NO EXPLANATION IS POSSIBLE**



POWER FACTOR



$$\text{Power Factor} = \frac{\text{Real Power}}{\text{Apparent Power}}$$



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QUEENSLAND

- ◆ **POWER FACTOR TARIFFS PROPOSED?**
- ◆ **PROBABLY COST NEUTRAL**
 - LV @ 0.85
 - HV @ 0.90
- ◆ **SUSPECT THAT THE KW TARIFFS WILL THEN BE GRADUALLY WITHDRAWN (SUNSET TARIFFS)**



RISK MANAGEMENT

- ◆ **TAKE OR PAY (TOP)**
 - A real windfall for the retailers
- ◆ **BILLING ERRORS**
 - You would be surprised hw often this happens
 - Back bills for accounts you didn't know you had
- ◆ **DEFAULT TARIFFS**
 - Often set so that somebody else benefits
- ◆ **EVERGREEN CONTRACTS**
 - Can be a problem with 'Large Market' sites



ENERGY EFFICIENCY

◆ HIGH EFFICIENCY MOTORS

- Often at a very minor price premium.
- Also look at real cost of a re-wind and

◆ LIGHTING

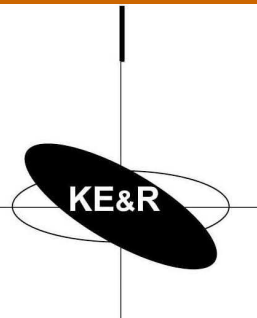
- Controls
- Fittings

◆ COMPRESSED AIR

- Leaks, - isolation valves
- Air pressure, intake temperature
- Plant allocation

◆ HVAC

- Simultaneous Heating and Cooling
- Free cooling
- Set point control



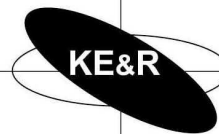
REGULATORY CHANGE

- ❖ MRET
 - 9,500 GWh target – 45,000 GWh
 - LSRES & SSRES

- ❖ Nuos Tariff
 - increases of 10 → 30%

- ❖ Power Factor

- ❖ ETS - Carbon



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Summary and close

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