FAR NORTH QUEENSLAND
ELECTRICITY USERS NETWORK

"Advocating on behalf of peak FNQ industry and social organisations
for competitively priced and reliable electricity in FNQ"

Submission to the Australian Energy Regulator on Ergon Energy 2015-2020 Determination

24 July 2015

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DISCLAIMER

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OVERVIEW

The aim of the Far North Queensland Electricity Users Network is to ensure that the Far North Queensland (FNQ) region has "competitively priced and reliable electricity".

The 19 organisations involved with the Far North Queensland Electricity Users Network cover the North's major regional industries including agriculture, mining, tourism, and construction as well as FNQ Councils and an organisation representing retirees (see Appendix 1). The organisations were drawn together with the common purpose of reducing unaffordable electricity bills that are creating financial and emotional distress to households, businesses and industries in the FNQ region.

With limited time and resources the Far North Queensland Electricity Users Network (FNQEUN) considered the most effective way to reduce electricity prices was to reduce the cost of Ergon Energy's "poles and wires" (the distribution network for regional Queensland). As per **Figure 1** the distribution network accounts for about 50 percent of an electricity bill in Queensland.

Since November 2013, the organisations involved with the FNQEUN have actively engaged with the Australian Energy Regulator, the Federal Government's regulatory authority responsible for setting the revenue cap for Ergon Energy's distribution (poles and wires) network. Their aim is simple; to reduce the largest component of the electricity price. As the Australian Energy Regulator's decisions cover a 5-year period, the efforts of the FNQEUN are aimed to reduce electricity bills to Queenslanders for the period 2015 to 2020.

Over an 18 month period the collective and substantial efforts of the FNQEUN and other Queensland consumer organisations contributed to a Preliminary Decision by the Australian Energy Regulator to:

- Reduce residential electricity bills in regional Queensland by $34 in 2015-16, followed by reductions of $16 to $44 in the remaining years through to 2020 and
- Reduce small business electricity bills in regional Queensland by $53 in 2015-16, followed by reductions of $25 to $69 in the remaining years through to 2020

To put this into perspective, the extensive work by Queensland consumer organisations has resulted in savings of $0.65 per week for a household or $1.02 per week for a small business. If a loaf of bread costs $4 and there are 20 slices in a loaf, our collective efforts have saved Queensland households the equivalent of 3 slices of bread a week.

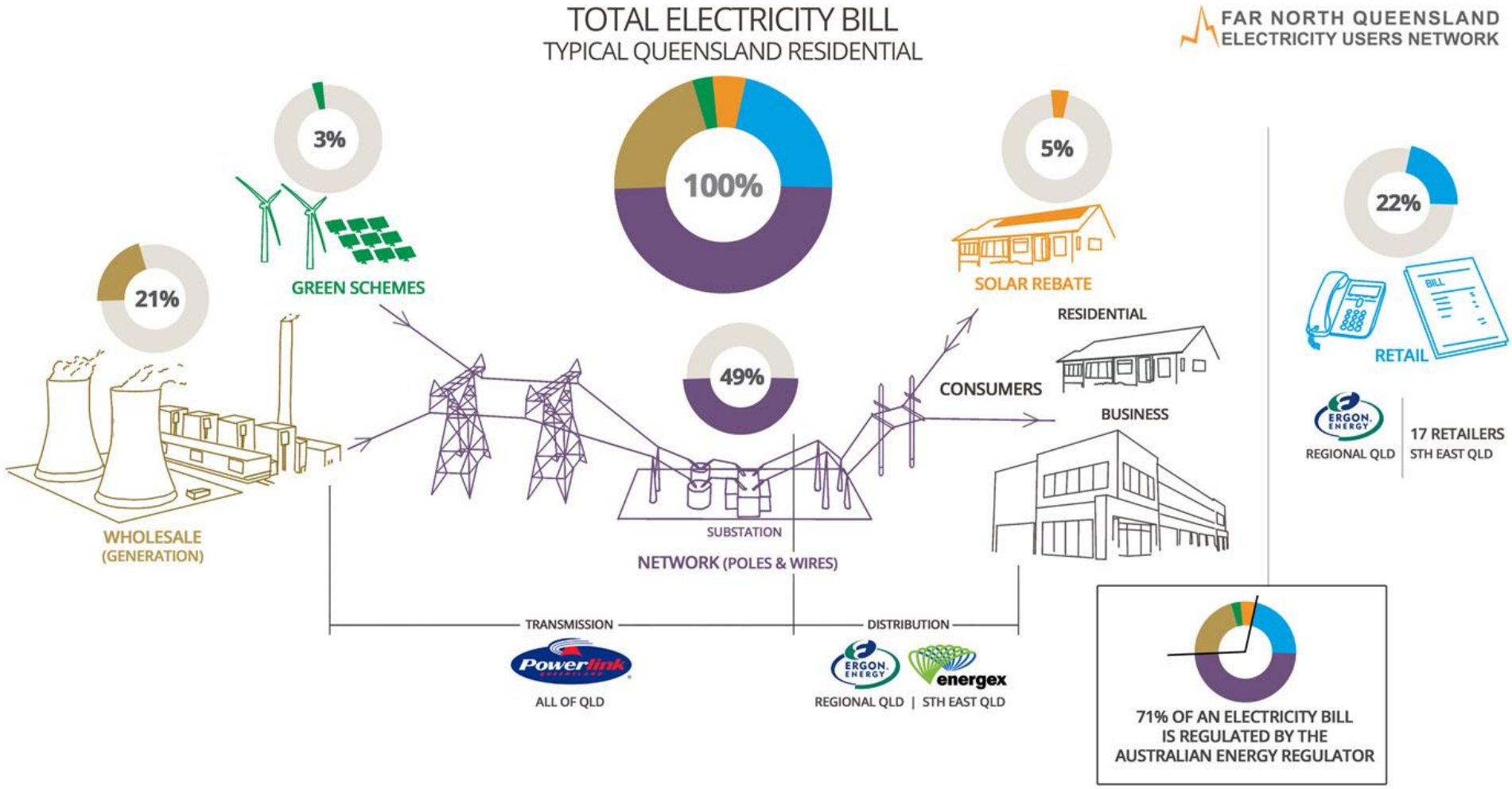
The FNQEUN believes that the Council of Australian Governments (COAG), with the Australian Energy Regulator (AER), have failed in their obligation to uphold the National Electricity Objective as per the Australian Energy Market Agreement dated 30 June 2004.

The National Electricity Objective, as set out in the National Electricity Law, is to:

"promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to –

(a) Price, quality, safety, reliability and security of supply of electricity; and
(b) The reliability, safety and security of the national electricity system"

Figure 1: Components of an Electricity Bill



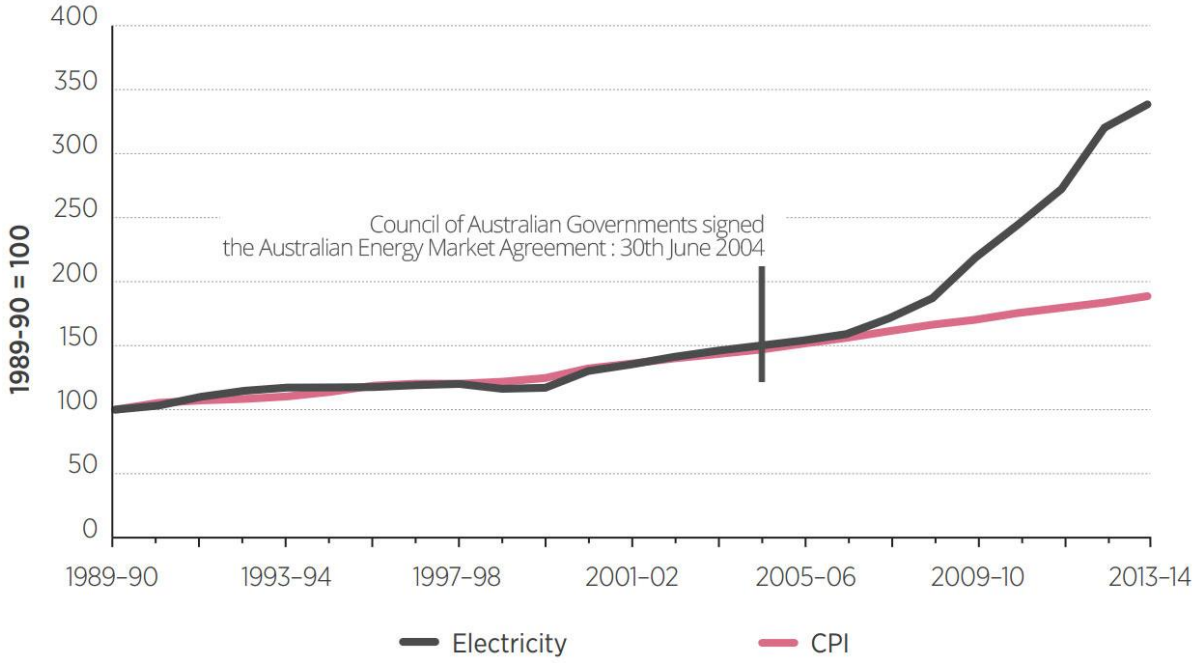
The National Electricity Rules (NER) and the interpretation of the rules by the Australian Energy Regulator has unwittingly created an Australia that every day is dividing Australians into two classes; those who can afford electricity and those who cannot.

The social and economic implications of an Australia divided by electricity affordability has not been addressed in any industry report.

At a recent Queensland Competition Authority (QCA) meeting on electricity prices for 2015-16, the QCA said they were not concerned about affordability, the QCA followed a methodology. The AER too, is following a methodology, the National Electricity Rules.

Since COAG signed the Australian Energy Market Agreement in 2004, national electricity prices have risen sharply (see **Figure 2**).

Figure 2: National Retail Electricity Price Index, 1989-90 to 2013-14



Source: Australian Government Energy White Paper, April 2015

According to the Australian Bureau of Statistics (ABS), electricity prices rose by around 50 percent nationally during 2010-2013. The ABS attributed the massive price rise to the investment in poles and wires to ensure reliable supply to customers, especially during peak periods. Both Ergon and Energex identified that the excessive price rise was directly attributed to the need for Queensland networks to achieve compliance standards well beyond those required for reliable supply in Queensland.

In the AER's 2013-14 Annual Report on the Performance of the Retail Energy Market the key findings noted that annual electricity bills increased by 22 percent in Queensland and represented a greater share of household income in 2014 (4.8 percent) compared with 2013 (4 percent).

Yet no warning bells are ringing at the COAG Energy Council or the Australian Energy Regulator.

It seems that electricity prices can continue to rise as long as they are noted and the methodology or rules are adhered to. There is no mechanism to make regulators and governments understand that if the methodology and rules result in an unaffordable and unsustainable electricity price the electricity price and rules should be reviewed.

Queensland Competition Authority statistics clearly show a growing number of customers unable to afford electricity. In the 12 months to March Quarter 2015, the number of residential customers participating in hardship programs increased by 67 percent in Queensland from 8,633 to 14,438 customers. Regional Queensland is the hardest hit with a 73 percent increase in the number of customers in hardship programs. Alarmingly, on average it is taking 154 days for regional Queenslanders on hardship programs to pay off a debt of $365. (See **Table 1.**)

Table 1: Customers in Queensland on a Hardship Program

Period	Participating in a hardship program (#)	% in a hardship program in Ergon area	Av. Debt on entry into a hardship program ($)	Av. Length of time a customer remained in a hardship program (days)
March Quarter	14438		n/a	n/a
- Ergon only	5087	35.23%	365	154
Dec Quarter 2014	12757		n/a	n/a
- Ergon only	3603	28.24%	390	174
Sept Quarter 2014	11422		n/a	n/a
- Ergon only	3242	28.38%	726	190
June Quarter 2014	9402		n/a	n/a
- Ergon only	3209	34.13%	388	196
March Quarter 2014	8633		n/a	n/a
- Ergon only	2938	34.03%	311	230
Dec Quarter 2013	7104		n/a	n/a
- Ergon only	2461	34.64%	389	264
Sept Quarter 2013	8497		n/a	n/a
- Ergon only	2998	35.28%	648	236
Dec Quarter 2012	8950		n/a	n/a
- Ergon only	5184	57.92%	768	292
Sept Quarter 2012	8653		n/a	n/a
- Ergon only	5293	61.17%	731	250
Dec Quarter 2011	7512		n/a	n/a
- Ergon only	4580	60.97%	645	247
Sept Quarter 2011	7309		n/a	n/a
- Ergon only	4454	60.94%	696	181
Dec Quarter 2010	5311		n/a	n/a
- Ergon only	2659	50.07%	633	191
Sept Quarter 2010	4932		n/a	n/a
- Ergon only	2367	47.99%	663	163

Source: Queensland Competition Authority.

Participating in a hardship program means the customer has a debt to an electricity retailer that has been outstanding for a period of 90 days or more. For 9,140 Queensland customers paying the bill was not possible in March Quarter 2015 and their home or small business was disconnected (see over **Table 2**). Queensland disconnections between March Quarter 2014 and March Quarter 2015 rose 26 percent. Again regional Queensland was hardest hit with disconnections rising by 30 percent in the same time period.

The most telling statistic relates to those most affected by unaffordable and unsustainable electricity prices. In March Quarter 2014, Queensland pensioners and concession card holders made up 18.28 percent of customers disconnected in Queensland due to non- payment. This has since risen to 21.85 percent in March Quarter 2015 (see over **Table 2**). This clearly demonstrates that contrary to popular belief, around 80 percent of disconnections due to non-payment of an electricity bill are ordinary working families and individuals.

Working families and individuals need jobs to pay their electricity bill. Statistics compiled by the Queensland Competition Authority indicates that the number of businesses disconnected due to non-payment increased by 31 percent to 720 businesses between March Quarter 2014 and March Quarter 2015 (see also **Table 2** over). There is no data available as to the number of employees in the disconnected businesses but no electricity usually means no or reduced productivity from a business which generally translates to reduced working hours or redundancies.

Queensland is not alone in experiencing unaffordable electricity. Other states show a similar worrying trend.

AER statistics show the number of customers on payment plans in New South Wales rose 66 percent in the 9 months to March Quarter 2015, from 60,960 to 101,327 customers (see **Table 3**).

Table 3: Customers in NSW on a Payment Plan

Retailer	Jun 2014	Sep-14	Dec-14	Mar-15
ActewAGL	124	170	163	190
AGL	4300	5397	4155	3512
Click Energy	25	34	41	29
CovaU	-	0	0	7
Diamond Energy	5	9	13	50
EnergyAustralia	16669	19120	31666	59320
Lumo Energy	1428	1503	1765	1827
M2 Energy	9	25	35	33
Momentum Energy	278	363	578	297
Origin Energy	35928	32461	31697	33035
Powerdirect	162	243	277	214
QEnergy	25	20	38	27
Red Energy	1685	158	1858	1811
Sanctuary Energy	29	107	51	49
Simply Energy	293	602	891	926
Total	60960	60212	73228	101327

Source: AER retail statistics.

Table 2: Total Queensland Disconnections and Percentage of Pensioners Disconnected

Period	Business Customer		Residential Customer				Total Customers		% Business Customers Disconnected (using Distributor data)	% Pension/ Concession Card Holders (using Retailer data)
			Retailer data							
	Retailer data	Distributor data	Pension/ Concession Card Holder	Others	Total	Distributor data	Retailer data	Distributor data		
Mar Qtr 2015	540	720	1830	6545	8375	8420	8915	**9140**	7.88%	21.85%
- Ergon only	199	199	832	2949	3781	3781	3980	3980	5.00%	22.00%
Dec Qtr 2014	436	581	1502	5072	6574	6525	7010	7106	8.18%	22.85%
- Ergon only	142	142	698	1911	2609	2609	2751	2751	5.16%	26.75%
Sept Qtr 2014	622	758	1404	5680	7084	7301	7706	8059	9.41%	19.82%
- Ergon only	180	180	752	2243	2995	2995	3175	3175	5.67%	23.69%
June Qtr 2014	549	647	1351	5409	6760	6953	7309	7600	8.51%	19.99%
- Ergon only	162	162	891	2590	3481	3481	3643	3643	4.65%	25.60%
Mar Qtr 2014	508	551	1210	5408	6618	6713	7126	7264	7.59%	18.28%
- Ergon only	106	106	733	2227	2960	2960	3066	3066	3.46%	24.76%
Dec Qtr 2014	436	581	1502	5072	6574	6525	7010	7106	8.18%	22.85%
Dec Qtr 2013	495	446	1378	4300	5678	6048	6173	6494	6.87%	24.27%
Dec Qtr 2012	355	373	1071	3888	4959	4976	5314	5349	6.97%	21.60%
Dec Qtr 2011	320	356	959	4452	5411	5527	5731	5883	6.05%	17.72%
Dec Qtr 2010	357	360	881	4052	4933	4986	5290	5346	6.73%	17.86%

Source: Queensland Competition Authority.

The National Electricity Rules stipulate that electricity retailers must offer payment plans to customers experiencing payment difficulties. Customers using flexible payment arrangements for convenience or budgeting purposes are excluded from payment plans. In the same 9 month period, New South Wales customers on hardship programs rose 27 percent from 18,293 to 23,526 customers (see **Table 4**).

Table 4: Customers in NSW on a Hardship Program

Retailer	Jun-14	Sep-14	Dec-14	Mar-15
ActewAGL	416	423	418	433
AGL	4743	5592	5791	6099
Click Energy	0	0	26	32
Diamond Energy	0	1	1	3
EnergyAustralia	3517	3279	3743	4483
Lumo Energy	209	276	206	184
M2 Energy	240	301	308	295
Momentum Energy	14	35	59	125
Origin Energy	8714	11873	12184	10742
Powerdirect	24	45	60	73
QEnergy	20	24	28	16
Red Energy	347	285	285	274
Sanctuary Energy	0	0	20	14
Simply Energy	49	190	397	580
Total	18293	22324	23526	23353

Source: AER retail statistics.

The affordability problem is easily hidden when the AER's affordability statistics are expressed as a single digit percentage. However, each customer that can't pay their bill and is disconnected or enters a hardship or payment plan is a household. There are thousands of such households spread across the National Electricity Market which includes Queensland, New South Wales, Australian Capital Territory, Victoria, South Australia and Tasmania. Each month thousands of Australian households join the existing thousands of households struggling to pay their electricity bills.

The unseen impacts of electricity bill stress include the following examples;

- homes without adequate heating – consequence; colds and flus which require medication or hospitalisation, etc;
- homes without adequate cooling – consequence; dehydration which requires medication or hospitalisation, etc;
- homes without adequate lighting – consequence; personal injury from falls, burns or attacks,etc;
- homes without computers – consequence; inability of kids to do their homework, etc

Most of the organisations involved with the FNQEUN are small businesses. It is important to note that the engine room of the Australian economy - small businesses - do not have access to hardship programs under the National Electricity Rules. Similarly, large electricity customers do not have access to hardship programs.

Since more than 80 percent of Queensland is now officially drought declared and an El Nino is predicted to bring drier conditions in the months ahead, it is not just city houses that will be left in the dark, farm houses will also be burning candles.

The precarious situation many small and large businesses are experiencing is not registering with the AER or COAG. It's all about whether the electricity businesses comply with the rules.

Far North Queensland faces the possible closure of two sugar mills plus other manufacturing and processing plants. Large processing businesses are the mainstay of many regional economies and the ripple effect of their closure would be economically and emotionally devastating to whole towns and communities. One long established regional manufacturing business employing up to 100 people has managed to negotiate on average a 2 percent rise on all input costs except for electricity. Their electricity bill increased 52 percent in 5 years. Electricity is necessary for the business to continue operating.

One dairy farm milking 250 cows has experienced a jump in their electricity bill from $12,000 to $22,000 in 2 years. It is not possible to milk 250 cows in 3 hours by hand, they need electricity to operate. Milk is an essential food item. High electricity prices have a much broader effect on households than just paying an electricity bill. High electricity prices flow through into every commodity and services purchased. It is making the average weekly grocery bill increase. If farmers cannot afford to irrigate, the cost of food such as fruit, vegetables and meat will increase due to lower supply. Even cows that need hay during the drought will be affected as hay growers are now turning off their electric pumps and reducing the hay production.

High electricity prices will mean less crops, less mining commodities, less hotel rooms occupied , less construction and ultimately less taxes and mining royalties to state and federal governments.

For the ordinary Australian the major concern is job security. At a time of high unemployment businesses are struggling to keep existing jobs let alone create new jobs. Lower electricity prices would stimulate regional productivity and jobs growth and would benefit every business regardless of their geographic location.

Current unsustainable and unaffordable electricity prices being experienced across the National Electricity Market has started a death spiral that is poised to accelerate. The death spiral is price driven. The higher the electricity price, the lower the demand for electricity, the less customers there are to share the high capital and operating costs of the poles and wires distribution network. Hence, as the unit cost of electricity increases, more customers reduce their demand or leave the grid completely. This again increases the cost for those customers remaining on the network and the death spiral continues.

The death spiral is the result of a regulatory framework that is unable to join the dots and paint a picture. Regulatory authorities and distribution businesses such as Ergon Energy have become intensely segmented and specialised and until recently have had minimal meaningful engagement with customers.

Customers are now challenging the business plans of distribution network businesses such as Ergon Energy. The Public Interest Advocacy Centre (PIAC), a NSW consumer organisation, has launched the first ever legal challenge on behalf of consumers to the AER's recent NSW distribution network revenue decisions.

If the Australian Competition Tribunal rules in favour of PIAC the average household electricity bill in NSW could be reduced by more than $150 next year. If the NSW distribution networks (the equivalent of Ergon Energy and Energex in Queensland) are successful, the average electricity bill in NSW could rise by $420 next year.

One transmission network in the National Electricity Market has recognised the financial and emotional distress caused by high electricity prices. In 2012-13 and 2013-14, Tasmania had the highest annual electricity bills in Australia. In TasNetworks acceptance of the AER's Draft Decision for 2015-2019 it stated;

"*Central to these changes are our customers – who are changing the way they use electricity in response to technological developments and financial pressures, both domestically and internationally. In preparing our Revenue Proposal we responded to customer feedback by proposing significant cost savings without compromising network safety and reliability*."

Finally, an electricity network business needs to understand the concept that it must produce a product that is affordable to its customers.

In the rush to tackle climate change and embrace competition, the COAG Energy Council has ignored a number of basic principles that TasNetworks does understand:

- A business only exists if it has customers;
- A business must make sufficient profit from its customers to cover its expenses and provide funds for its ongoing operations;
- If a business is overpriced, customers will if possible, shop elsewhere.

A partial collapse of the national electricity grid, stranded customers (particularly regional customers) or stranded assets caused by unaffordable electricity prices would be a complete failure of the COAG Energy Council to uphold the National Electricity Law which stipulates that it must take into account the long term interests of consumers.

The way forward starts with meaningful engagement with a broad cross section of customers, a simple demand and supply exercise and the management of what the electricity industry considers to be the disruptive technologies of solar photovoltaics (PV) and batteries.

A ***SMOOTH*** TRANSITION TO A RENEWABLE ENERGY FUTURE: The National Grid versus Solar PV

The electricity industry is full of complex jargon when it comes to discussing how consumer organisations can achieve "competitively priced and reliable electricity".

The complexity of the jargon is matched only by the myriad of federal and state regulatory authorities, government departments and individual components of the supply electricity chain eg Ergon Energy, with which consumer organisations must engage with to present a case for affordable electricity prices.

The level of complexity and specialised responsibility developed by electricity entities has provided the perfect environment for the electricity industry to divorce itself from the real world of the consumer.

The electricity industry would have you believe that electricity pricing and supply is complicated. It is not complicated.

Electricity pricing is simply about supply and demand.

The customer will buy if the price is right and the supply is reliable.

SUPPLY FROM THE NATIONAL GRID

Traditionally and at present, non-renewable power stations fuelled by coal and gas have supplied the majority of the electricity produced in Australia. Non-renewable energy sources provide low cost, predictable and reliable power to Australia.

The Australian Energy Market Operator (AEMO) is the entity responsible for the operation and planning of the National Energy Market (NEM). The NEM is the wholesale market for electricity supply in Queensland, New South Wales, Victoria, Tasmania, South Australia and the Australian Capital Territory. The NEM supplies electricity from generators to the customer via the national grid; the transmission and distribution networks that traverse the states and the ACT.

AEMO estimates there is potentially between 7,650 MW and 8,950 MW of surplus capacity across the NEM. Approximately 90% of this is in New South Wales, Queensland and Victoria (see Table 5).

For the first time in the NEM's history, as a result of decreasing operational consumption, no new capacity is required in any NEM region to maintain supply-adequacy over the next 10 years.

Table 5: Surplus capacity in the NEM by region across high, medium and low growth scenarios

Region	2014–15	2023–24
Queensland	Between 2,200 MW and 2,850 MW	Between 1,100 MW and 3,650 MW
New South Wales	Between 2,800 MW and 3,100 MW	Between 1,500 MW and 3,450 MW
Victoria	Between 1,950 MW and 2,200 MW	Between 1,450 MW and 3,100 MW
South Australia	Between 550 MW and 600 MW	Between 350 MW and 1,050 MW
Tasmania	Between 150 MW and 200 MW	Between 250 MW and 750 MW
Total	Between 7,650 MW and 8,950 MW	Between 4,650 MW and 12,000 MW

Source: AEMO Electricity Statement of Opportunities for the NEM, August 2014

Despite the current oversupply in Queensland of between 2,200 MW and 2,850 MW, AEMO is tracking another 5,625 MW of generation proposed for Queensland. Most of the proposed generation is gas powered (45%) but also includes wind (36%), large scale solar (13%), hydro (3%) and biomass (3%). The generation withdrawn in Queensland equates to 925 MW.

To put this into perspective, companies are proposing more generation for an oversupplied Queensland market, a large portion of which is more expensive than the traditional coal fired electricity generation. Of particular note is the non-inclusion of small scale renewable energy such as rooftop solar PVs in AEMO's calculation of generation capacity (see Table 6).

Table 6: Queensland generation and project capacity by generation type (MW)

Status/Type	Coal	CCGT[a]	OCGT[b]	Gas other	Solar	Wind	Water	Biomass	Other	Total
Existing	8,406	1,627	1,103	30	0.4	12	664	364	879	13,085
Committed	-	-	-	-	44	-	-	-	-	44
Publicly announced	-	-	2,545	-	679	1,999	200	158	-	5,581
Withdrawn	540	385	-	-	-	-	-	-	-	925

Source: AEMO Electricity Statement of Opportunities for the NEM, August 2014

The national situation mirrors the Queensland problem.

Despite the current national oversupply of between 7,650 MW and 8,950 MW in the NEM, AEMO is tracking 25,329 MW of proposed new generation capacity. This includes 58% (14,589 MW) wind, 25% (6,300 MW) gas, 8% (2,000 MW) coal, 4% (1,152 MW) solar, 2% (599 MW) water and 3% (689 MW) other generation. The generation withdrawn equates to 2,240 MW, consisting of 1,855 MW of coal and 385 MW of gas generation. Again the omission of rooftop solar generation needs to be noted.

SUPPLY FROM SOLAR PVs

The current Queensland Government policy is to have one million solar PVs installed by 2020.

According to Ergon and Energex's Distribution Annual Planning Reports, both dated September 2014 and covering the period from 2014-15 to 2018-19, Ergon has 98,910 solar PV connections equating to 14% of its 720,000 customers. Energex has over 250,000 solar PV connections within its 1,363,815 customer base representing 18% .

This would equate to around 349,000 customers with solar PVs in Queensland.

To meet the Queensland Government's goal of one million solar PVs by 2020, over 651,000 customers will need to install solar PVs in a six year (72 month) period. This would require a connection rate of approximately 9,000 per month.

In Ergon's Distribution Annual Planning Report, Ergon estimate the number of solar PV connections for 2014-15 to 2018-19 to be between 162,000 and 258,000. This would require an connection rate of approximately 2,700 to 4,300 per month.

Energex is estimating a connection rate of 2,500 to 3,000 per month.

This could result in 5,200 to 7,300 connections per month in Queensland or between 374,400 and 525,600 over a 6 year (72 month) period to 2020.

The combined Ergon and Energex connections could equate to between 723,400 and 874,600 solar PVs installed by 2020 – short of the Queensland Government's one million target.

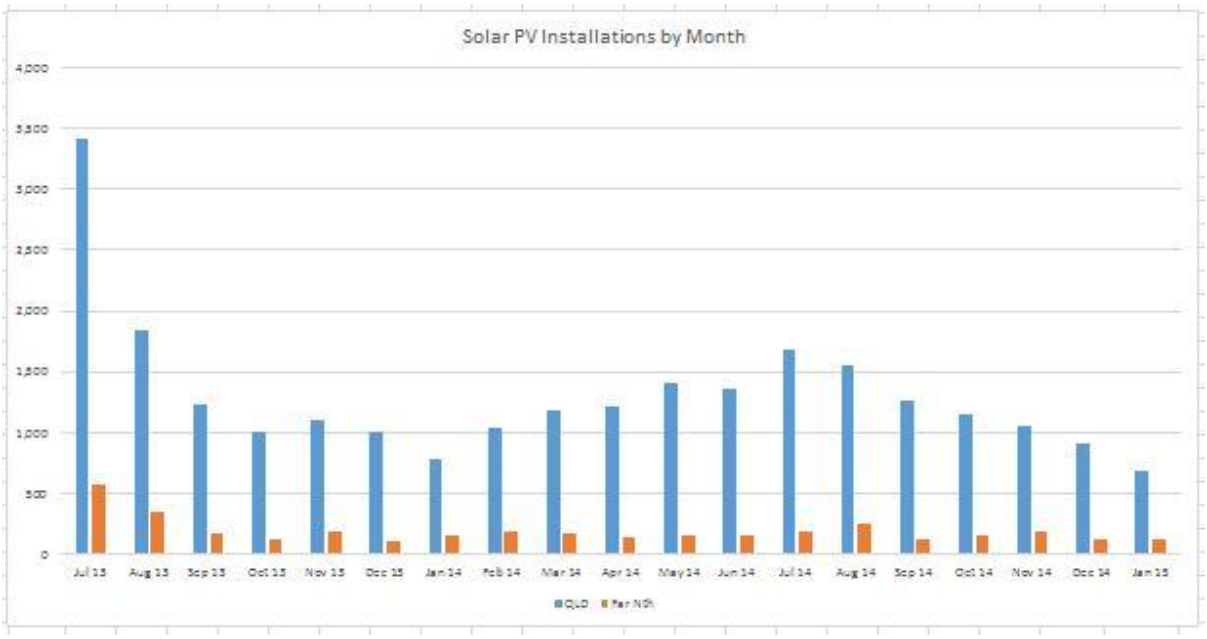
The average capacity in the Ergon network area is 3.7 kW. The average capacity has increased from 2.1 kW in 2008-09 to 4.6 kW in January 2014.

Assuming an average capacity of 4 kW, the combined connections to the Ergon and Energex distribution networks could total between 2,984 MW to 3,498 MW by 2020. The Queensland Government's target of 1 million solar PVs could result in an installed capacity of 4,000 MW.

But how realistic is Ergon and Energex's solar PV connection estimates and hence the installed capacity or supply of electricity from solar PV in Queensland

In January 2015 there were only 684 solar PVs connections in the Ergon area of regional Queensland, well below Ergon's estimates of 2,700 to 4,300 connections per month (see Table 7).

Table 7: Solar PV installations in Ergon area by Month



Source: Ergon Energy

However, new business strategies adopted by the biggest through to the smallest electricity retailers in Australia are set to transform the source of generation for residential and small business customers. Solar Power Purchase Agreements (SPPAs) are approved and regulated by the Australian Energy Regulator and are authorised to operate throughout the national grid.

Solar Power Purchase Agreements allow an electricity retailer to install solar PV on a residential or small business customer's roof or premises at no upfront cost. The solar PV capacity will be matched to the customer's individual demand. The SPPA company is likely to suggest that electricity supply will not be a problem as the customer is still connected to the distribution network ie Ergon and Energex in Queensland. Hence, during the night or on a rainy or overcast day the customer will still have access to reliable electricity.

The solar PV is owned by the SPPA company, even though the solar PV is fixed to the customer's roof or property.

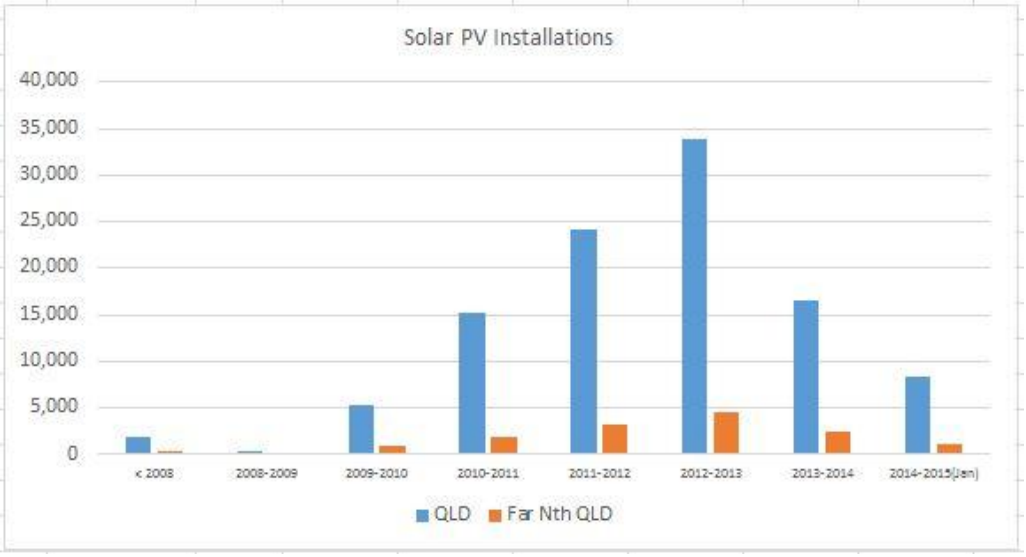
The SPPA company may offer a price which could be 20 percent lower than a customer's current electricity retailer. However, the SPPA is likely to require monthly payments for the term of the SPPA which could be 15 years. The customer must agree to pay for all the electricity generated by the installed solar PV. A customer with an SPPA will still need to be a customer of an electricity retailer using the Ergon or Energex distribution network unless they have invested in battery storage.

This is the hidden catch likely to be exploited by SPPA companies – the connection cost to the national grid is rising dramatically. In Queensland the fixed cost or service fee will rise 40% or more in 2015-16. SPPA customers may have a cheaper electricity price but to ensure 24/7 reliable supply they will need to pay the high fixed component or service fee to access electricity from the grid. The more demand removed from the national grid due to customers signing 15 year plus SPPAs, the higher the service fee. Again the death spiral of higher prices lowering demand is evident. Battery technology is advancing in leaps and bounds and its uptake will be accelerated by the high service fees paid to access supply from the grid when the solar PV is not producing electricity.

Customers are currently being harassed by telemarketers selling solar PVs. Their catch line is they can organise a site visit by a consultant to ascertain if a customer qualifies for a solar rebate. The solar PV companies are using the incentive of a customer receiving credits (a reduced electricity bill) to entice customers to sign a SPPA.

As discussed earlier, Queensland and Australia is oversupplied for at least the next 10 years on current demand estimates and there is more large scale generation proposed for Queensland and throughout the national grid. The generous 44 cents per kWh Feed-In Tariff has ceased, however the direct effect of boosting solar PV installations is shown in Table 8.

Table 8: Solar PV installations in Ergon area



Source: Ergon Energy.

The current Feed In Tariff in Queensland is 6.348 cents per kWh. The 44 cents Feed- In Tariff is paid by every Queensland consumer and accounts for approximately 5% of an electricity bill (see Figure 1).

The effect of small scale rooftop solar PV on overall demand for grid supplied electricity is placing the future of the national grid at risk.

In AEMO's 2015 National Electricity Forecasting Report it states:

"*that in 2014-15, the total demand of 1,235 MW for a particular day in South Australia was offset by 445 MW of rooftop PV resulting in a minimum demand of 790 MW from the grid occurring in the middle of the day. This was the lowest grid demand experienced in South Australia in the past ten years and resulted in rooftop PV contributing one-third of total demand for this particular time of the day.*

This trend of rooftop solar PV offsetting demand in South Australia is forecast to continue and by 2023-24, the minimum demand required from the grid in South Australia could fall below 0 MW, assuming current market conditions continue.

This means that by the summer of 2023-24, rooftop PV generation could be sufficient to meet all demand in that region, at that specific minimum demand time.

AEMO is investigating this scenario and the possible consequences of such an event on system security and reliability."

The widespread adoption of the SPPA business model by electricity retailers across the national grid, together with a Queensland Government policy of a million solar PVs, severely reduces the demand for grid supplied electricity.

DEMAND

The major reason for Queensland's unaffordable electricity bills is Ergon's network charges. Ergon's exorbitant network charges are a hangover from the 2010-15 regulatory period when the Australian Energy Regular approved capital and operating expenditure for a demand which did not eventuate.

We believe that Ergon's demand forecasts are again significantly overestimated. Ergon has failed to understand the impact of unaffordable electricity prices on customers and unlike TasNetworks shows no sign of adjusting its capital and operating expenditure to reflect falling demand for grid supplied electricity.

Furthermore, Ergon's $11 billion regulatory asset base which is automatically increased by the CPI each year, should instead be significantly reduced to accurately reflect the declining value of the asset caused by the falling demand over the next 5 years.

SUMMARY

Electricity pricing is simply about supply and demand.

Grid supplied electricity will reduce over the next 5 years depending upon the pace of uptake of solar PVs and batteries.

Unaffordable electricity prices, together with the Queensland Government's policy to install one million solar PVs by 2020, will severely impact on Ergon.

The Preliminary Decision of the Australian Energy Regulator regarding Ergon's 2015-2020 Revenue Determination will not address the systemic problem of Ergon's falling demand which will ultimately reduce Ergon's revenue over the next 5 years. The reduction in Queensland electricity bills as a result of the AER's Preliminary Decision is the equivalent of 3 slices of bread

a week. This saving is not enough to incentivise a residential customer to remain loyal to grid supplied electricity accessed via Ergon's distribution network.

The Australian Energy Market Agreement was signed by the Council of Australian Governments in 2004. This was a period of demand growth for the grid and its associated networks such as Ergon. The COAG Energy Council, the AER and electricity networks such as Ergon have not kept pace with the changes and more importantly are failing to keep in touch with the customer.

By reducing electricity prices and making electricity affordable again, it is possible to plan a smooth transition to a renewable energy future. Affordable electricity will allow households to maintain a reasonable standard of living and businesses to produce more goods and services and employ more staff.

The foundation of a transition plan is an in-depth knowledge of customer demand. Ergon needs to better understand customer demand to accurately estimate capital and operating expenditure and the value of its regulatory asset base.

Due to Ergon's poor demand forecasting, particularly its inability to more accurately understand the impact of solar PVs, Ergon's demand forecasts are again too high. In other words, the AER is poised to make the same mistake as it did for the 2010-15 regulatory period and allow a revenue cap that does not relate to demand.

The only difference between 2010-15 and 2015-2020, is technology and the rules have allowed Solar Power Purchase Agreements to give customers an alternative to Ergon. For residential and business customers stranded on the grid, COAG will need to justify that it has acted in the long term interests of customers.

Appendix 1

The following is a list of organisations involved in the FNQ Electricity Users Network:

1. Cairns Regional Council
2. Tablelands Regional Council
3. Cook Shire Council
4. Far North Queensland Regional Organisation of Councils
5. Advance Cairns
6. Tourism Tropical North Queensland
7. Regional Development Australia FNQ & Torres Strait
8. Cairns Chamber of Commerce
9. Mareeba Chamber of Commerce
10. Atherton Tablelands Chamber of Commerce
11. Innisfail District Chamber of Commerce, Industry and Tourism
12. Urban Development Institute of Australia (Cairns branch)
13. Consolidated Tin Mines Ltd
14. Canegrowers - Tablelands
15. North Queensland Miners Association
16. Australians in Retirement (Cairns branch)
17. Queensland Dairyfarmers Organisation (Northern Division)
18. Mareeba District Fruit and Vegetable Growers Association
19. Mareeba Shire Council