



National Irrigators' Council

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Energy White Paper

Green Paper 2014

to inform preparation of a White Paper

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The National Irrigators' Council is the peak body representing irrigators in Australia, supporting 31 member organisations covering the Murray Darling Basin states, irrigation regions and the major agricultural commodity groups. Council members collectively hold approximately 7,000,000 megalitres of water entitlement.

The Council represents the voice of irrigators who produce food and fibre for Australia and significant export income. The total gross value of irrigated agricultural production in Australia in 2012-13 was \$13.4 billion. {ABS} Irrigated agriculture produces essential food such as milk, fruit, vegetables, rice, grains, sugar, nuts, meat and other commodities such as cotton and wine. The Council aims to develop policy and projects to ensure the efficiency, viability and sustainability of Australian irrigated agriculture and the security and reliability of water entitlements.

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1. Executive Summary

The National Irrigators' Council (NIC) provides this submission to the Australian Government's proposal to develop an Energy White Paper focusing on deregulation, competition and productivity. The submission is directed to Chapter Two of the Energy Green paper which focuses on Electricity prices.

The Green Paper states: *'The COAG Energy Council will undertake a review of governance arrangements for energy markets. The review is expected to consider the performance of current governance arrangements for energy markets, and provide advice to the Council on potential areas of improvement to the institutions and their oversight by the Council.'*

The NIC would support any move through the COAG process if it resulted in eliminating the complexity around energy market governance arrangements and reduce costs for consumers.

The NIC seeks to highlight the impacts of electricity price rises, particularly network costs, on the profitability and financial sustainability of the irrigated agricultural sector. Price rises have been far in excess of the Consumer Price Index (CPI) primarily due to the way tariffs are now calculated. The cumulative increases in electricity tariffs are a major causal factor and leaving many producers finding it unviable to irrigate using existing electricity infrastructure.

The prices irrigators receive for their food and fibre products have not matched the unfettered escalation in electricity prices. As price takers, irrigators operate on low margins and any small increase in input cost erodes profitability and competitiveness when they already operate in a tough international competitive environment.

The NIC proposes a package of measures designed to reform network charging regimes that would deliver in the order of a 30% reduction in electricity prices and remove impediments to the productivity of Australian irrigated agriculture. Typically network charges represent around 50% of farmers' electricity bills, environmental charges 20%, and electricity usage making up less than 26%. Around 4% is reflected in administration charges.

While it is acknowledged that the removal of the Carbon Tax will provide some relief in reducing the environment component of electricity bills, real benefits can only be achieved from genuine reform of network charges which continue to have a highly distorting effect on the energy market in regional Australia. The NIC will continue to press the case to the federal government and to the Australian Energy Market Commission (AEMC) for the need for specific irrigation food and fibre tariffs.

The regulatory framework around the setting of electricity prices is complicated and convoluted, largely due to numerous state and federal agencies having a range of roles. These governance arrangements are in need of reform. Chapter 2 of the Energy Green Paper notes that *'states and territories need to reform the way that electricity is priced, so that households and businesses can take more control over the way they use electricity.'*

It is important to highlight that there are limited opportunities for irrigators to change their electricity demand patterns, which are largely dictated by the needs of a particular crop and/or requirements of water pumping regulations as part of river management operations.

2. Introduction

The NIC is the peak body representing irrigators in Australia, supporting 31 member organisations covering the Murray Darling Basin states, irrigation regions and the major agricultural commodity groups. Council members collectively hold approximately 7,000,000 mega litres of water entitlements.

Irrigated agriculture contributes to the social and economic wellbeing of rural and regional communities and to the national economy producing goods such as milk, fruit, vegetables, rice, grains, sugar, nuts, meat and other commodities like cotton. The total gross value of irrigated agricultural production in Australia in 2012-13 was \$13.4 billion. *{Australian Bureau of Statistics}*

The NIC represents the voice of irrigators who perform a vital role in producing food and fibre for local consumption as well as making a significant contribution to Australia's export income. The NIC aims to develop projects and policies to ensure the efficiency, viability and sustainability of Australian irrigated agriculture and the security and reliability of water entitlements.

The NIC is directed by guiding principles designed to underpin current and future policy decisions impacting on our members. It is funded by irrigators for the benefit of irrigated agriculture which provides jobs in rural and regional communities.

The NIC will in due course provide input into the Australian Government's review of Agricultural Competitiveness and Northern Australia to boost agriculture's productivity and profitability to ensure the Australian agricultural sector remains a significant contributor to the economy and to the social and economic wellbeing of local communities.

The ability of Australian agriculture to remain internationally competitive goes to the detail outlined in this submission which highlights the urgent need for reform of the electricity market to alleviate the burden of unsustainable electricity prices on Australia's irrigators to assist them to return to financial stability.

The Green Paper's Executive Summary makes reference to the need for reform, noting: *'Reforms are needed to create competition, and drive innovation and productivity. Competition encourages innovation, leading to better products and services. It also encourages better prices. Competition is best enabled through a deregulated environment. Sometimes, however regulation is needed to protect consumers and the environment.'*

3. Recommendations

The NIC proposes the following suite of measures to assist in reigning in electricity prices to ensure that network supplied electricity remains a cost-effective source of energy for irrigators.

The NIC recommends:

- a 30% reduction in electricity costs through immediate reform of network charges.
- the Australian Energy Market Commission (AEMC) approve a rule that would allow irrigators to be a separately classified customer across Australia. Irrigators (and other network supplied electricity users) should not pay a disproportionate share of the cost of government policies that encourage alternative energy programs eg the Carbon Tax, the Renewable Energy Target (RET) and solar feed in tariff.

- a national suite of volume-based specific irrigation tariffs, reflecting irrigation demands on the network in terms of base load and off-peak use and including worthwhile time-of-use incentives for irrigation during off-peak periods and during weekends.
- the regulated asset base be re-valued to remove the impact of over investment from the underlying cost base.
- promotion of increased competition in the electricity market.
- funding for both on-farm energy audits and to implement best practices energy efficient measures.
- development and implementation of strategies to manage peak demand which will help to optimise the efficiency of network investment, such as use of generators during peak demand.

4. Energy Green Paper: Chapter 2 – Electricity prices

4.1 Background

The current complex federal and state government policy and regulatory framework around the determination of electricity prices is undermining the fair and cost effective delivery of electricity and reducing the ability of Australia's irrigated agricultural sector to remain financially viable. Major reform is needed particularly in the area of network charges which are imposing a highly distorting effect on the energy market in regional areas. Cumulative increases in electricity tariffs are no longer sustainable.

Escalating price increases over the last decade are also eroding irrigators' competitive capacity when they already operate in a tough international competitive environment.

Irrigators are left with few choices; they can either cease production, switch off pumps (resulting in loss of productivity) or source cheaper forms of energy. In the latter case, the uptake of alternative energy sources and users moving 'off grid' produces a 'knock on' effect with costs having to be recovered from fewer users. In those states where demand charges currently exist, irrigators are also severely impacted due to lumpy usage patterns.

Chapter 2 of the Green Paper acknowledges recent rises in household electricity prices noting: *'Electricity prices have recently increased sharply, with household electricity prices rising by around 50 per cent nationally over the past four years.'*

By contrast the cotton industry has experienced power bill increases in the order of 300 per cent since 2000 (*the CPI increase over this period was 43 per cent*). In Queensland canefarmers are now paying 107 per cent more than they were in 2009 (*the CPI increase over this period was 13.9 per cent*), representing price increases far exceeding CPI over these periods.

While the removal of the Carbon Tax and the Renewable Energy Target may save irrigators up to 20 percent on their energy bills, it is only genuine reform of network charges that will achieve real benefits for consumers. The NIC has identified that the Network (N) component of the Network (N) plus Retail (R) electricity cost build up methodology as a key causal factor. *{note graph references on page 8}*

In the lead up to the 2013 federal election, the major political parties acknowledged the burden of Australia's high electricity prices:

- *'Electricity prices are too high by global standards. This affects the competitiveness of all firms large and small. Of course it also affects individual consumers.'* Former Prime Minister Kevin Rudd, National Press Club address, 11 July 2013.
- *'I mean, this country ought to be an affordable-energy superpower ... what we need to do to get power prices down, and down significantly.'* Prime Minister Tony Abbott, Sydney Morning Herald, 19 December 2013.
- *'Some forms of farming and food storage on-farm necessarily involve using a lot of energy, and we rely on them to do so because the energy is used to maximise food freshness and safety, and to maximise water use efficiency. But that necessary high energy use comes at a cost to farmers, who operate in a tough competitive environment against the rise of cheap imports.'* Australian Greens Policy, 18 July 2013: Lowering On-Farm Energy Bills

Notwithstanding these statements power prices in all states will experience above CPI increases this financial year, despite the removal of the Carbon Tax.

At a state level political representatives also acknowledge that electricity prices are too high, yet long-term blame shifting is enabling regulators and electricity companies to avoid scrutiny, resulting in inaction.

4.2 Role of the Australian Energy Regulator (AER)

As the body responsible for the economic regulation of the electricity transmission and distribution networks in the national electricity market, the Australian Energy Regulator (AER) determines the network component of electricity prices. The National Electricity Law and Rules set out the regulatory framework for electricity networks. Network businesses are required to apply to the AER to assess their revenue requirements (usually every five years). The AER then sets a revenue recovery target at a level that is intended to guarantee a return on network costs.

The recent draft rule determination by the Australian Energy Market Commission (AEMC) in relation to National Electricity Amendment (Distribution Network Pricing Arrangements) Rule 2014 (August 2014) noted: *Distribution network businesses will be subject to a new pricing objective that network prices should reflect the business' efficient costs of providing services to each consumer. Businesses will be required to comply with new pricing principles when determining the structure and level of their network prices.*

The NIC submits that the current regulatory pricing framework is enabling an excessive guaranteed return on investment and encouraging over investment in network assets. There is a need for a comprehensive examination of this process and the way electricity network companies are providing information to the AER.

Networks must not be rewarded for over-investment, 'gold-plating' and under utilisation of assets. The federal government has the ability through the AER to ensure that over-investment by network owners is discontinued. As part of any reform process, it is imperative that the regulated asset base is re-valued to remove the impact of over-investment from the underlying cost base.

4.3 Privatisation of electricity assets

Governments' desire to maximise sale returns has impeded any progress on reforms. While the NSW and Queensland Governments' majority electricity assets remain in public hands, this is expected to change in the near to medium term with both states looking to privatise assets in their next terms of government. This may be inspired by the Asset Recycling Initiative announced in the 2014-15 federal budget, which provides incentive payments to states and territories that sell assets and reinvest sale proceeds in infrastructure.

Any move to the privatisation of assets however, must come with safeguards to ensure there is sufficient competition in the market for rural and regional users. The implementation of a Community Service Obligation applied to regional communities could act as a mechanism to mitigate unreasonable electricity costs for irrigated agriculture.

Electricity price regulators must take into account the financial impact on electricity users' profit margins and their capacity to pay. Any measures implemented should also take into account the impact of other government controlled services such as water delivery charges.

4.4 Sustainability of the irrigated agriculture sector

The Commonwealth is investing \$12 billion in the Murray Darling Basin to recover water for the environment, with \$5.8 billion originally allocated to recover water through increased water use efficiency. However, the 'water efficiency versus energy efficiency' conundrum is impacting on the ability of farmers to make new water efficient systems profitable. Financial pressures caused by electricity price increases are also impacting on the ability of farmers to move to new pressurised water efficient systems.

There is a role for federal and state governments to provide for a policy framework to enable irrigation system audits that would identify and eliminate pump and distribution system inefficiencies and assist with planning and implementation of system upgrades.

The NIC in coalition with a group of Australia's key agricultural industry organisations recently established the Agricultural Industries Electricity Taskforce. The Taskforce was borne out of a consensus view on the crippling costs of network charges on agricultural industries, undermining productivity and the viability of rural businesses, and risking flow on effects to the social and economic wellbeing of local communities.

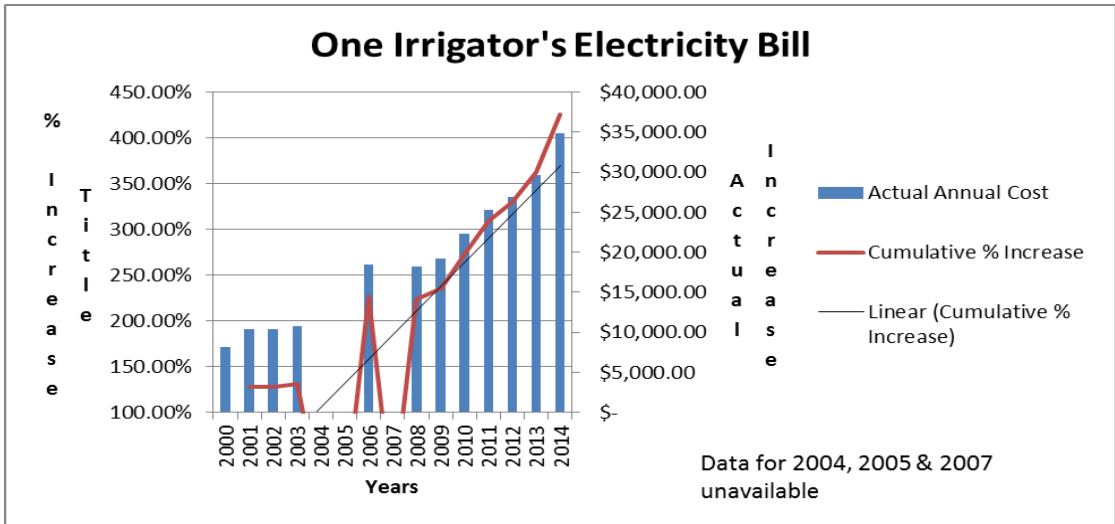
The NIC will play its part in helping to transition irrigators to 'off-grid' and identify other opportunities to avoid unsustainable pricing mechanisms. Network demand is declining in a growing economy and further price increases will reduce rather than enhance network revenue as 'off-grid' options become more competitive.

5. State by state overview

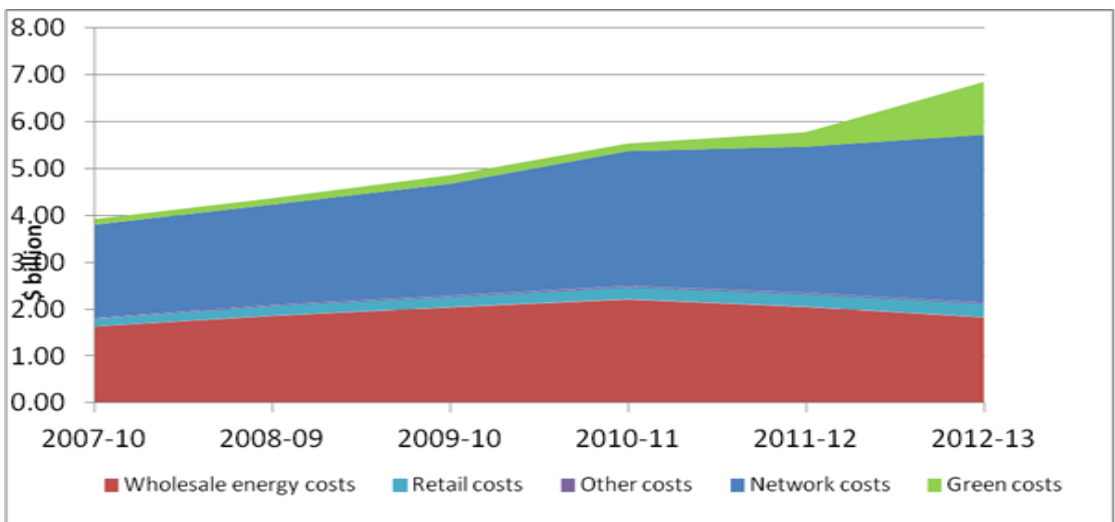
The following graphs show state by state price increases and percentage component costs.

5.1 Queensland

The graph below illustrates the effect of electricity prices on one cotton grower in the Emerald district. The graph reflects the cost of a particular quarter's bill in 2000, extrapolated using the tariff prices for the particular year, multiplied by the usage experienced in that quarter in 2000.



The graph below shows that in 2012/13, the network charges (N) accounts for around 54% of the total charge and the retail charges (R) account for 46% of the determined price in Queensland. The R component can be further broken down to show that 26% is actual energy costs and a significant 20% is due to environmental costs. Half the environmental cost is due to the carbon tax and the other half is the cost of green initiatives such as the Renewable Energy Target and the photovoltaic subsidy schemes. {Source: Queensland Competition Authority, 2012}



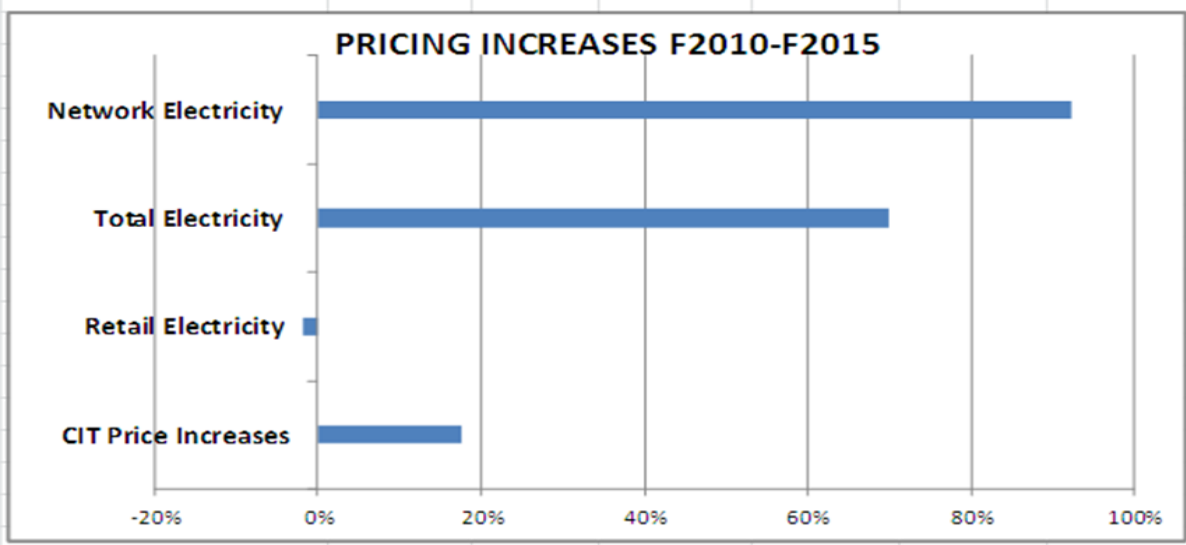
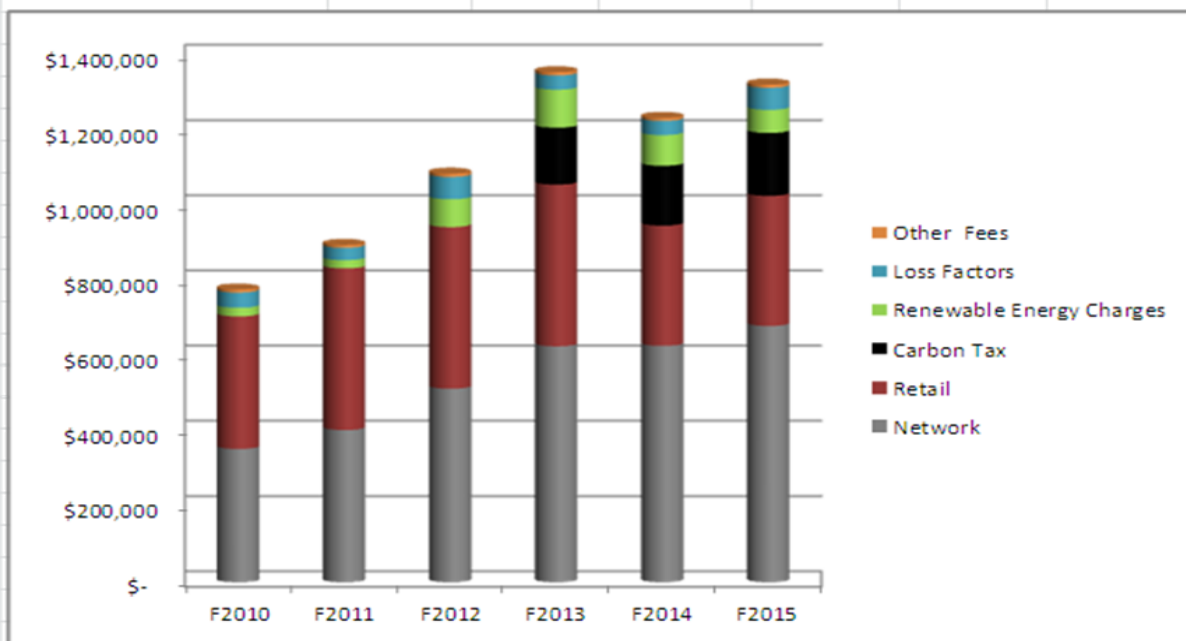
5.2 New South Wales

An electricity trial conducted by NSWIC and Cotton Australia has made similar findings. The trial found that overall electricity costs for irrigators participating in the trial have increased by up to 300 per cent over the last five years. Network charges have been the most significant drivers of electricity cost increases, as they make up between 55 and 65 per cent of an irrigator's electricity costs. The biggest network cost increase was \$263,575 by one trial participant (between 2008/09 - 2012/13).

5.3 South Australia

The following graph highlights increases in electricity network charges in South Australia.

LOXTON PUMPING STATION ELECTRICITY COSTS F2010 to F2015						
Annual Expense	F2010	F2011	F2012	F2013	F2014	F2015
Network	\$ 354,614	\$404,794	\$ 514,720	\$ 627,484	\$ 628,701	\$ 681,605
Retail	\$ 352,669	\$430,008	\$ 430,008	\$ 430,008	\$ 319,779	\$ 346,095
Carbon Tax	\$ -	\$ -	\$ -	\$ 151,483	\$ 159,093	\$ 167,289
Renewable Energy Charges	\$ 22,789	\$ 21,930	\$ 73,950	\$ 100,927	\$ 81,669	\$ 61,252
Loss Factors	\$ 40,388	\$ 32,643	\$ 59,307	\$ 37,823	\$ 37,576	\$ 58,817
Other Fees	\$ 7,787	\$ 7,297	\$ 8,465	\$ 8,491	\$ 7,711	\$ 8,078
Total	\$ 778,246	\$896,672	\$ 1,086,449	\$1,356,216	\$1,234,530	\$1,323,136



{provided by Central Irrigation Trust, South Australia}