



Submission to the Queensland Competition Authority

Regulated Retail Electricity Prices 2013-14 Transitional Issues & Cost Components and Other Issues

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Cotton Australia

Cotton Australia is the key representative body for the Australian cotton growing industry. It helps the industry to work together to be world competitive and sustainable, and also tell the good news about the industry's achievements. Cotton Australia determines and drives the industry's strategic direction, retaining its strong focus on R&D, promoting the value of the industry, reporting on its environmental credibility, and implementing policy objectives in consultation with its stakeholders.

Cotton Australia works to ensure an environment conducive to efficient and sustainable cotton production. It has a key role in Best Management Practices (myBMP), an environmental management program for growers. This work has seen a significant improvement in the environmental performance of the industry, with huge improvements in water use efficiency, significant reductions in pesticide use, and millions of dollars invested into R&D.

The Australian cotton industry directly employs thousands of Australian's and this year will contribute over \$1 billion to the Queensland economy.

Cotton Australia welcomes the opportunity to provide this submission to the Queensland Competition Authority's (QCA) Inquiry into *Regulated Retail Electricity Prices 2013-14*.

Cotton Australia is a member of the Queensland Farmers Federation (QFF).

Cotton Australia is aware that QFF will also be making a submission to this Inquiry, and while Cotton Australia is confident that this submission will reflect the views of QFF, if there is any divergence of views expressed then Cotton Australia's position is the one outlined in this paper.

For further information on this submission please contact Cotton Australia's Queensland Policy Manager Michael Murray – 0427 707 868 or michaelm@cotton.org.au .



Executive Summary

Cotton Australia is concerned about the disconnect between the various electricity industry sectors and their regulators, and believes that the QCA should have a future role in overseeing such issues as the prudence of network expenditure and the determination of an appropriate Return-on-Asset rate.

Further is greatly concerned by the lack of appropriate tariffs that reflect the usage patterns of irrigators, and the complete disincentive to access off-peak power.

It is also greatly concerned that the classification of many its irrigators as “Large” electricity users, and their forced migrations to Tariffs 44-46, will render the use of electricity by these users totally uneconomic, and force them to alternative power sources.

Cotton Australia has documented electricity bill increases for these users in the order of 200 to 300%, and has called on the QCA to allow these users to continue to access Tariffs 62-66 for 20 years as a transitional measure that recognises the effective life of their current pumping installations.

Cotton Australia has made the following recommendations:

Recommendation: *That the Queensland Government ensures that the QCA has a future role in scrutinising energy network costs and pricing.*

Recommendation: *That the Queensland Government commission a review of existing tariffs, to ensure irrigators have access to tariffs that match their usage requirements and ensure access to electricity in an affordable manner.*

Recommendation: *Electricity users currently accessing Tariffs 62-66 who are deemed to be “large”, be able to access their current tariffs till June 30, 2034.*

Recommendation: *That alternative tariff structures be developed that provide realistic incentives for “shoulder” and “off-peak” use, and until they are available users should be able to continue to access Tariffs 62-66 through till June 30, 2034.*

Recommendation: *That QCA undertake a Tariff Comparison exercise, utilising actual 5-year electricity usage data for randomly selected Ergon clients currently accessing Tariffs 62-66, so as to be able to fully demonstrate the impact users would face if they were unable to access the obsolete tariffs.*



General Comments

In preparing this submission Cotton Australia has focused its attention primarily on the issues raised in the *Transitional Issues* paper, but strongly endorses the QFF's response to the issues raised in the *Cost Components and Other Issues* paper.

However, Cotton Australia believes the current disconnect between the various sectors of the electricity industry and its regulatory bodies is entirely unacceptable.

It is particularly concerned about the fact that the QCA must simply accept network charges that have been approved by the Australian Energy Regulator (AER).

It is simply unacceptable that in today's economy the AER can apply a Return-on-Assets of 9.72%, and that 63% of a networks income can be achieved from the ROA component.

There needs to be much closer scrutiny of network pricing, along with much greater scrutiny of the prudence of network expenditure.

Recommendation: *That the Queensland Government ensures that the QCA has a future role in scrutinising energy network costs and pricing.*

Further, as highlighted later in this submission there is a great need for tariffs that provide a genuine "time-of-use" incentive, and can provide affordable electricity for the usage patterns described below.

The Queensland cotton industry has a high reliance on irrigation, and much irrigation pumping is powered by electricity.

The changes to tariffs following the 2012-13 QCA Determination will have a significant impact on a large number of cotton growers who rely on electricity for irrigation.

Modelling shows that in a number of instances the impact will be in the order of 200-300% increases, particularly for irrigators forced from Tariffs such as 62, 63, 64, 65 and 66 onto the 44, 45 or 46 Demand Tariffs (See case study below).

Broadly speaking, cotton grower irrigation electricity-use profiles fall into three categories and the new tariffs structures will impact on these categories differently.

Large Users: Typically, these are larger users with a high reliance on supplemented, unsupplemented and overland flows. When water is available in the river at levels that satisfy



their licence requirements, they activate their pumps, and will pump 24hrs a day, seven days per week while the water is available.

However, the reality is that months, and sometimes years, may pass with no pumping, and when pumping is activated it may be for as little as day, could extend to several days or even weeks, but would very rarely extend to a month of continuous pumping.

Typically they use large capacity pumps, which do have relatively high electricity requirements.

Their usage profile can be summarised as relatively high demand requirement, highly climate dependant, and episodic usage.

24hr Users: Typically these are users with smaller water licences than the larger users described above, who use electricity not only to draw water from their primary source be it river, bore or overland flow, but may also use electricity to power irrigation systems such as drip irrigation, centre pivot irrigators or recycling pumps.

When they pump, they tend to pump for 24hr periods, and their usage is a little more predictable than the large users describe above, but still with significant variability, primarily related to season conditions.

Their usage profile can be summarised as medium demand requirement, broadly predictable, but still subject to significant climate induced variability.

Off-Peak: Usage is similar to the 24 Hour users described above, except these users have invested in higher capacity infrastructure, allowing them to operate primarily during off-peak/shoulder periods, such as nights and weekends.

Their usage profile can be summarised as having a higher peak demand per hectare irrigated (when compared with 24hr users), broadly predictable, but subject to significant climate induced variability and a high preference for off-peak/shoulder use.

Off-peak usage is also favoured by many growers for their recycling pumps.

It is imperative that suitable tariffs that reflect the above usage patterns are available to irrigators.

Cotton Australia is very concerned that a review of the suitability of the existing tariff structures for irrigation is outside its Terms of Reference for this Inquiry. If this is the case, it is imperative that the Queensland Government commission such a review.



Recommendation: That the Queensland Government commission a review of existing tariffs, to ensure irrigators have access to tariffs that match their usage requirements and ensure access to electricity in an affordable manner.

Responses to the Authority's specific questions

The Authority seeks stakeholders' views on the following:

(a) How should the Authority determine whether transitional arrangements are necessary for each obsolete tariff? What would be considered a "significant" price impact?

Given the significant electricity price increases that have occurred over the past five years, any increase in excess of CPI should be considered a "significant" increase, with the maximum increase allowed in any one year capped at $CPI \times 2$. Transitional arrangements will be required while ever required increases are deemed to be greater than $CPI \times 2$.

However, more importantly the Authority must ensure that electricity users have appropriate access to tariffs that encourage off-peak use, with a far greater differential than the 2 cents provided for by Tariff 22, and those users who made investment decisions based on access to Tariffs such as 62, 63, 64, 65, and 66 are not massively disadvantaged by being identified as "large customers" and forced onto Tariffs 44, 45 or 46.

These demand tariffs are completely unsuitable for irrigators because their usage is neither highly predictable nor regular.

(b) Are there any non-financial reasons why obsolete tariffs should be retained or other transitional arrangements put in place?

Irrigators have made significant investment based on the tariff structures that were available to them at the time they made their investment decisions.

Cotton Australia is aware of numerous instances where pumping and irrigation infrastructure has been designed and purchased so as to best utilise the electricity pricing regime available under a particular tariff.

For example, an irrigator in the Emerald District, made investment decisions based on being able to access Tariff 65, and concentrate on irrigation only over weekends.

In all but the hottest conditions this irrigator pumps from the river into an on-farm dam, and then uses three centre-pivot irrigators to irrigate, again over the weekend period.



In deciding to utilise the weekend tariffs, this irrigator has had to build significant extra capacity into his irrigation system – a significantly larger pump, storage dam, and pivot delivery capacity, than would have been required if he had opted to regularly irrigate seven days per week, 24 hours per day.

In addition to the financial cost of doing this, he has also developed his management and labour structures so as to allow him to concentrate on weekend watering.

Under the current arrangements it appears that this irrigator will be forced to transition to either Tariff 44 or 45 if he is to continue to rely on electricity. However, should he be forced to he has indicated that he would have no choice but to turn to an alternative energy supply such as diesel.

(c) If transitional arrangements are necessary:

(i) Should the obsolete tariffs be retained and escalated or should other transitional arrangements be put in place?

Unless and until there are more suitable alternative tariffs for irrigators who are classified as “large” they must be able to continue to access their current tariffs 62-66 for the life of the irrigation infrastructure that they have invested in.

This could be achieved either through site-by-site assessment, or by adopting a simplified process were the life of all the infrastructure is deemed to be 20 years.

Recommendation: *Electricity users currently accessing Tariffs 62-66 who are deemed to be “large”, be able to access their current tariffs till June 30, 2034.*

For small users accessing Tariff 62-66, the priority must be to ensure tariffs are available that encourage “off-peak” and “shoulder” usage. While users should be able to transition to Tariff 22 if they like, they should also be able to remain on their existing Tariffs for 20 years, or until suitable alternative tariffs are available.

Recommendation: *That alternative tariff structures be developed that provide realistic incentives for “shoulder” and “off-peak” use, and until they are available users should be able to continue to access Tariffs 62-66 through till June 30 2034.*

(ii) What would be a reasonable level of annual price increase and over what time period should transitioning occur?

Given the considerable increases in electricity prices over the past five-years, future increases should be capped at no more than CPI x 2.



As detailed above, the transitioning period should reflect the effective life of investments made based on Tariffs available, and therefore should be 20 years.

(d) Any other suggestions on how customers might be transitioned from below cost prices to prices that more closely reflect the cost of consumption?

As detailed throughout this submission.

The Authority seeks stakeholders' views on whether large customers on Tariffs 44, 45, 46, 47 and 48 should be able to access any transitional arrangements that are put in place for large customers on obsolete tariffs.

Cotton Australia believes as a matter of principal that users should be able to continue to access the tariff that was available to them when they made their investment decision, while ever their original investment remains current.

Therefore, an existing large customer that made an investment decision based on accessing Tariff 44-48 should not be able to access any transitional arrangements.

Further, should an irrigator wish to replace existing infrastructure (not just repair) or install new infrastructure that new infrastructure should not be able to access the obsolete tariffs, as the irrigator would be making the investment decision based on available tariffs.

Financial Impacts

The case study below highlights the potential financial impact on a number of irrigators located in the St George district if they are forced to migrate to one of the Demand Tariffs.

Cotton Australia is very aware that these particular growers are not unique, and the impacts they will face will also be faced by a large number of cotton growers in regions such as the Central Highlands, Dawson Valley, Darling Downs, Lower Balonne and MacIntyre Valley.

Further Cotton Australia was very disappointed in the quality of the impact modelling used by the QCA for the 2012/13 Pricing Inquiry into Regulated Retail Electricity Prices where basic assumptions were made to model likely impacts.

Cotton Australia recommends that the QCA request from Ergon details on the number of clients currently utilising Tariffs 62-66, and how many of them have been classified as Large.



Further, QCA should take a random cross-section of these Ergon Customers, and undertake Tariff Comparisons utilising actual electricity usage data from the past five years, so a full understanding of the likely impacts can be demonstrated.

Recommendation: That QCA undertake a Tariff Comparison exercise, utilising actual 5-year electricity usage data for randomly selected Ergon clients currently accessing Tariffs 62-66, so as to be able to fully demonstrate the impact users would face if they were unable to access the obsolete tariffs.



Case Study – St George

Approximately 10 years ago a number of irrigators in the St George region were encouraged by the Queensland Government to develop their irrigation infrastructure based on access to electricity for pumping water.

A dedicated 33KVA line was constructed, which supplies 22 26 inch pumps with electrical power.

In making their investment decision these irrigators based their calculations on being able to access Tariffs 62-66.

These irrigators have all been classified as Large Users, and will under the current arrangements, have to migrate to Tariffs 44-46.

A number of the irrigators have had tariff comparisons done by Ergon, and a sample of results appear below.

These irrigators are typical of irrigators in this region. They primarily pump to harvest river flows, where access is determined by their licence conditions, and access is episodic, and there are often extended periods between pumping opportunities and pumping opportunities are more often measured in days rather than weeks.

The table below shows the pumping opportunities that have been experienced by these users since 2004.

Water Year	Quarter	Number of Days	Total
2003/04	1	0	
	2	1	
	3	36	
	4	0	37
2004/05	1	0	
	2	5	
	3	0	
	4	0	5
2005/06	1	4	
	2	8	



	3	0	
	4	0	12
2006/07	1	0	
	2	0	
	3	0	
	4	0	0
2007/08	1	0	
	2	22	
	3	30	
	4	0	51
2008/09	1	0	
	2	0	
	3	0	
	4	0	0
2009/10	1	0	
	2	0	
	3	44	
	4	0	44
2010/11	1	10	
	2	75	
	3	61	
	4	13	159
2011/12	1	0	
	2	34	
	3	47	
	4	2	83

The episodic nature of this pumping makes Tariffs 44-46 totally unsuitable.

For example, the first comparison below shows that the total electricity cost under Tariff 62 of approximately \$25,000 would have risen to in excess of \$103,000 if the irrigators were on Tariff 44.

Other examples document rises from \$138,000 to \$382,000.

Price increases of this order are clearly unjustifiable and unsustainable.

It is clear that if faced with these increases the growers will have no option to switch to alternative energy sources such as diesel, which will not only lead to a requirement for massive



investment on the behalves, but will also see the 33KVA line completely un-utilised, and Ergon receiving no return from its installed infrastructure. 1

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Date	kWh	44	45	46	65	% Night	kWh/day	Days	Current Tariff	65	
27/09/2011	17494	\$ 21,711.19	\$ 20,854.60	\$ 40,554.26	\$ 3,979.56	48%	182.23	96			
23/06/2011	27495	\$ 21,859.45	\$ 21,065.42	\$ 40,116.67	\$ 6,371.22	44%	298.86	92			
23/03/2011	51623	\$ 23,486.88	\$ 22,834.38	\$ 42,531.21	\$ 11,655.01	48%	567.29	91			
22/12/2010	9642	\$ 18,493.32	\$ 17,834.84	\$ 37,230.90	\$ 1,713.33	89%	107.13	90			
23/09/2010	3891	\$ 18,208.14	\$ 17,535.03	\$ 37,362.11	\$ 1,000.75	33%	42.29	92			
23/06/2010	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0			
23/06/2010	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0			
23/06/2010	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0			
23/06/2010	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0			
23/06/2010	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0			
23/06/2010	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0			
23/06/2010	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0			
Low Voltage	110145	\$ 103,758.98	\$ 100,124.27	\$ 197,795.16	\$ 24,719.86		Average 238.93	461			

Possible Savings		%
44	\$ 79,039.12	-76.2%
45	\$ 75,404.41	-75.3%
46	\$ 173,075.30	-87.5%
-	-	0.0%
-	-	0.0%

* Please check the tariff conditions to ensure that you understand, accept and agree to those conditions.

Demand kWh
181.00 Maximum
173.80 Average

Date	kWh	44	45	46	62	% Night	kWh/day	Days	Current Tariff	62	
21/12/2011	160423	\$ 95,422.25	\$ 86,669.56	\$ 85,340.82	\$ 33,315.29	60%	1887.33	85			
27/09/2011	2452	\$ 24,842.45	\$ 23,326.92	\$ 38,798.88	\$ 593.29	60%	25.54	96			
23/06/2011	249871	\$ 114,668.27	\$ 104,858.88	\$ 103,336.10	\$ 51,875.60	58%	2715.99	92			
23/03/2011	620620	\$ 159,173.10	\$ 149,177.96	\$ 147,598.07	\$ 124,545.00	60%	6820.00	91			
22/12/2010	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0			
22/12/2010	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0			
22/12/2010	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0			
22/12/2010	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0			
22/12/2010	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0			
22/12/2010	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0			
22/12/2010	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0			
Low Voltage	1033366	\$ 394,106.06	\$ 364,033.32	\$ 375,073.86	\$ 210,329.18		Average 2838.92	364			

Possible Savings		%
44	\$ 183,776.88	-46.6%
45	\$ 153,704.14	-42.2%
46	\$ 164,744.69	-43.9%
-	-	0.0%
-	-	0.0%

* Please check the tariff conditions to ensure that you understand, accept and agree to those conditions.

Demand kWh
872.00 Maximum
693.75 Average



Date	kWh	20	22	41	62	% Night	kWh/day	Days	Current Tariff	62	
19/07/2012	585	\$ 236.31	\$ 227.25	\$ 15,695.57	\$ 160.60	77%	6.43	91	Possible Savings		
19/04/2012	30627	\$ 6,857.12	\$ 6,552.16	\$ 20,184.11	\$ 7,301.08	53%	312.52	98	%		
12/01/2012	65570	\$ 14,547.24	\$ 13,775.53	\$ 23,834.54	\$ 14,361.45	61%	675.98	97	20	\$ 107.43	0.5%
7/10/2011	487	\$ 204.10	\$ 195.73	\$ 14,138.87	\$ 129.08	84%	5.94	82	22	\$ 1,201.53	5.8%
17/07/2011	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0	41	\$ 51,900.88	-70.3%
17/07/2011	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0	-	-	0.0%
17/07/2011	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0	-	-	0.0%
17/07/2011	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0	* Please check the tariff conditions to ensure that you understand, accept and agree to those conditions.		
17/07/2011	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0	Demand kWh		
17/07/2011	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0	216.00 Maximum		
17/07/2011	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0			
17/07/2011	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0			
Low Voltage	97269	\$ 21,844.77	\$ 20,750.66	\$ 73,853.08	\$ 21,952.20						



Date	kWh	44	45	46	62	% Night	kWh/day	Days	Current Tariff	62	
21/09/2012	3251	\$ 56,280.99	\$ 50,351.69	\$ 49,744.51	\$ 564.34	87%	37.80	86	Possible Savings		%
27/06/2012	39942	\$ 99,336.55	\$ 88,291.08	\$ 86,456.90	\$ 11,055.18	36%	434.15	92	44	-\$ 283,617.57	-67.2%
27/03/2012	435954	\$ 150,065.83	\$ 138,505.06	\$ 136,592.61	\$ 97,041.59	48%	4494.37	97	45	-\$ 243,416.11	-63.8%
21/12/2011	139010	\$ 116,053.72	\$ 104,387.81	\$ 102,438.57	\$ 29,458.42	59%	1448.02	96	46	-\$ 237,113.06	-63.2%
16/09/2011	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0	-	-	0.0%
16/09/2011	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0	-	-	0.0%
16/09/2011	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0	* Please check the tariff conditions to ensure that you understand, accept and agree to those conditions.		
16/09/2011	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0	Demand kWh		
16/09/2011	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0	952.00 Maximum		
16/09/2011	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0			
16/09/2011	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0			
Low Voltage	618157	\$ 421,737.09	\$ 381,535.63	\$ 375,232.59	\$ 138,119.53						