

Queensland Productivity Commission,  
PO Box 12112,  
George St,  
Qld, 4003

16-11-2015

Dear Commissioner, **Re: Electricity Pricing In Queensland – Response to the Draft Report**

Cotton Australia welcomes the opportunity to respond to the Commission's draft report into Queensland Electricity Pricing.

Cotton Australia is the peak national body representing cotton growers and ginners. While Queensland's cotton production is highly variable, the State's 600 cotton growers often produce between 1,000,000 and 1,500,000 bales each year worth somewhere between \$500,000,000 and \$900,000,000 (including the value of cotton seed) farm gate.

Cotton Australia is an active member of the Queensland Farmer's Federation (QFF), and endorses QFF's submission to this Inquiry on the draft report. The following submission is intended to be supplementary to the QFF's submission, and will highlight areas of particular concern to the cotton industry.

## **Recommendations**

- **The Queensland Government should support the development of a 5, 10 and 20 year state electricity plan, that in particular takes into account the impact of renewables and disruptive technologies.**
- **Access to transitional tariffs should be "grandfathered". That is existing farm business should be able to continue to access transitional tariffs on existing connections while ever ownership remains the same, and capacity is not increased at the request of the business.**
- **There should be no further "escalation" of transitional regulated tariffs, when compared to other regulated tariffs.**
- **All electricity account holders, but particularly those currently on transitional tariffs should be given access to on-line tools, education and material that allows them to easily assess whether their current tariff is the most suitable tariff for them.**
- **Irrigators and Farmers should be able to access a suite of tariffs that allows access to off-peak electricity for extended periods (reflective of the actual periods of peak and off-peak demand).**
- **Uniform Tariff Policy support should remain available to Very Large Customers in regional areas.**

## **Background**

Cotton producers are relatively high energy users, with requirements for machinery operations, water transfer and processing. Energy is mostly supplied either through diesel or electricity, with many farms utilising a combination of the two. In addition, the first stage processing, known as ginning, has a high requirement for electricity.

The proportion of electricity as total energy requirement does vary enormously between farming operations, as does the quantum of electricity bills. However, it is reasonable to say that electricity charges for cotton producers who use electricity for some or all of their water transfer requirements would range from tens of thousands of dollars to hundreds of thousands of dollars, while the annual expenditure of cotton gins on electricity can exceed one million dollars.

Given this high dependency on electricity, and the impact of escalating electricity charges on farm profitability, Cotton Australia has become a very active participant in the electricity space over the past five years.

Activity includes, but not limited to:

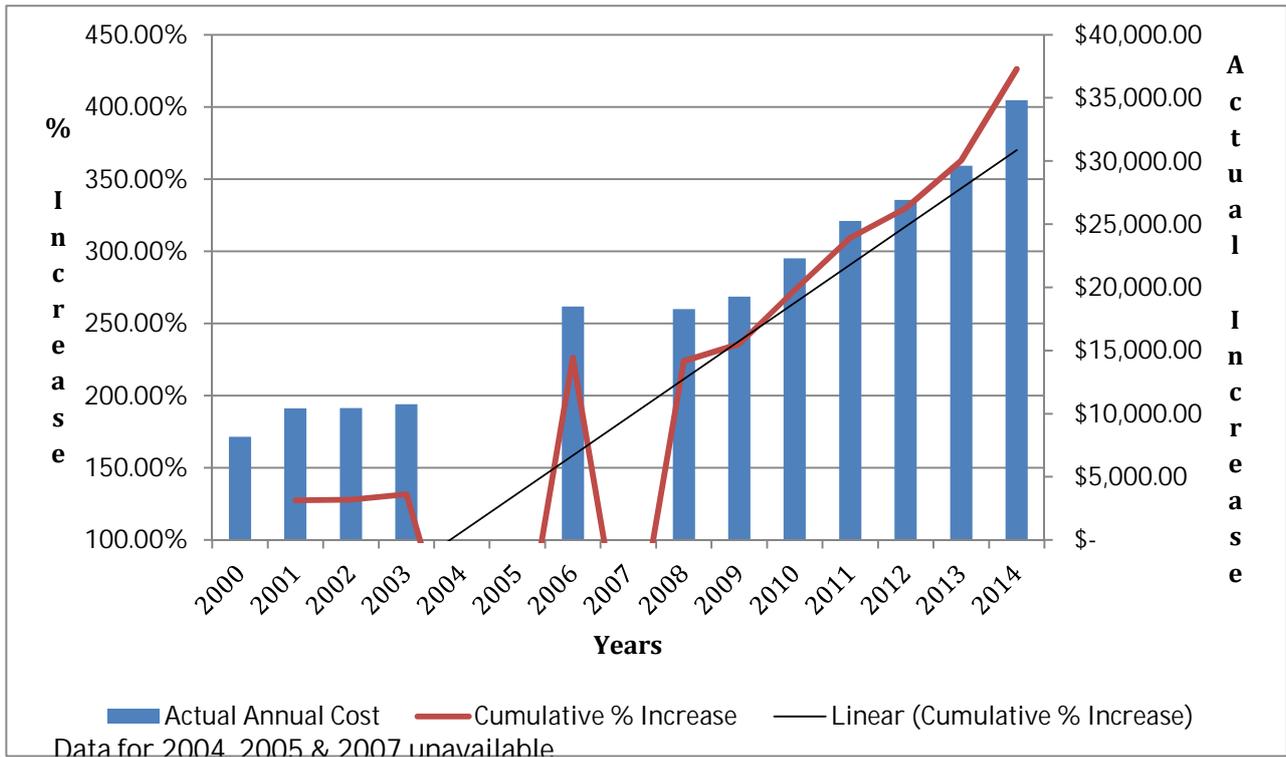
- Full participation in the Queensland Competition Authority's annual regulated retail electricity pricing determination.
- Australian Energy Regulator Network Revenue Determinations
- Australian Senate Inquiry into Electricity Networks
- Ergon Agricultural Energy Forum
- Agricultural Industries Electricity Taskforce
- Queensland Productivity Commission's Electricity Pricing Inquiry

## ***Impact of rising electricity prices***

Like all Queenslanders, cotton producers who rely on electricity for irrigation have experienced exponential increases in electricity prices over the last 15 years.

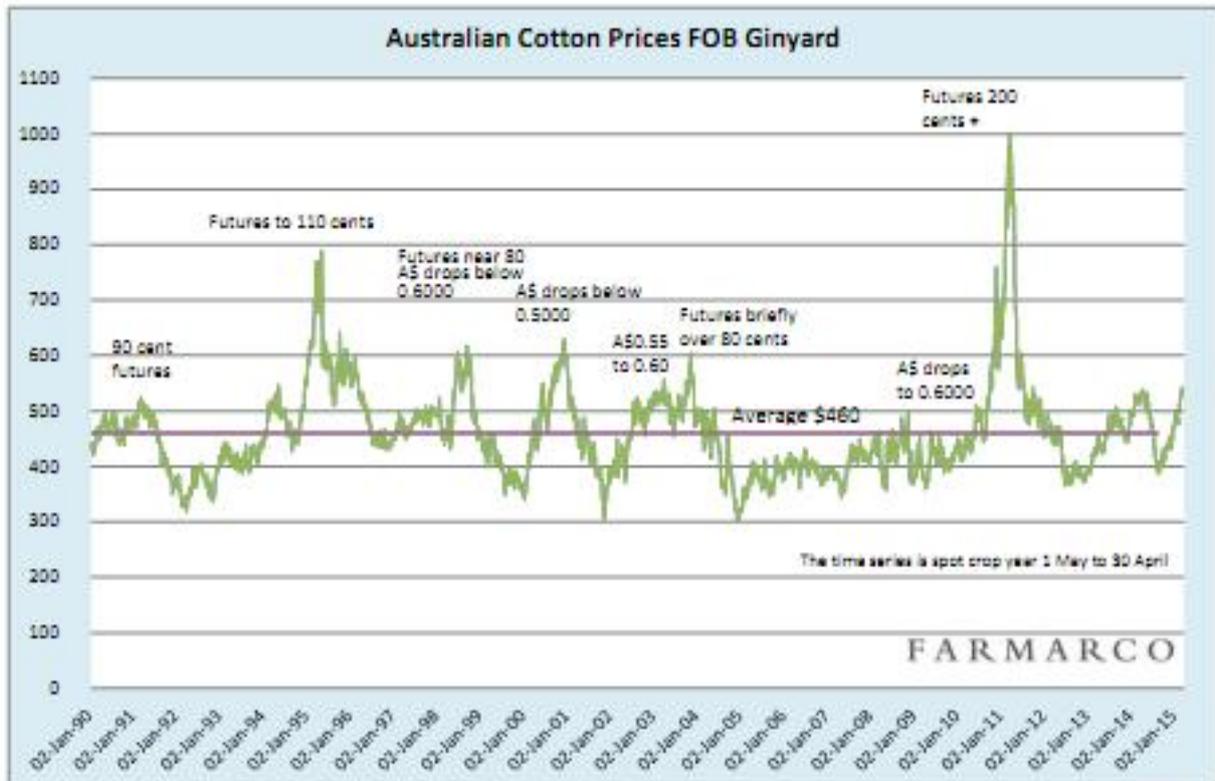
In some cases, irrigators have seen close to 300% increases in their electricity bills (adjusted for constant consumption). The following graph illustrates the exponential increase in electricity prices as demonstrated by the bills faced by an Emerald based cotton irrigator.

**Figure 1. Emerald irrigation electricity bill demonstrating the sharp increases in electricity prices (2000–2014)**



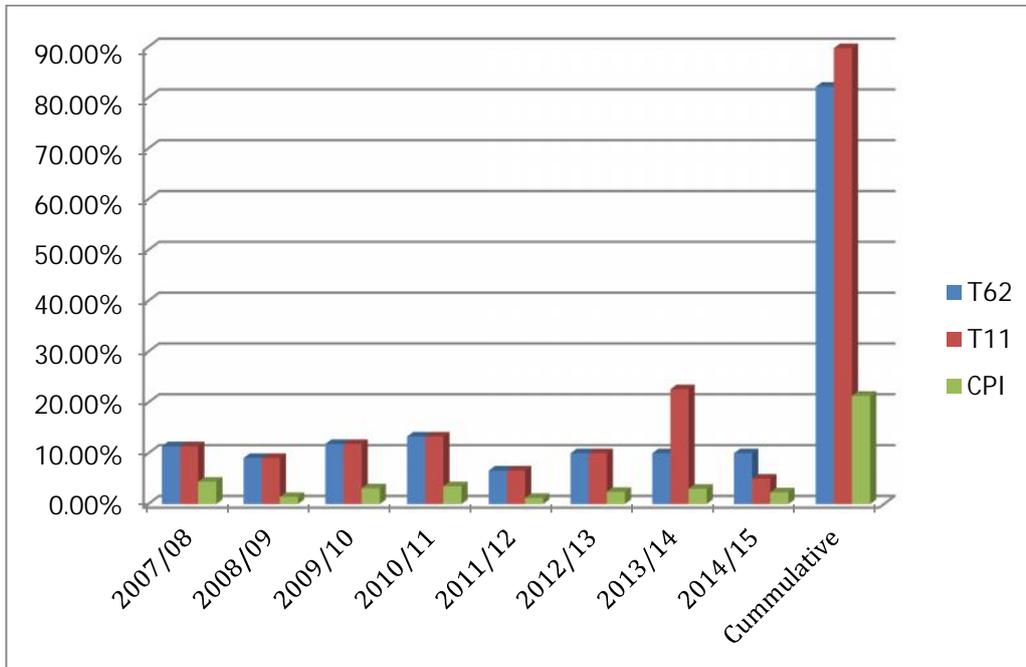
It is of interest to note that during this period the average price of cotton per bale received by the grower has only nominally shifted as illustrated in the following graph.

Figure 2. Cotton price per bale (1990–2015)



The increases in electricity prices is further illustrated by the following table which shows the average annual increase in the commonly used Ergon irrigation Tariff 62, compared to the standard domestic tariff 11 and CPI since 2007.

**Figure 3. Comparison of Ergon tariffs and CPI (2007–2015)**



It is clear that over this period electricity prices for both domestic users and irrigators have significantly and consistently increased at a rate well in excess of CPI.

In addition to the rapid escalation of electricity prices in general, cotton growers, particularly those who have a high reliance on flood harvesting, are at great risk from the dual impact of the loss of access to transitional tariffs (scheduled to occur in 2020) and the ongoing move to greater reliance on demand based tariffs.

The following are examples of the impact on actual irrigators will face when usage under current tariffs switches to demand based charges. Costs were determined using the Ergon tariff comparison tool.

It must be kept in mind that the resulting charge does not reflect any change in usage, or timing of usage, but simply a change in tariff applied.



Date	kWh	44	45	46	65	% Night	MWh/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		
23/06/2010	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0		
<b>Low Voltage</b>	<b>110145</b>	<b>\$ 103,758.98</b>	<b>\$ 100,124.27</b>	<b>\$ 197,795.16</b>	<b>\$ 24,719.86</b>		<b>Average 238.93</b>	<b>461</b>		

Possible Savings	
44-\$	79,039.12
45-\$	75,404.41
46-\$	173,075.30

\* 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	%
21/09/2012	3251	\$ 56,280.99	\$ 50,351.69	\$ 49,744.51	\$ 564.34	87%	37.80	86			
27/06/2012	39942	\$ 99,338.55	\$ 88,291.08	\$ 86,456.90	\$ 11,055.18	36%	434.15	92			
27/03/2012	435054	\$ 150,066.83	\$ 138,505.06	\$ 136,592.61	\$ 97,041.59	48%	4494.37	97			
21/12/2011	139010	\$ 116,053.72	\$ 104,387.81	\$ 102,438.57	\$ 29,456.42	59%	1448.02	98			
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			0.0%
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			0.0%
16/09/2011	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0			0.0%
16/09/2011	0	\$ -	\$ -	\$ -	\$ -	0%	0.00	0			0.0%
<b>Low Voltage</b>	<b>618157</b>	<b>\$ 421,737.09</b>	<b>\$ 381,535.63</b>	<b>\$ 375,232.59</b>	<b>\$ 138,119.53</b>		<b>Average 534.53</b>	<b>371</b>			

Possible Savings	
44-\$	283,617.57 -67.2%
45-\$	243,416.11 -63.8%
46-\$	237,113.06 -63.2%

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

**Demand kWh**  
952.00 Maximum  
855.50 Average

	Current		Tariff Options				
	Tariff 62	Tariff 20L	Tariff 22L	Tariff 44	Tariff 45	Tariff 46	Tariff 66
Bill 1	\$ 13,621.02	\$ 13,745.87	\$ 14,208.79	\$ 80,761.13	\$ 74,871.71	\$ 74,184.90	\$ 35,967.55
Bill 2	\$ 54,570.98	\$ 71,991.58	\$ 61,083.01	\$ 134,583.37	\$ 125,205.12	\$ 123,262.58	\$ 67,380.46
Bill 3	\$ 110,722.72	\$ 143,957.94	\$ 127,139.40	\$ 107,813.09	\$ 103,575.49	\$ 103,425.98	\$ 104,209.59
Bill 4	\$ 101,315.77	\$ 127,305.49	\$ 116,525.48	\$ 175,691.92	\$ 164,094.12	\$ 161,407.28	\$ 98,182.51
Bill 5							
Bill 6							
Bill 7							
Bill 8							
Bill 9							
Bill 10							
Bill 11							
Bill 12							
<b>Totals</b>	<b>\$ 280,230.49</b>	<b>\$ 357,000.87</b>	<b>\$ 318,956.67</b>	<b>\$ 498,849.50</b>	<b>\$ 467,746.44</b>	<b>\$ 462,280.74</b>	<b>\$ 305,740.11</b>

It is in no way an exaggeration to say that if these users are forced onto demand based tariff charges, they will exit the grid and switch to an alternative energy source, the most likely at this stage being diesel, although developments in technologies such as solar and battery storage will open up other alternatives.

## **Response to the Draft Report**

### *Statewide Electricity Transition Plan*

Cotton Australia recognises that technological change, renewables and the implementation of disruptive technology will fundamentally change the way that electricity is produced and delivered in Queensland over the coming decades.

As a general rule, we believe the challenge will be to maintain a network that is affordable and relevant to the vast majority of Queensland consumers.

However, it does not mean, that we believe the future is a continuation of geographically spread, large electricity generators, with a distribution network supplying electricity many hundreds of kilometres from where it is produced.

While Cotton Australia is no expert in this area, we envisage that the future will be a mixture of small and large renewable energy producers, fossil fuel baseload generators, peaking generators, energy storage, mini-networks and more extended networks.

Cotton Australia believes the challenge is for a State like Queensland to transition to this future, without creating an environment that will foster perverse outcomes.

Cotton Australia would argue that the 44 cents solar feed-in tariff, while well intentioned, is an excellent example of a policy that has generated perverse outcomes, pricing solar energy at well in excess of its market value, and relying on remaining members of the electricity grid to pay for the policy.

Looking slightly further afield to South Australia, that State's enthusiasm for wind energy, where on a windy day up to 90% of the State's requirement can be generated by wind, has resulted in massive spot electricity market prices on still days, when otherwise underutilized gas fired plants are operated to meet the shortfall.

And while it is too early to identify serious perverse outcomes, much thought needs to be given to how small and large renewable generators should be given access to the grid, and the ability to sell electricity to third parties.

To be clear, Cotton Australia believes third party access is commendable and must play a role in Queensland's energy future, but the policy settings must be well thought through first.

It is therefore imperative that this Inquiry support the development of a proper, integrated plan for Queensland's energy generation and distribution.

### **Recommendation**

**The Queensland Government should support the development of a 5, 10 and 20 year state electricity plan, that in particular takes into account the impact of renewables and disruptive technologies.**

#### *Rural and Regional Industries - Transitional and Obsolete Tariffs*

As demonstrated above in the submission and as witnessed first-hand by Commissioner Woods during his visit to St George in February, a key issue for the cotton industry is the scheduled removal of access to the transitional tariffs in 2020.

Cotton Australia accepts the draft report's claim that a certain number of farmers and irrigators currently on tariffs 62, 65, or 66 may be better off on cost reflective tariffs. However, Cotton Australia also knows that for many, particularly those that use electricity for flood harvesting under their irrigation water licence conditions, the impact of being forced off 65 or 62 and onto a demand based tariff such as 44 or 45, will see their charges rise anywhere between 200 and 300%.

This would result in them immediately switching to alternative energy sources, forcing them to incur otherwise unnecessary capital expenditure, and resulting in the network provider (Ergon) receiving no revenue from previously made capital expenditure – which in truth puts further financial pressure on the remaining network customers.

In regards to transitional tariffs Cotton Australia makes the following recommendations:

#### **Recommendations**

**Access to transitional tariffs should be “grandfathered”. That is existing farm business should be able to continue to access transitional tariffs on existing connections while ever ownership remains the same, and capacity is not increased at the request of the business.**

**There should be no further “escalation” of transitional regulated tariffs, when compared to other regulated tariffs.**

**All electricity account holders, but particularly those currently on transitional tariffs should be given access to on-line tools, education and material that allows them to easily assess whether their current tariff is the most suitable tariff for them.**

Cotton Australia supports draft recommendations 36, 37 and 40.

Cotton Australia partially supports draft recommendation 38, in particular the provision of grants to assist in the adoption of energy efficient technology and demand management, but believes that “grandfathering” recommendation provides better protection for those customers currently at risk from the shift from transitional tariffs.

Similarly, Cotton Australia is supportive in principle of draft recommendation 39, it believes “grandfathering” provides the appropriate response.

Cotton Australia is concerned that tariff structures at the moment do not properly reflect true peak and off-peak periods.

Cotton Australia is aware of two reports that demonstrate that in regional areas the genuine peak period is somewhere between three and five hours. However, many tariffs have a peak period in the order of 12 hours.

Cotton Australia request the Commission consider these reports:

*Tariff Design Options – Report for Canegrowers, December 2015 – Alternative Technology Association*

*Irrigator Tariff Analysis in the National Electricity Market – A Report for National Irrigators Council, December 2015 -CME*

And recommend that appropriate tariffs be made available in regional areas that reflect the actual periods of peak and off-peak demand.

## **Recommendation**

**Irrigators and Farmers should be able to access a suite of tariffs that allows access to off-peak electricity for extended periods (reflective of the actual periods of peak and off-peak demand).**

### *Regional Competition and the Uniform Tariff Policy*

Cotton Australia supports a transparent Uniform Tariff Policy (UTP), to apply to all users. Cotton Australia acknowledges that the UTP can be viewed as a subsidy to regional Queensland and its residents. However, if the government wishes to foster vibrant regional and rural communities affordable energy is essential not only to residents but to the businesses and industries that underpin regional economies.

Model down several years ago suggested that the removal of the UTP for cotton gins could well see a doubling of the price of electricity.

Cotton Australia was alarmed by the draft finding on page 147 stating that there was no compelling case to continue to subsidise very large customers. It is these industries that provide employment and economic activity for these regions, and a doubling of electricity charges will see them close.

The challenge should be to develop and deliver on a transition plan that drives electricity charges down for all users.

The UTP should guarantee a default charge no greater than those applied to south-east Qld users. If local, or regional solutions can provide electricity at a lower rate, then naturally that should be made available to consumers.

Cotton Australia does support the transfer of the UTP payments away from Ergon Retail to the network, but strongly questions the claim in the draft finding that such a move would cost between \$90 and \$150 million per annum. Cotton Australia urges the Commission to test that claim.

Cotton Australia supports Draft Recommendations 29, 32, 33, 34 and 35. Cotton Australia has some concerns with recommendations 30 and 31. In summary it does not understand why the movement of the payment from Retail to Network should increase the overall UPT, and without further detail cannot at this stage offer its support for 30 and 31.

### **Recommendation**

**Uniform Tariff Policy support should remain available to Very Large Customers in regional areas.**

### *Role of Local Service Providers*

Subject to our comments regarding the need to full develop a statewide transitional plan, Cotton Australia does strongly support draft recommendations 41, 42, and 43.

We are aware of growers who are already installing renewable generation capacity and would like to be able to deliver it through the grid to third party customers in innovative ways.

Cotton Australia is convinced that demand for this type of access will grow, and while it presents policy and technical challenges, it represents a significant part of Queensland's electrical future.

Cotton Australia would welcome further input into this inquiry. Please contact Michael Murray, General Manager, [michaelm@cotton.org.au](mailto:michaelm@cotton.org.au), or 0427 707868.

Yours sincerely,



Michael Murray,  
General Manager