

# Energy Policy

## Electricity Tariffs and Charges

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## **Introduction**

NSW Irrigators' Council (NSWIC) represents more than 12,000 water access licence holders across NSW. These water access licence holders are on regulated, unregulated and groundwater systems. Our Members include valley water user associations, food and fibre groups, irrigation corporations and commodity groups from the rice, cotton, dairy and horticulture industries.

This document represents the views of the Members of NSWIC. However each Member reserves the right to an independent view on issues that directly relate to their areas of operation, or expertise, or any other issues that they may deem relevant.

## **Executive Summary**

This document sets out the policy of NSWIC in respect to the setting of electricity tariffs and charges in NSW, including the regulatory framework and the level of competition we envision to exist in the NSW electricity market. We believe that the criteria outlined below will initiate a movement to more cost-reflective and efficient electricity prices in the state.

While providing a background on the development of electricity prices, and the impact they had on irrigated agricultural production, this document is designed to address the principles that must be considered when designing and implementing a suitable framework for electricity price setting in NSW.

This policy document was prepared in response to a motion that was accepted by Council in March 2012;

### **The NSWIC undertake a scoping study of:**

- 1. The impact of energy pricing on water efficiency programs;**
- 2. The avenues to influence energy prices and the structure of charges.**

### **Then report to Council to enable a decision on whether NSWIC should put resources into attempting to influence energy charges.**

While NSWIC has dedicated extensive resources in the pursuit of answering the two aspects of the scoping study, this policy document will inform Council on the last component of the motion.

We have analysed the regulatory framework guiding electricity prices and have assessed the resulting impact on irrigated agricultural producers. With the obtained information, we have prepared a submission to the Senate Select Committee on Electricity Prices and provided two Briefing Papers to Members which are appended to this policy.

We have identified that the regulatory framework for setting electricity tariffs and charges in NSW is highly complex, multi-layered and not transparent. Additionally, NSWIC is aware that the regulatory framework guiding electricity prices is currently in flux as a result of recently initiated state and federal policy reviews and inquiries aimed at determining the causes and potential solution to the recently escalating electricity prices.

In this context, this policy document sets out NSWIC main objectives and criteria for an adequate electricity tariffs and charges framework in NSW that is both efficient and cost-reflective.

NSWIC's main policy objective is to establish efficient and cost-effective tariff rates and charges that reflect current usage pattern, allow irrigators to use their on-farm infrastructure equipment optimally and give irrigators an incentive to expand their water use efficiency works where possible.

To achieve this objective, NSWIC will pursue the following:

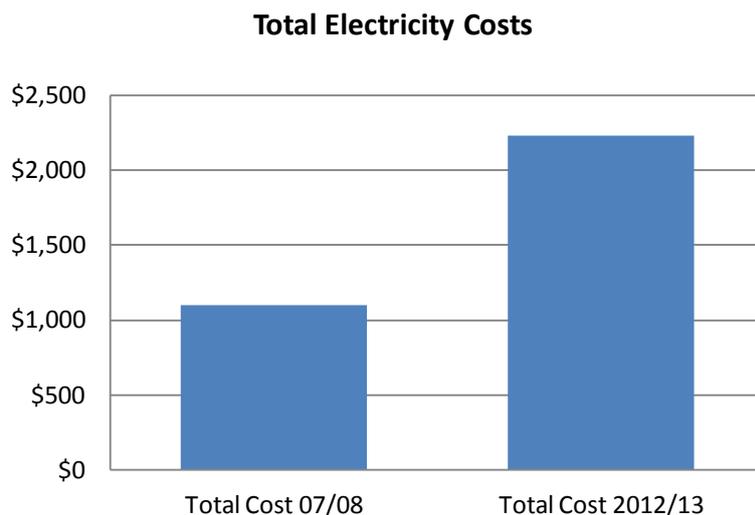
1. Lobby for a simpler and more transparent rules and regulations governing the setting of electricity tariffs and charges in NSW. Future regulation must have a clear defined objective, address all aspects of the current electricity costs and allow the NSW regulator to assess the efficiency and effectiveness of any proposed charges and tariffs.
2. Advocate for increased competition in the NSW electricity market to ensure a that price increases are mitigated and customers are offered better information, products and services.
3. The introduction of farm business tariffs that address the specific needs and requirements of irrigators in NSW;
  - I. The tariffs and the associated charges must be positively correlated to the usage pattern of an individual irrigators. If there is a decrease in use or a modification in the use time pattern towards shoulder or off-peak time periods then this must trigger a decrease in overall prices for electricity.
  - II. The tariffs and the associated charges must be at levels that do not discourage irrigators from participating in national and state water efficiency and land care programs and/or from utilising technologies and infrastructure that contribute to the national goal of increased food and fibre production.
  - III. The tariffs must allow for an efficient use of energy related equipment on-farm. This includes wires, poles and meters.
  - IV. The tariffs must allow for optimal water application that best assists plant growth.
  - V. The tariffs must avoid perverse pricing outcomes, especially in the context of demand charges. Such demand charges must be tailored to the specific farm operation and the equipment used on farm.

## Background

Increased competitive pressure for water resources and a highly variable climate have led to significant structural changes in irrigated agriculture over recent years. Many irrigators have converted existing on-farm irrigation equipment to reduce their water use dependency. While initial studies indicate that the water savings achieved through these on-farm infrastructure investments have surpassed prior expectations, side effects have materialised in terms of higher energy usage. The costs associated with this higher energy usage has been the subject of ongoing debate and questions have been raised about the trade-off between water efficiency and energy intensity.

### Retail Electricity Prices

The Independent Pricing and Regulatory Tribunal (IPART) is responsible for the regulation of one segment of the NSW retail electricity market<sup>1</sup>. As part of its regulatory obligation, IPART has monitored the development of retail electricity prices and has shown that over the past five years alone, regulated retail electricity prices in NSW have more than doubled in nominal terms and by around 79% in real terms. These price developments were caused by increases in network costs and 'green' schemes costs.



Data: Independent Pricing & Regulatory Tribunal

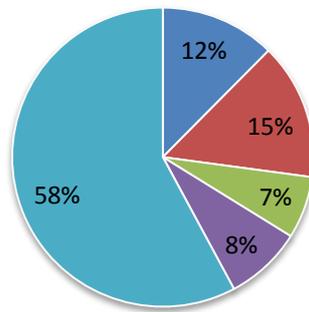
According to IPART, the rise in network costs, including the charges that electricity retailers must incur through using transmission and distribution networks to transport electricity to their customer's premises, have risen by around 58%. Furthermore, the compliance costs associated with state and federal 'green' schemes have increased retail electricity prices by around 15%. It must be highlighted that these two cost drivers are outside IPART's regulatory framework and had to be passed through by IPART in the last price determination.

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<sup>1</sup> While IPART is only responsible for the determination of regulated retail electricity prices in NSW, the development of prices in the unregulated electricity market segment is positively correlated with the development in the regulated segment and hence IPART's result can be seen as a proxy measure for both market segments.

## Electricity Cost Increase 2007/08 - 2012/13

■ Energy ■ Carbon ■ Other Green ■ Retail ■ Network



Data: Independent Pricing & Regulatory Tribunal

### Electricity Prices and Irrigation

Studies on the impact of electricity prices on irrigated agricultural production are scarce, however an initial assessment by NSWIC has indicated a range of inefficiencies and input cost problems as a result of the recent price increases.

Whilst NSWIC analysis confirmed the results obtained by IPART in that network costs and charges associated with federal and state 'green' schemes are the main drivers of overall electricity price increases, the magnitude of the impacts are not necessarily comparable with IPART's results.

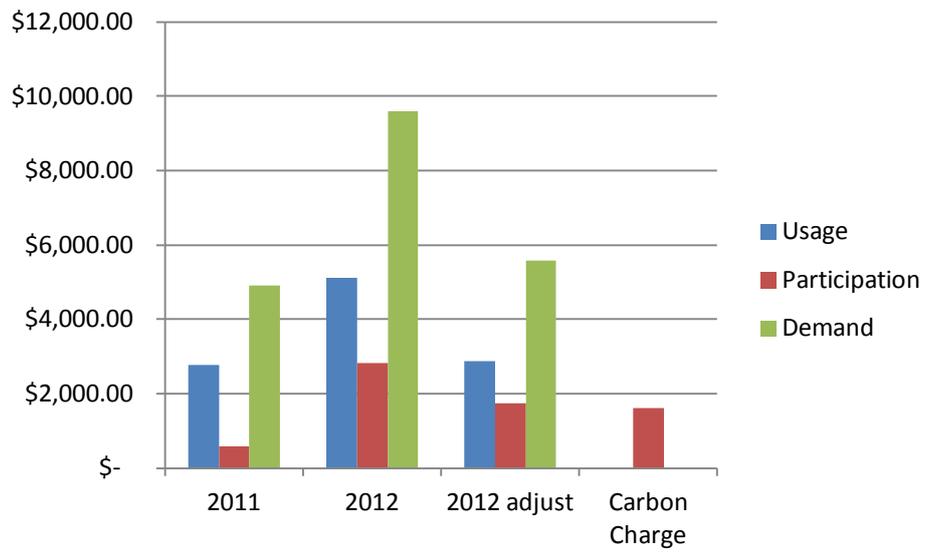
Data obtained from the Riverina region of NSW have shown that market participation charges have increased by around 203% in nominal terms over the period 2011 to 2012 alone (including the carbon charge). When excluding the carbon charge, electricity price have risen more moderately by 31% in nominal terms. Furthermore, network charges have contributed around 22% to overall electricity costs in the period 2011 to 2012. The rise in network charges are mainly driven by demand charges (both peak, shoulder and off-peak) that contribute around 50% of overall network costs. In comparison, the data showed that the usage component of the electricity bill only increased around 3.5% in the period 2011 to 2012<sup>2</sup>.

Some irrigation equipment has become prohibitively expensive to use as a result of the steep electricity cost increases. This has caused an underutilisation of the water saving irrigation equipment and has prevented the optimised application of water to crops.

Furthermore, irrigators in some areas of NSW have also observed perverse pricing outcomes as a result of consolidating their electricity distribution and metering equipment.

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<sup>2</sup> NSWIC acknowledges the difficulty of generalising the changes to irrigator's electricity costs given the diversity of each individual irrigation operation in NSW.



\*2012 adjust assumes equivalent electricity usage as 2011

## Inefficiencies

- Regulatory environment

The current regulatory framework is highly complex, multi-layered and not transparent for customers.

Complexity arises due to the various regulators that are responsible for assessing and determining different components of electricity charges and tariffs. While charges associated with network costs and 'green' schemes are set at a federal level and then passed through to customers, the NSW regulator IPART is unable to fully assess the efficiency and cost-effectiveness of these tariffs and charges. Such a multi-layered regulatory approach causes a disconnect in the overall electricity price setting and hence makes the entire system prone to inefficiencies.

Furthermore, this multi-layered regulatory approach causes information to be widely dispersed and not easily accessible for customers who aim to gain an understanding of how prices are derived and reasons behind the recent price increases. Customers do not even have the opportunity to approach the NSW regulator IPART to query the reasons behind the overall electricity prices increases as not all charges and tariffs have been assessed and determined by IPART.

- Competition

NSWIC is concerned that the level of competition between energy retailers in urban and regional NSW is uneven. While competition in urban NSW is high, this same level of competition does not exist in rural NSW due to installed infrastructure and pre-existing contracts. The lack of competition in regional NSW needs to be monitored carefully before further consideration is given to the deregulation of the NSW electricity market.

NSWIC is aware that the *Australian Energy Market Commission* (AEMC) will make a recommendation to the NSW Government in September 2013 about the degree of competitiveness in the NSW electricity market and the possibility of future deregulation. However, NSWIC believes there is yet sufficient evidence that would prove that deregulation would benefit all customers in regional NSW.

Due to a lack of competition, customers in regional NSW have limited choice about products, services and tariff rates provided by energy retailers.

- Tariff

Despite the existence of a large range of tariff rates in NSW, NSWIC does not believe there exist tariff rates that are specifically tailored to irrigated agricultural producers.

Irrigators have the ability to be flexible in their electricity usage and would prefer to minimise their input costs if possible, however this is currently not possible under the existing tariff structure. As market participation charges and 'green' scheme costs make up the majority of overall electricity costs for irrigators in NSW, usage

patterns seem to play a minor role in overall costs. Not only does current electricity usage contribute an insignificant amount to overall electricity costs, but the two are not necessarily positively correlated; i.e. a decrease in usage or a change in use pattern does not necessarily trigger a decrease in electricity prices.

Furthermore, the use of certain irrigation equipment triggers large increases in demand charges, even if the duration of use for this equipment is relatively short. This does not allow irrigators to fully utilise their irrigation infrastructure on farm which is clearly an inefficient outcome.

Additionally, the design of the current electricity tariffs do not allow for an efficient consolidation of necessary electricity delivery and metering equipment. Examples show that the consolidation of electricity meters between several farms has caused irrigators to switch from a franchise tariff to a contestable tariff with significantly higher charges.

Finally, some irrigators in NSW have suffered from agronomic and water use disadvantages as peak electricity rates during the day prevent an optimal application of water to plants at a time when the plant is most active.

## **Necessary improvements**

NSWIC recognises that in the context of electricity price setting there are three separate components that could be improved upon. Each of these aspects should be given equal consideration in further discussions about future electricity price setting.

### **Objective:**

**The overarching objective should be to establish efficient and cost-effective tariff rates and charges that reflect usage pattern, allow irrigators to use their on-farm infrastructure equipment optimally and give irrigators an incentive to expand their water use efficiency efforts where possible.**

### **Regulatory environment**

The overall regulatory framework has to become more transparent, less complex and avoid an overlap between state and federal legislation. Transparency and simplification of legislation will allow individual customers, including irrigators, to obtain access to all necessary information and allow them to make informed decisions about their electricity usage. To avoid overlapping regulation also decreases the need of excessive compliance procedures and makes the whole process simpler and more transparent. NSWIC believes that the currently initiated state and federal reviews and inquiries provide an ideal platform to make further progress in this respect.

It must furthermore be possible for the state regulator to assess all components of electricity charges and tariffs. The efficiency and cost-effectiveness of those charges can simply not be guaranteed if several aspects of the overall electricity costs have to be simply passed through to consumers without regulatory scrutiny.

An optimal regulatory framework has to ensure that the existing regulation have a clear defined objective which has to be reflected in the setting of charges and tariffs. As such, the tariffs and charges have to ensure that the usage patterns are positively correlated to the electricity costs.

### **Competition**

As competition generally drives efficiency and cost reductions, NSWIC strongly encourages further developments in this respect within the NSW electricity market. We also believe that further competition will foster the provision of more detailed information, better products and services and hence more cost-reflective and better targeted tariff rates for customers.

### **Farm Business Tariffs**

NSWIC strongly supports the introduction of farm business tariffs that are designed for the specific needs and requirements of irrigators throughout NSW.

In principle, these farm business tariffs must fulfil the following three criteria;

- I. The tariffs and the associated charges must be positively correlated to the usage pattern of an individual irrigators. If there is a decrease in use or a modification in the use time pattern towards shoulder or off-peak time periods this must trigger a decrease in overall prices for electricity.
- II. The tariffs and the associated charges must be at levels that do not discourage irrigators from participating in national and state water efficiency and land care programs and/or from utilising technologies and infrastructure that contribute to the national goal of increased food and fibre production.
- III. The tariffs must allow for an efficient use of energy related equipment on-farm. This includes wires, poles and meters.
- IV. The tariffs must allow for optimal water application that best assists plant growth.
- V. The tariffs must avoid perverse pricing outcomes, especially in the context of demand charges. Such demand charges must be tailored to the specific farm operation and the equipment used on farm.

## **Other Matters**

NSWIC strongly urges state and federal policy makers to expand the range of available options that would allow irrigators to decrease their electricity costs. One example could be the extension of the solar grant scheme to irrigators. While domestic peak consumption is at night and on weekends, irrigator's demand for electricity is often during the day which might therefore be a perfect fit for solar generators. An extension of the scheme would be a logical expansion of current policies that will see irrigation demand and power supply system constraints coincide.

Furthermore, in light of the continuous water recovery strategies by the Federal government, emphasis must be placed on the continuous need and benefits of further water saving infrastructure investment, together with a reminder that already implemented equipment must be used most efficiently.

The progress achieved in terms of water use efficiency measures must be recognised and rewarded by both policy makers and the electricity industry and further implementation of water saving infrastructure equipment must be fostered to increase the resilience and the productive capacity of irrigated agriculture in Australia.

## Appendix



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## Submission

## Select Committee on Electricity Prices

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Member Organisations: Bega Cheese Ltd., Border Rivers Food & Fibre, Coleambally Irrigation Co-Operative Ltd., Cotton Australia, Gwydir Valley Irrigators Association Inc., High Security Irrigators Murrumbidgee Inc., Hunter Valley Water Users Association, Lachlan Valley Water, Macquarie River Food & Fibre, Mid Coast Dairy Advancement Group, Mungindi-Menindee Advisory Council Inc., Murray Irrigation Ltd., Murray Valley Water Diverters Advisory Association Inc., Murrumbidgee Groundwater Inc., Murrumbidgee Irrigation Ltd., Murrumbidgee Private Irrigators Inc., Murrumbidgee Valley Food and Fibre Association, Namoi Water, NSW Farmers' Association, Ricegrowers' Association of Australia Inc., Richmond Wilson Combined Water Users' Association, Southern Riverina Irrigators, South Western Water Users', West Corugan Private Irrigation District, Western Murray Irrigation Ltd., Wine Grapes Marketing Board.

## Introduction

NSW Irrigators' Council (NSWIC) represents more than 12,000 irrigation farmers across NSW. These irrigators access regulated, unregulated and groundwater systems. Our Members include valley water user association, food and fibre groups, irrigation corporations and community groups from the rice, cotton, dairy and horticulture industries. Many of these Members have been - and will be - affected by the progressive increase in electricity price across NSW.

This submission represents the views of the Members of NSWIC. However each Member reserves the right to independent policy on issues that directly relate to their areas of operation, or expertise or any other issues that they may deem relevant.

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## Executive Summary

Irrigators are greatly concerned about the substantial electricity price increases in NSW in recent years. Wide scale conservational policy advocated and implemented by both the State and Federal government have forced irrigators to 'make do with less' and pay more for the privilege. In the context of overall input costs, electricity has become a dominant input factor and the recent explosion of electricity prices have caused the operation of irrigation equipment to become prohibitively expensive.

As a result of growing competitive pressure for water resources between the environment and productive water users, many agricultural producers have adopted more water saving equipment on farm to remain financially viable. While considerable success has been achieved in relation to the water input and agricultural output ratio, the irrigation industry as a whole has become more energy intensive in the process.

Irrigators currently find themselves at a crossroad between two federal policy objectives – to preserve more water for the environment and emit less carbon - which are two objectives that irrigators find difficult to align. While substantial water savings have been achieved in recent years, it needs to be remembered that electricity has become an increasingly important input factor for our food and fibre producers. To remain a competitive and financially viable industry as a whole, NSWIC urges this Inquiry to immediately address the regulatory complexity and transparency issues related to electricity price setting.

## General Comments

Energy, in the form of electricity or otherwise, has been an increasingly important input factor for irrigated agricultural production. Recent structural changes in the form of greater utilization of water saving and energy intensive infrastructure equipment, has caused many Members of NSWIC to express their great concerns over escalating electricity prices.

Across NSW, average regulated electricity prices have increased by 10% and 17% in 2010/11 and 2011/12 respectively and will further rise by an average of 18% in 2012/13<sup>3</sup>. While these average price increases should only be regarded as indicative cost increases for irrigators, it is evident that the price rises have caused severe financial constraints for irrigators in NSW<sup>4</sup>.

The great diversity of irrigation systems used on farm make accurate estimations of individual cost increases difficult, however it is undeniable that irrigators have been exposed to the upwards electricity price adjustments due to the location of their operations, the increasing use of energy intensive equipment and the varying demand patterns.

Firstly, the regional nature of irrigated agricultural production and the heavy reliance on *Country Energy* as an electricity provider, show the exposure of irrigators to electricity price increases. In contrast to *Energy Australia* and *Integral Energy*, *Country Energy* has been subject to larger average price increases over the last two years as a result of greater network and distribution costs. The extensive service area and the constant upgrades in distribution network have caused significant price rises that have been passed on to customers, many of which are irrigators.

Secondly, the policy focus of providing water for the environment has caused fundamental changes in the irrigation industry. Partly due to necessity and partly due to competing pressure for sustainable profit margins, irrigators have increasingly adopted water saving infrastructure equipment. The adoption of water saving infrastructure equipment has come at the price of higher energy intensity – including electricity - as a substitute input to water. The associated higher energy cost has become a major constraining factor for the irrigation industry and has made individual irrigators more vulnerable to price fluctuations.

Thirdly, irrigators do not rely on a constant demand for electricity across the course of a day. This irregular demand for electricity is closely correlated to climate variability, irrigation water supply and equipment used on farm. While the demand for electricity in some instances coincides with demand for other electricity users, NSWIC considers there to be potential opportunities for spreading demand between the irrigation sector and other sectors of the economy with potentially mutually beneficial outcomes for both the energy providers and customers by decreasing peak demand.

Overall, NSWIC considers the recent electricity price increases to be a considerable obstacle to the efficient operation of irrigated agricultural production in NSW. The effect has not only been visible through bottom line profits, but the pricing structure for electricity has not allowed for an efficient use of capital equipment on farm. Such an outcome is clearly suboptimal and needs to be addressed urgently.

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<sup>3</sup> IPART, Changes in regulated electricity retail prices from 1 July 2012 - Final Report, June 2012

<sup>4</sup> These price increases have been determined by IPART for *Energy Australia*, *Integral Energy* and *Country Energy*. The high interconnectedness between regulated and unregulated electricity provider, changes in the regulated section has often stipulated changes in the unregulated section.

## Specific Comments

### Part 1: Causes

*Identification of key causes of electricity price increases over recent years and those likely in the future.*

NSWIC would like to reiterate in this context that the recent electricity price increases have been extensive. Over the last six years, average regulated retail electricity prices in NSW have been over 60% and according to the last IPART determination, electricity prices will increase between 11.8% and 20.6% in 2012-13 across the different supply areas in NSW<sup>5</sup>.

As far as NSWIC can assess, the main drivers for the recent electricity price increases have been the rising network costs (transmission and distribution networks) and increasing 'carbon emission scheme' costs (Commonwealth and State programs). According to IPART's review from June 2012, both these components contribute approximately equally to the price increase.

What is particularly noteworthy is the fact, that in the case of NSW, both of these cost components are driven by state and federal legislation and are hence outside the control of the NSW electricity price regulator IPART. To be more specific, the network costs are set by the *Australian Energy Regulator* and the 'carbon emission scheme' costs are governed by federal and state legislation. This means that IPART is not able to assess the efficiency or cost effectiveness of the price increases and is merely forced to pass these costs on to customers. NSWIC considers this to be a substantial shortcoming as potential upwards biased in the price setting cannot be assessed by the state regulator.

Furthermore, these cost push factors are not equally distributed across NSW, in that different electricity supply areas face different increases in network costs. For irrigators, whose operations are generally in rural NSW and who rely on *Country Energy* as their main electricity supplier, the network cost increases have been significantly larger than for *Integral Energy* and *Energy Australia*. This again highlights how irrigators are disproportionately burdened by increasing electricity costs.

Additionally, calculations for the costs of financing generation and retailing businesses have also contributed to the price increases. IPART as a regulator for regulated retail electricity prices has determined that given 'unusual market conditions' a higher weighted average costs of capital (WACC) was necessary to compensate electricity providers for the increased market risk. Such assessment has also led to direct adjustments in customer electricity bills.

NSWIC would like to reiterate at this point that regardless of the driver of higher electricity prices, the fact remains that the irrigation industry has become more energy intensive in recent years due to the adoption of more water saving infrastructure equipment. Hence, higher demand for energy - regardless of the magnitude of the price change - has constrained irrigators and this trend is unlikely to reverse in the future.

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<sup>5</sup> IPART, Changes in regulated electricity retail prices from 1 July 2012 - Final Report, June 2012

## Part 2: Legislative and Regulatory Arrangements

*Legislative and regulatory arrangements and drivers in relation to network transmission and distribution investment decision making and the consequent impacts on electricity bills, and on the long term interests of consumers.*

The regulatory complexity associated with electricity price setting and the often overlapping responsibilities of different state and federal departments are of great concern for NSWIC.

As mentioned in Part 1, the main causes for recent electricity price increases in NSW were regulated outside the control of the state based regulator IPART. As long as IPART is unable to assess the cost effectiveness and efficiency of these significant cost components, a potential upwards bias price setting cannot be excluded. NSWIC considers it essential that the process is simplified and improved so that state based regulators have direct access to information and are able to provide input into all components that are relevant for final electricity prices.

Furthermore, for optimal price setting it is crucial that the reliability standards, carbon reduction schemes and subsidies are effective, efficient and well-targeted. The principle aim should be to ensure that electricity prices accurately reflect the underlying cost base and are not unnecessarily adjusted upwards. The current process and the multitude of regulators do not allow such a process to occur.

Additionally, in the opinion of NSWIC, the continuous rise in network costs are driven by major capital investment that are supposed to target rising peak demand, changing electricity use patterns and compliance obligations imposed on electricity providers in improving network security and reliability. While IPART currently allows each standard retailer to pass through the actual network prices, NSWIC shares IPART's concerns that network costs are higher than necessary due to the current regulatory framework, including the economic regulation of networks under the *National Electricity Rules* (NER) and the standards for network reliability and security.

### Part 3: Peak Demand & Productivity

#### *Options to reduce peak demand and improve the productivity of the national electricity system*

NSWIC considers the provision of information to customer as a necessary first step in reducing the peak demand for electricity. Information about peak demand and associated costs, could assist in changing customer's behaviour for electricity use. Such information should be readily accessible, easy to understand and consolidated at one central online platform. NSWIC would like to point this Inquiry to the Bureau of Meteorology website in as it provides general as well as business specific climate information that is widely used by the irrigation industry for their operational decisions.

Furthermore, NSWIC would like to refer the Inquiry to IPART's final report on changes in regulated electricity retail prices<sup>6</sup>. The report has recommended the following changes to increase the productivity of the electricity system and mitigate future price increases;

- The *National Electricity Rules* should be changed to remove any potential bias towards higher network costs and inefficient investment decisions.
- The *National Electricity Law* should be changed to require the review body to consider decisions in the context of the whole determination, and not be confined to the specific items contested by the business or interveners in order to make the process fairer for customers.
- The *reliability standards* should be set with reference to the costs and benefits, and determined with reference to customers' preferences. Further, reliability standards should be set on an output basis to allow least-cost delivery of those standards.
- The *green schemes* should be reviewed to ensure that they are efficient and cost effective. If there are components that are not complementary to the carbon pricing mechanism then they should be terminated.

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<sup>6</sup> IPART, Changes in regulated electricity retail prices from 1 July 2012 - Final Report, June 2012

## Part 4: Reduction in Energy Cost

*Investigation of mechanisms that could assist households and business to reduce their energy costs including;*

- *the identification of practical low cost energy efficiency opportunities to assist low income earners reduce their electricity costs,*

NSWIC would strongly support that any cost effective energy saving opportunities are highlighted to all electricity consumer, regardless of their income level. A uniform approach will be the only sensible way to achieve an efficient use of energy.

- *the opportunities for improved customer advocacy and representation arrangements bringing together current diffuse consumer representation around the country,*

Given the diverse use of electricity within the irrigation community, NSWIC considers it difficult to recommend an ideal framework to improve customer advocacy or representation arrangements for electricity price developments. In this context, the establishment of customer service committees for each electricity provider could be useful in order to bring together diverse views and provide customers and industry representatives with the opportunity to voice their concerns.

However, independent of these customer service committees, NSWIC considers it more important that customers are given access to adequate, transparent and easy to understand information so that they are able to make informed decisions and act on the price signals provided. Without easily accessible information and a solid understanding of the reason behind the price increases, NSWIC doubts that large scale changes in usage will materialise.

It will be of primary importance to centralise the information gathering and distribution of information to customers in a coherent and useable format. The current multi-layered responsibilities of various state and federal regulators unnecessarily complicate customer's understanding and consequently their engagement.

- *the opportunities and possible mechanisms for the wider adoption of technologies to provide consumers with greater information to assist in managing their energy use,*

NSWIC is confident that appropriate technology and necessary information is already available which would assist consumers in better managing their electricity use, however NSWIC believes there is a lack of willingness to provide customers with easy to understand information. Consolidation of information - both general and stakeholder specific - would certainly assist in this matter and would allow electricity users to make more informed decisions. The current information available is widely dispersed and not user friendly to assist customer in managing their electricity usage.

## Part 5: Customer Information

- *the adequacy of current consumer information, choice and protection measures, including the benefits to consumers and industry of uniform adoption of the National Energy Customer Framework,*

As outlined previously, the current available information is widely dispersed and far from useful for a individual consumer to better manage his electricity usage.

With respect to a uniform *National Energy Customer Framework*, NSWIC would like to highlight that such a framework has not yet been adopted by NSW, Victoria, Queensland or South Australia. As such, an evaluation on the effectiveness of this framework is difficult.

However, NSWIC would like to express its concern regarding a certain aspects of the *National Energy Customer Framework (NECF)*. The framework proposes that 'most regulatory functions (should be transferred) to the NECF', but that 'retail energy price regulation (is) to remain the responsibility of state and territories.' If the regulation of electricity prices remains with different entities, NSWIC would like to reiterate that the regulatory complexity will remain.

- *the arrangements to support and assist low income and vulnerable consumers with electricity pricing, in particular relating to the role and extent of dividend redistribution from electricity infrastructure,*

In the context of electricity pricing, irrigators could be regarded as 'vulnerable' customers. The recent adoption of water saving infrastructure investment on-farm has caused many irrigation operations to be more energy intensive and hence has led to greater exposure to electricity price fluctuations.

As outlined in the general comments, NSWIC feels that current federal policy objectives are not closely aligned. The aims to provide more water for the environment while at the same time reduce energy usage are difficult to reconcile for irrigators. While irrigators have progressively moved towards more water saving infrastructure investment, and hence have become less 'water intensive' in their input mix, these same irrigators have become more 'energy intensive' in the process. This higher energy usage is necessary to operate the water saving infrastructure equipment on farm effectively.

If the Australian Government encourages the use of water saving energy equipment which is by definition more energy intensive, energy prices should allow for an optimal usage of this equipment. With the current electricity price development, this is not the case as irrigators can find it financially unviable to use the equipment. Furthermore, the pricing structure that is imposed on irrigators also does not allow for an efficient use of the water saving equipment on farm as the following example highlights;

Murrumbidgee Irrigation has progressively modified old concrete and earthen channels with pressure pipelines servicing horticultural farms – the Integrated Horticulture Supply program (IHS). In the absence of the IHS program, the conversion of farms to drip irrigation may have still taken place but without capturing the improved system operations and water efficiency that comes with decommissioning channels.

Whilst substantial water savings have been achieved through the modification, the IHS program faces questions of financial viability due to high energy costs. The reason relates to the high contestable tariff rates. Eight of the nine pump stations are currently on contestable tariff rates due to their energy usage (greater than 160 MWh / per annum) whilst the remaining one is on a franchise tariff rate. This effectively means that operations are being penalised for being more water efficient even if there is no greater demand for electricity. To avoid higher electricity costs, one of the systems has been converted and more meters installed to reflect individual usage and move back to a franchise tariff rate. The energy costs have decreased as a result of this, even though there is *more* infrastructure needed and their energy usage has stayed the same.

Murrumbidgee Irrigation has found the following issues;

1. In the absence of collective IHS schemes and the aggregation of energy demand (and a shift to the contestable tariff structure), customers would have invested in their own on farm infrastructure works and remained in the franchise tariff regime - with lower network charges. Whilst this would have increased the energy use component of the bill, it would have avoided the kVA “peak load charge” which is having the biggest impact on pricing;
2. The total energy costs for customers on the contestable sites are significantly higher than on franchise sites and similarly higher than individual farm pump stations. Peak rates are as high as \$2500/ML water for contestable sites versus peak rates of \$56/ML of water for franchise sites;

The results have been that higher electricity prices have offset many of the achieved water saving initiatives raising questions of viability. The changes to less infrastructure investment has had the undesirable effect of moving many of the operations to a contestable tariff rate, thereby compounding the effect of higher energy prices.

As this example has highlighted, the infrastructure that was adopted could not be used efficiently due to the cost of running the equipment<sup>7</sup>.

- *the arrangements for network businesses to assist their customers to save energy and reduce peak demand as a more cost effective alternative to network infrastructure spending, and*

NSWIC proposes a combination of increased information provision and greater cooperation between retailers and customers in order to reach a mutually beneficial outcome.

As the example from Murrumbidgee Irrigation indicated, equipment used on farm was not able to be used efficiently due to the pricing structure. If retailers and customers could arrange for a review of this pricing structure, then the current conditions could potentially be improved and peak loading demands could perhaps be mitigated.

- *the improved reporting by electricity businesses of their performance in assisting customers to save energy and reduce bills; and*

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<sup>7</sup> Some Murrumbidgee Irrigation customers are currently considering pulling out their high-tech watering systems and reverting back to flood irrigation as a result of the perverse energy pricing impacts.

Greater transparency and more detailed information will certainly be beneficial for the understanding of customers so that informed decisions can be made. For example, detailed charts and explanation of cost for electricity bills as well as hypothetical price changes associated with modified use would provide customers with better information that might encourage changes in electricity use behaviour.

## **Part 6: New Technologies**

*investigation of opportunities and barriers to the wider deployment of new and innovative technologies including:*

- *direct load control and pricing incentives,*

If load management appliances are able to save costs for both a utility and its customers by reducing the need for generation capacity and thereby minimising the amount of energy the utility must purchase in the open market at peak demand periods, then they would be a valuable addition to customers.

Access to real time data on current usage and associated prices, might also allow 'variable users' like irrigators to adjust their electricity usage to times where demand is lower – an outcome that would impact on overall generation capacity and hence benefits electricity provider also. What will be of crucial importance is whether the real time data is easily accessible and simple enough for consumers to understand.

- *storage technology,*

NSWIC would support the development of storage technology that allowed for loading during off-peak demand times that resulted in a cost effective energy use solution.

- *energy efficiency, and*

It should be recognised that for irrigators the trade off has been between 'energy intensive' and 'water intensive. While many irrigators have adopted more water saving equipment, they now face higher energy demand, often in the form of electricity.

It seems contradictory to incentivise irrigators to implement water saving infrastructure equipment that is by nature more energy intensive and then to make it prohibitively expensive for irrigators to use the implemented equipment. This creates perverse outcomes and is not efficient.

- *distributed clean and renewable energy generation.*

While this might be an option for the future, NSWIC doubts that a critical mass has yet been reached that would allow for a cost effective adoption of clean and renewable energy generation. As outlined previously in this submission, the increasing electricity costs are already constraining irrigators and any further price rises associated with the adoption of clean and renewable energy generation would cause further concerns.

**ENDS.**

## **Briefing Note**

### ***Changes to regulated electricity retail prices from 1 July 2012***

**120420**

**Stefanie Schulte**  
Economic Policy Analyst

Member Organisations: Bega Cheese Ltd., Border Rivers Food & Fibre, Coleambally Irrigation Co-Operative Ltd., Cotton Australia, Gwydir Valley Irrigators Association Inc., High Security Irrigators Murrumbidgee Inc., Hunter Valley Water Users Association, Lachlan Valley Water, Macquarie River Food & Fibre, Mid Coast Dairy Advancement Group, Mungindi-Menindee Advisory Council Inc., Murray Irrigation Ltd., Murray Valley Water Diverters Advisory Association Inc., Murrumbidgee Groundwater Inc., Murrumbidgee Irrigation Ltd., Murrumbidgee Private Irrigators Inc., Murrumbidgee Valley Food and Fibre Association, Namoi Water, NSW Farmers' Association, Ricegrowers' Association of Australia Inc., Richmond Wilson Combined Water Users' Association, Southern Riverina Irrigators, South Western Water Users', West Cororgan Private Irrigation District, Western Murray Irrigation Ltd., Wine Grapes Marketing Board.

## Overview

The Independent Pricing and Regulatory Tribunal (IPART) released a Draft Report on the changes to regulated electricity prices commencing 1st July 2012. IPART determines regulated retail prices for customers who have not signed a contract with an electricity retailer or who have chosen to return to the regulated price. The price adjustments will affect customers of *Energy Australia*, *Integral Energy* and *Country Energy* directly.

The last determination was conducted in March 2010 (to take effect in July 2010) and IPART is currently undertaking its 2012 review.

An assessment of the proposed price changes have highlighted that significant price increases will materialise in NSW with potentially severely consequences for the irrigation industry.

## Executive Summary

- 16.4% average increase in regulated electricity price for 2012/13.
- Higher network costs and continuing carbon emission schemes are the main reasons for the price increase.
  - **Problem 1:** Network costs are determined outside the IPART process.
  - **Problem 2:** Irrigator's price electricity of demand is low<sup>8</sup>.
- Variable water availability (1. key input) and higher energy prices (2. key input) will severely impact on the financial viability of irrigators.

### Recommendations:

- Urgent review of *National Electricity Rules* (NER) to remove potential bias towards higher network costs and inefficient pricing outcomes.
- Introduction of tailored irrigation tariffs - potential block tariffs - that allow individual irrigators to remain financially viable.

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<sup>8</sup> Price elasticity of demand measures the responsiveness of the quantity demanded to a change in its price. If the price elasticity of demand for electricity is low then this means individuals will consume a similar quantity of energy even if prices change, i.e. the good is a necessity in the operation process.

## 1. Changes to regulated electricity prices from 1 July 2012

Based on IPART's annual review, average regulated electricity prices in NSW will increase by around 16.4% in 2012/13. This change is additional to a 10% and 17% increases in 2010/11 and 2011/12 respectively. The proposed increase (segregated by providers) is given in the table below;

**Table 1.1 IPART's draft decision on regulated retail electricity price increases from 1 July 2012 (nominal, %)**

EnergyAustralia	19.2
Integral Energy	10.3
Country Energy	17.6
<b>NSW average</b>	<b>16.4</b>

**Note:** The increases in regulated retail electricity price increases are based on forecast network price increases which are subject to approval by the Australian Energy Regulator in June 2012.

Whilst these changes only relate to regulated electricity prices, it is often the case that unregulated prices changes accordingly, i.e. market based prices are heavily influenced by changes in the regulated prices.

The main reason for the difference in the Standard Retailers' individual average price increases is the differences in network costs.

## 2. Reason for electricity price adjustments

The main reasons for the price increase are the increased network costs and proposed carbon emission schemes (both federal and state government). Both components contribute approximately equally to the electricity price increase.

**Table 1.2 Drivers of the increase in average regulated retail electricity prices on 1 July 2012, by Standard Retailer (nominal, %)**

	EnergyAustralia	Integral Energy	Country Energy	NSW average
Network costs <sup>a</sup>	11.0	2.3	9.7	8.4
Carbon price costs	9.5	9.5	7.9	9.0
Wholesale energy costs	-2.6	-2.4	-1.8	-2.3
Other green scheme costs	-0.2	0.1	0.5	0.1
Retail costs and margin	1.4	0.9	1.2	1.2
Total cumulative increases on 1 July 2012	19.2	10.3	17.6	16.4

<sup>a</sup> The network service providers in EnergyAustralia's and Integral Energy's supply area are Ausgrid and Endeavour Energy respectively. The network service provider in Country Energy's supply area is Essential Energy.

**Note:** 'Other green schemes' include all of the Commonwealth and NSW Government schemes designed to reduce greenhouse emissions except for the Commonwealth Government's carbon pricing mechanism. While the \$/MWh cost of carbon is similar between the Standard Retailers, the proportionate increase is smaller for Country Energy because their total retail prices are larger. The increases in regulated retail electricity prices are based on forecast network price increases which are subject to approval by the Australian Energy Regulator in June 2012.

As the table above outlines, the wholesale energy costs and retail costs / margins have a negligible (if not negative) impact on electricity prices.

## **2.1. Network Costs**

Retailers must pay charges to use the transmission and distribution networks to transport electricity to their customers. These charges are set outside the IPART framework and are regulated by the Australian Energy Regulator (AER). As IPART cannot avoid or control these costs, it has simply passed these network charges through.

The increase in network costs are driven by capital investments aimed to;

- Cope with rising peak demand and changes in energy use patterns.
- Replace aging assets.
- Meet licensing conditions to improve network security and reliability.

## **2.2 Carbon Cost Pricing**

The introduction of the Commonwealth Government's carbon pricing mechanism are planned to commence on the 1st July 2012 with a fixed price of \$23 per tonne of CO<sub>2</sub> emission which will add 9% to average regulated retail electricity prices across NSW in 2012/13.

If introduced, this scheme will have direct impact on wholesale electricity costs (i.e. large component of the Standard Retailers' energy costs). In calculating the impact of the carbon price on regulated electricity prices, PART has used the Long Run Marginal Costs approach as a floor price.

## **3. Problems related to electricity price setting**

It is a concern that the network costs are entirely set outside the IPART regulatory framework. As IPART cannot assess the efficiency and cost effectiveness of the new capital investments (i.e. in transmission and distribution networks), it is unable to avoid potential biases in setting regulated electricity prices in NSW. A thorough review of the National Electricity Rules (NER) will be necessary to remove any existing inefficiencies that might have led to potentially unnecessarily high network charges - a move that has been also advocated by IPART.

It should be highlighted that irrigators in NSW have a very low price elasticity of demand for electricity. Electricity, together with water, is a key inputs into irrigation and rising input costs will place a severe financial strain on individual operators. Given the volatility in water availability in NSW, many businesses have taken measures to move to more water saving infrastructure. Whilst substantial water savings have been achieved in some instances, many of the operations in NSW have become more energy intensive in the process. Energy, in form of electricity or otherwise, has become a key component in the operational process and hence irrigator's demand elasticity has become more inelastic - i.e an inability to switch to a substitute good even if prices rise. Such a dependency on electricity will make irrigators especially vulnerable to the proposed price changes.

To highlight the higher energy intensity in irrigation the following graph has been provided by the Australian Bureau of Statistics.

**Energy Intensity, by industry - 2008-09 and 2009-10**

Industry	2008-09			2009-10		
	Energy use PJ	IGVA(a) \$m	Energy intensity GJ/\$m IGVA	Energy use PJ	IGVA(a) \$m	Energy intensity GJ/\$m IGVA
Agriculture(b)	107	29 109	3 676	109	28 764	3 783
Mining	519	90 507	5 736	543	96 105	5 651
Manufacturing	1 041	106 363	9 787	1 034	107 707	9 600
Water supply and waste services(c)(d)	22	9 332	2 342	21	9 786	2 129
Construction	144	95 292	1 527	144	95 804	1 529
Transport	531	63 885	8 330	544	65 392	8 291
Commercial and services	433	661 113	651	429	677 380	636
<b>Total</b>	<b>2 797</b>	<b>1 055 601</b>	<b>2 650</b>	<b>2 824</b>	<b>1 080 963</b>	<b>2 613</b>

(a) Industry Gross Value Added

(b) Includes Forestry and fishing

(c) Includes Water supply, sewerage and drainage services and waste collection, treatment and disposal services

(d) Excludes Electricity supply and gas supply

Note: One petajoule (PJ) = 1,000,000 gigajoules (GJ)

source: ABS, Energy Account Australia 2009/10

As the table shows, agriculture has become more energy intensive; a trend which is unlikely to reverse in the future.

#### 4. Impact of electricity price increases

The actual increase in regulated electricity prices for an individual irrigator will depend on the three components ; energy usage<sup>9</sup>, market participation<sup>10</sup> and network charges.

A typical bill by Country Energy for a groundwater pump<sup>11</sup> would consist of the following components (according to the cost shares) ;

Usage	~34% (variable charges divided into peak, shoulder and off peak)
Market Participation	~ 6% (variable charges based on total usage)
Network Charges	~60% (variable and fixed component)

This highlights that network charges are a major contributing factor to the overall electricity bill. These network charges are billed under various regulated tariffs published by the networks. These network charges typically relate to;

- Consumption - how much electricity is used at what particular time it is used (variable).
- Demand/Capacity - the maximum amount of electricity that is used or is allocated at one time (variable).
- Access - a connection fee to the network calculated daily (fixed).

Network costs will vary from tariff to tariff for each of the network providers and according to the time of the connection. This effectively means that newly installed equipment will

<sup>9</sup> Electricity usage at different time periods - peak, shoulder and off peak energy

<sup>10</sup> Includes End User Advocacy, Ancillary Services, NSW Greenhouse Reduction, NSW Energy Saving Scheme, AEMO etc.

<sup>11</sup> Other on farm irrigation equipment might have different cost shares

potentially fall under new tariff structures than older existing equipment. These new tariff structures might include additional network components, i.e. Peak Demand<sup>12</sup> and Shoulder Demand which can have very high unit costs. These high unit costs arise as a result of high investment into expanding infrastructure work that is aimed to cope with increased demand patterns. With increased capital investment for network related purposes, these costs components will be a major driver for electricity use in irrigation in the future.

The dollar value of an individual electricity bill will vary for each irrigator based on the equipment, size and layout of the irrigation operation. As an example, dairy farmers which operate more energy intensive equipment will likely see a greater increase in their electricity costs than broad acre cropping operations. Overall, the rise in electricity prices will have an impact on operational costs of all irrigators in NSW.

The impact will not only have a direct component, i.e. higher operational costs but also an indirect impact on consumption and investment expenditure in regional communities.

The direct impact of rising electricity prices will lead to a rise in input costs for irrigation operations. Assuming revenue from irrigation activities remain reasonably constant, an increase in operational costs will lead to a decrease in economic profits (crucial for financial viability). The assumption on stable revenue is broadly justified given that irrigators are generally price takers in domestic and international markets.

The indirect impact of rising electricity prices will be lower consumption and investment expenditure in regional communities given the lower economic profit margin of irrigators. As most of the industries in regional communities are heavily dependent on irrigation, the indirect impact on these industries can be substantial.

## **5. Recommendations**

Given the importance of electricity in irrigation, NSWIC would like to make the following recommendations to optimize electricity prices in NSW;

- Urgent review of the National Electricity Rules (NER) to remove potential bias towards higher than necessary network costs and consequently inefficient pricing outcomes. The cost effectiveness of all planned infrastructure upgrades should be thoroughly assessed and, if necessary, rectified to alleviate the financial burden on customers. Currently, those costs are simply 'passed on' by IPART, without assessing the cost effectiveness of infrastructure investments. This will mean that the efficiency of the pricing outcome cannot be guaranteed.
- Introduction of tailored irrigation tariffs that take into account the operational requirement of a particular irrigation infrastructure. Irrigators are progressively moving towards more energy intensive equipment and hence tailored irrigation tariffs would alleviate some of the financial burden of every increasing electricity prices for these industries. These tailored irrigation prices have to specifically address the Peak, Should and Off Peak Demand Network charges.

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<sup>12</sup> Peak demand refers to the highest demand during the peak period of the network time-of-use.

Such a specific irrigation tariff can take the form of a block tariff that comprise of the following components;

- A fixed network access charge component independent of usage.
- A variable Block component, expressed on a c/kWh basis applied to electricity consumption.

These two block components need to specifically address the needs of irrigation in the state.

With the current determination expiring on 30 June 2013, the proposed reviews and drafting of appropriate tariffs are urgently necessary to maintain a resilient irrigation industry.

## **Briefing Note**

# IPART Review of regulated retail prices and charges for electricity - 2013 to 2016

## Issue Paper

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## Introduction

This Briefing Note provides a summary of the Independent Pricing and Regulatory Tribunal (IPART) issue paper on the *Review of Regulated Retail Prices and Charges for Electricity - 2013 - 2016*. The issue paper outlines the scope, methodology and challenges for IPART's next price determination of regulated retail electricity prices.

This Briefing Note will provide a concise summary of IPART's challenges for this review and highlight the changes that might occur for the next price determination.

The current determination for regulated retail electricity prices will expire on 30 June 2013 and a new determination will be made for the period from 1st July 2013 to 30 June 2016. IPART's determination will be applicable to regulated retail tariffs and charges levied by the three Standard Retailers in NSW - *Energy Australia*, *Origin Energy* (trading as Integral Energy) and *Origin Energy* (trading as Country Energy).

Below is the timeline for the review:

Tasks	Timeframe
Release of draft report and determination & consultant's reports - Invitation of stakeholder's submissions	March 2013
Public hearing on draft report	April 2013
Due date for stakeholder submissions on draft report	May 2013
Release of final report and determination	May 2013

**The full IPART report is available under;**

[http://www.ipart.nsw.gov.au/Home/Industries/Electricity/Reviews/Retail\\_Pricing/Review\\_of\\_regulated\\_electricity\\_retail\\_tariffs\\_and\\_charges\\_2013\\_to\\_2016/14\\_Nov\\_2012\\_-\\_Release\\_Issues\\_Paper/Issues\\_Paper\\_-\\_Review\\_of\\_regulated\\_retail\\_prices\\_and\\_charges\\_for\\_electricity\\_2013\\_to\\_2016\\_-\\_November\\_2012](http://www.ipart.nsw.gov.au/Home/Industries/Electricity/Reviews/Retail_Pricing/Review_of_regulated_electricity_retail_tariffs_and_charges_2013_to_2016/14_Nov_2012_-_Release_Issues_Paper/Issues_Paper_-_Review_of_regulated_retail_prices_and_charges_for_electricity_2013_to_2016_-_November_2012)

## Executive Summary

The period in which this review will be conducted coincides with a period of potential large scale changes in the electricity industry. After a series of large price increases, both state and federal governments are reviewing policy and regulatory settings for the electricity industry to ensure the industry operates in the long-term interest of customers.

These federal and state reviews focus mainly on the costs associated with transmission and distribution networks as well as the costs of complying with 'green' energy schemes. IPART has assessed that at this stage, it is not clear which policy and regulatory settings will apply over the next three years and what the associated impacts on electricity prices will be. While not all reviews are yet finalised, IPART predicts that the steep price increases that have occurred over the past 5 years are unlikely to continue at the same rate.

## Terms of Reference

For this next regulatory period, IPART has been instructed to assess the competitiveness of the electricity industry and follow the Terms of References (ToR) provided by the NSW Government ([here](#)).

While the ToR are similar to those provided in 2010, there are some important differences;

- A narrower definition for "small customers"
  - Instead of being defined as those customers with annual consumption of up to 160 MWh, the 2013 ToR define small customers as those with annual consumption of up to 100 MWh.
- Discretion over setting energy purchase costs.
  - Instead of requiring IPART to set the allowance for these costs no lower than the long run marginal cost of generating plant, the 2013 ToR specify that this allowance must be no lower than the weighted average of 75% of the LRMC and 25% of the market-based cost. This difference is intended to place downward pressure on regulated retail prices by reducing the amount of 'headroom' build into process when the LRMC exceeds the market-based cost.
- Assessment of the total price impact of Standard Retailers' obligations to comply with the green schemes.

## **Methodology for IPART's determination**

1. Carefully consider the requirements of the Act, our ToR and other contextual factors to ensure IPART understands the matters it must take into account and the objectives it must aim to achieve through the determination.
2. Analyse the level of competition in the retail electricity market to understand the degree of regulation necessary to protect customers from prices being materially above the efficient cost of supply while also facilitating effective competition.
3. Take account of the above considerations and analysis to decide on the appropriate form of regulation.
4. Estimate the costs that an efficient Standard Retailer is likely to incur in supplying its small retail customers on regulated prices over the determination period, including energy costs, retail operating costs and a retail margin, and considering the risks and challenges associated with forecasting these costs for this period.
5. Calculate the average change in regulated retail price for each Standard Retailer taking account of the above considerations.
6. Review and make decisions on the level of each regulated retail non-tariff fee and charge the Standard Retailers can levy.
7. Provide information on the impact of our decision on customers.
8. Check that the determination balances the requirements of the ToR, including meeting the long term interests of customers and the stability of the electricity market.

## Regulatory Package

Similar to the 2010 determination, IPART's preliminary view is that it will design a 'regulatory package' to compensate an efficient standard Retailer for the costs and risk faced in supplying electricity to small retail customers.

This package includes;

- Three cost allowances:
  1. **Energy cost allowance**
    - i. including energy purchase costs, green scheme compliance costs, market fees and energy losses
  2. **Retail operating cost allowance**
    - i. including retail operating costs and customer acquisition costs
  3. **Retail margin allowance**
    - i. reflecting any material risks not compensate for elsewhere in the regulatory package

Furthermore, there will be an annual review of the energy purchase costs and green scheme costs included in the energy cost allowance, to manage the risk associated with forecasting these costs.

Also, a pass-through mechanism will be incorporated to allow retailers to pass through to customers, material increases or decreases in costs associated with **regulatory or taxation change events** that were unanticipated or uncertain at the time of making the determination.

Finally, there will be a weighted-average price cap that allows the Standard Retailers to recover the above cost allowance, and pass through to customers the applicable network charges. This would give the Standard Retailers the flexibility to set their own cost-reflective regulated prices subject to an overall cap on the maximum average increase in these prices. This has been equivalent to the previous determination.

## Competition in the electricity industry

The NSW Government is considering to phase out retail electricity price regulation where it can be demonstrated that effective competition exists. The NSW Government will make a decision on whether to end price regulation after considering advice on the competitiveness of the market from the *Australian Energy Markets Commission (AEMC)*. AEMC will make its recommendations in **September 2013**.

IPART will engage with stakeholders to identify how the existing regulatory package could be enhanced to further facilitate competition and help improve customer confidence and participation in the competitive market, including whether to move to an opt-in approach to price regulation (i.e. where customers would need to actively choose to remain on regulated prices).

## Regulatory Changes and Challenges

In response to the large price increases;

- Over the past five years, regulated retail electricity prices in NSW have more than doubled in nominal terms, and by around 79% in real terms. These occurrences are driven by;
  - rise in network costs
  - compliance with green schemes

both state and federal government are currently focusing on identifying and addressing inappropriate energy policy and regulatory settings to ameliorate future price increases. These policy and regulatory reviews will likely affect the electricity market and retail electricity prices over the 2013 determination period.

Below is an outline of current reviews:

- **Review of the RET and uncertainty about other green schemes;**
  - The RET was split into a large scale and an uncapped small scale scheme in 2011 and the Carbon Pricing Mechanism was introduced on 1 July 2012. Furthermore, the state-based Greenhouse Gas Reduction Scheme was closed when the carbon price was introduced and the NSW Solar Bonus Scheme was closed to new participants in July 2011.
  - The Climate Change Authority is undertaking a statutory review of the RET scheme (structure and targets). If the Climate Change Authority's recommendations lead to changes in the structure or operation of the RET, this could affect the cost that electricity retailers incur in complying with the scheme - and thus the costs that get passed on to customers in electricity prices.

- The Carbon Pricing Mechanism is undergoing a change in its intended floor price mechanism. Changes in the mechanism will have implication for the determination (i.e. the fixed price carbon is due to end July 2015 and will be replaced by a market mechanism).
  - The Federal Government is considering introducing a National Energy Savings Initiative, which would replace the existing state-based schemes, including NSW's Energy Savings Scheme.
- **Changes to network regulation and governance:**
    - In 2011, AEMC proposed changes to the economic regulatory provisions in the *National Electricity Rules*. With stronger provisions to allow only efficient expenditure into the regulatory asset base, IPART considers that the AEMC's draft determination is likely to limit future increases in network prices to efficient levels. This in turn would take some pressure off retail price increases.
    - The *National Electricity Law* (NEL) includes a Limited Merits Review Regime to provide parties affected by the AER's decisions with recourse to review the mechanism. To date, around \$3 billion in additional review has been granted to network businesses through this regime, with the majority applying to the NSW network businesses. In March 2012, the Standing Committee on Energy and Resources (SCER) announced that an expert panel had been established to review the regime. In September 2012, the expert panel recommended significant changes to it, including broadening of the scope of the review mechanism, increasing customer participation, and establishing a new administrative body to hear appeals under the regime.
    - The AEMC has recently completed its review of reliability standards in NSW. This review concluded that the benefits from reductions in capital expenditure under all three of the review's scenarios for lower distribution investment significantly outweighed the costs to customers of slightly lower levels of reliability. The AEMC is currently conducting a national reliability standard review. This review will provide advice to the SCER on the merits of moving to a nationally consistent framework for expressing, delivering and reporting on distribution reliability outcomes. The NSW Government and SCER will consider these reports in deciding on future reliability standards.
    - The NSW Government has made changes to the governance of the three distribution businesses - Ausgrid, Endeavour Energy and Essential Energy - to extract efficiency savings. The NSW Minister for Resources and Energy has indicated capital expenditure savings over the next four years of \$1 billion.

- **The move to the National Electricity Customer Framework:**
  - The new *National Energy Customer Framework* was established to transfer the various state-based retail regulations to a single national framework. Once the Retail Law and Rules are adopted by the NSW Government, the AER will be responsible for the compliance and enforcement activities that IPART currently undertakes. The *National Energy Customer Framework* was expected to commence in NSW on 1 July 2012, as agreed by the Australian Government via the Ministerial Council on Energy in December 2010. However, on 1 June 2012, the NSW Government announced that this would be delayed until 2014.
  
- **NSW Government's intention to ban electricity retailers from charging small customers on market contracts early termination or exit fees:**
  - The NSW Government recently announced that it intends to ban electricity retailers from charging an early termination fee to customers who exit their electricity contract due to a change in the contract's terms and conditions. Early termination fees are not regulated charges (IPART does not determine maximum early termination fees or any other fee for the market contract). The extent to which a ban on early termination fees affects the retail market will depend on how this particular policy will be implemented.
  
- **Additional Reviews;**
  - AEMC's review of the effectiveness of competition in the retail electricity market in NSW ; and
  - the NSW Government's asset sale program in relation to its remaining energy generation assets.

## Conclusion

As this briefing note has highlighted there are many issues over future electricity price setting that could affect Members of NSW Irrigators' Council;

- Uncertainty over the future regulatory environment
- Changes to 'green' scheme requirements
- Potential deregulation of the electricity market