

ENA UPDATE

CEO UPDATE

IN PRAISE OF 'BORING'

The new Commonwealth Energy White Paper has recently been criticised by some as relatively dull and a 'missed opportunity'. Still, there is something to be said for continuity in energy policy in such an uncertain market environment, exacerbated by 17 major regulatory reviews in the energy network sector since 2010.

No one can dispute Australia has unfinished business in renewables and emissions policy. There is an urgent need to close out the costly chaos of the Renewable Energy Target review and achieve more bipartisan approaches to emissions abatement.

Given these were never going to fixed unilaterally, the Energy White Paper largely gets the balance right. It provides focussed reform priorities, while reinforcing policy principles that underpin efficient outcomes for energy customers. Investors and service providers responsible for essential infrastructure will welcome the Paper's "boring" recommitment to 'technology neutral' policy settings; recognition of the need

for investment certainty, and the avoidance of unnecessary Government intervention in energy markets which increases costs to consumers.

The Energy White Paper includes a concerted focus on the need to make electricity tariffs fairer and more efficient. This has been a key priority for ENA member companies and we welcome the Government's commitment for the COAG Energy Council to deliver a concrete implementation plan for electricity tariff reform by the end of this year.

The review of upstream gas market competition by the Australian Competition and Consumer Commission is an important opportunity to increase confidence in wholesale market transparency and price discovery. Similarly, a National Energy Productivity Plan can provide a constructive opportunity to move beyond arbitrary targets and recognise the real services provided in the energy supply chain. ENA will be working with the Commonwealth to ensure productivity measures and proposed targets are fit-for-purpose.

Continued page 2

CONTENTS

CEO UPDATE	1
ENA SEMINAR SERIES 2015	3
INDUSTRY NEWS	4
ENA ADVOCACY	11
ENA PROJECTS	16
ENA PUBLICATIONS	18
NATURAL GAS NETWORKS – VALUABLE CONNECTIONS	



LinkedIn

ENA ON SOCIAL MEDIA

Connect with us socially for the latest on major events and news via twitter at [@ENA_Australia](#) or LinkedIn



The incredible disruption in energy supply chains caused by technology, energy use and new markets will require policy and regulatory reforms that harness, and stimulate innovation. These trends are not only disrupting the business model of energy networks and other service providers – they are challenging policy and rule-making institutions like the AEMC and the COAG Energy Council itself, the Australian Energy Regulator and Australian Energy Market Operator.

Energy market governance will soon come under the spotlight in the long-planned review for energy ministers chaired by Dr Michael Vertigan AC, Euan Morton and Professor George Yarrow. It's an important opportunity to ensure Australia's energy institutions are fit for the disruptive challenges to come. These institutions will be influential in removing barriers to innovation in both new markets and in regulated services. They will also determine if Australia maintains investor confidence essential in an industry that remains capital intensive under all future scenarios.

Consumers have a direct interest in maintaining a stable investment environment for network infrastructure simply because it means a lower bill. Ongoing network infrastructure investment remains fundamental even in the most decentralised energy futures assessed by the CSIRO and others. A recent University of Sydney study by Khalilpour and



Consumers have a direct interest in maintaining a **stable investment environment** for network infrastructure simply because it means a lower bill.

Vassallo has again confirmed that widespread disconnection is not realistic in the future, even with falling technology costs, because of the value the grid provides to customers with distributed energy resources.

In this dynamic environment, a first priority for the Governance Review will be to preserve, in the AEMC, the capacity to provide a clear, coherent vision for energy reform, which is reflected with sufficient clarity in a rules framework supporting investment. In turn, AER and AEMO should be positioned to perform their distinct, complementary roles in the implementation of reform, rather than being expected to confront fundamental market design or competition policy issues in a reactive manner, responding to market trends.

Of course, if energy policy makers are scrambling to rethink policy and regulatory frameworks in the face of disruption, then they are certainly not alone. The Harper Review of Competition Policy released in March highlights that new services like Uber are not

only disrupting the traditional taxi service but challenge conventions on what consumer protections are sought, or needed, by informed, consenting customers.

The ENA supports a consistent, principles-based approach to regulation of new business models, which avoids creating unnecessary barriers to entry and ensures a level playing field for providers of equivalent services. Consumer protection frameworks will require review to ensure they remain fit-for-purpose in the face of new sales models for solar, storage or other services. Not only do such services change the physical and financial features of a customer's energy supply, the extent of choice itself may permit a re-evaluation of the need for consumer protection for consenting customers.

If you'd like to read more, see our website for recent submissions on The Regulation of New Products and Services and the publication, **Evolving a Future Ready Regulatory Framework.**

John Bradley
Chief Executive Officer

REGISTER NOW!

ENA Seminar Series 2015

Energy Transformed

Pathways + Connections

7 May 2015, Australian National Maritime Museum, Sydney

Join energy network industry decision makers and leading experts in new services, technology and pricing to discuss the latest in strategic responses to the dynamic environment that is faced by the energy supply sector.

AEMC Chairman, John Pierce will provide a keynote address on policy and regulatory reform focused on empowered consumers and distributed technology.

With tariff reform a focus of the sector and the COAG Energy Council in 2015, Dr Toby Brown of the Brattle Group will provide an international keynote address on 'Leading Tariff Design in the US: The Heart of an Integrated Grid'.

The interactive sessions will include a unique perspective from the network sector on the changing face of utility ownership in Australia and how network utilities are responding to energy market transformation. Sessions include:

- » Energy Transformed Leaders Panel - The View from the Top
- » Reorienting For The Future – Delivering Energy Or Service
- » Grid Side Smarts – Customer Value In Service Delivery
- » Pricing Reform As a Platform For Innovation

Register for this seminar today and join Australia's leading energy businesses enabling the transformation of the nation's energy system.

To download the program and registration

[CLICK HERE](#)

SPONSORS

**Landis
Gyr+**
manage energy better

GOLD SPONSOR

KPMG

SILVER SPONSOR

ORACLE
UTILITIES

BRONZE SPONSOR

REGISTER NOW!

ENA Seminar Series 2015

Gas 2015

CUSTOMERS, CHOICES AND CHALLENGES

12 June 2015, Hotel Windsor, Melbourne

The **Energy Networks Association** is pleased to announce that the program for Gas 2015: Customers, Choices and Challenges is now available – with ACCC Chairman Rod Sims to provide Keynote Address.

In light of the ACCC **public inquiry into the competitiveness of wholesale gas prices in Eastern and Southern Australia** Mr Sims' address will be a timely opportunity to gain insights into this critical inquiry for the domestic gas sector and its customers.

Other distinguished speakers include:

- » Gas Network executives, including the new CEO of Australian Gas Networks Limited, **Ben Wilson**;
- » Representatives of commercial and residential users, including **Gavin Dufty** and **Innes Willox**;
- » Policy makers and Regulators from the Australian Government's Department of Industry, Economic Regulation Authority of Western Australia and the Australian Energy Regulator; and
- » **Greg Ellis**, Managing Director of appliance manufacturer Rinnai and **Sean Blythe** of gas transport operator Envirotrans.

Join the gas network sector and key stakeholders representing policy makers, consumers, appliance manufacturers, major gas users and gas networks to consider the critical issues facing the future growth and prosperity of the Australian gas market, and the customers it serves.

To download the program and registration

[CLICK HERE](#)

SAVE THE DATE:
ENA Regulation Seminar 2015
5 August 2015, The Novotel, Brisbane.

Planning is underway for the annual ENA Regulation Seminar 2015 to be held at the Novotel Brisbane on Wednesday 5 August starting at 1.00pm.

The event is being held adjacent to the annual ACCC conference. A stimulating and topical program will be launched.

INDUSTRY NEWS

QUEENSLAND "VIRTUAL WORLD" TECHNOLOGY CHOSEN AS FINALIST FOR INTERNATIONAL AWARD

Queensland-developed technology that creates a virtual version of the real world allowing fast and accurate inspection and assessments of electricity networks and the surrounding environment without the need to deploy field workers has been selected as a finalist for the prestigious international 2015 Edison Award.

One of three international finalists in the Awards, the Remote Observation Automated Modelling Economic Simulation (ROAMES) system developed by Ergon Energy is transforming inspection, maintenance and vegetation management regimes on large scale assets such as electricity networks.

Operating one of the single largest electricity networks in the western world, Ergon Energy developed an aircraft-based laser and imaging capture system that can quickly and efficiently map its network and reveal encroachment of vegetation and condition of poles, wires and other assets. It also delivers other cloud-based data which can be used to quickly assess large sections of network in a fraction of the time of traditional inspection regimes.

ROAMES combines pioneering geospatial mapping techniques with accurate three-dimensional modelling which shows precise locations of the electricity network in relation to buildings, trees and other objects.

Ergon Chief Executive Ian McLeod said that while the Edison Award selection was very much world-class recognition of the regional Queensland innovation, ROAMES had already been a winner for his electricity company.

"We are already part of the way through a third mapping of our entire 160,000-plus kilometres of network with ROAMES and understanding maintenance and other priorities from this data better than we ever have in the past," Mr McLeod said.

"It's great to see that Queensland can develop and commercialise world leading and cost effective technology," Mr McLeod said, "The technology, now owned by Fugro ROAMES, is also making headway in Europe and the USA".

The 2015 Edison Award is run by the United States-based Edison Electric Institute and is recognised as the pre-eminent international recognition of electricity industry innovation.


[CLICK HERE](#)

WESTERN POWER DELIVERS AUSTRALIA'S BIGGEST POWERLINE PROJECT IN 25 YEARS

Western Power's Mid West Energy Project, featuring the construction of one of Australia's largest powerlines, has been officially declared ready to be energised by Treasurer and Energy Minister Dr Mike Nahan.

The new 330,000 volt transmission powerline transports electricity 190 kilometres from Perth to the Mid West.

Western Power's Chief Executive Officer Paul Italiano said the new powerline was the largest built in WA since the line to Kalgoorlie was constructed in the mid-1980s.



"It's great to see that Queensland can **develop** and **commercialise** world leading and **cost effective** technology,"

"The Mid West Energy Project, which includes the construction of a 190 kilometre transmission line from Perth to the Mid West, a 70 kilometre line to power Karara's iron ore mine and substantial upgrades to several substations is a substantial achievement in electrical engineering, planning, budgeting and construction," Mr Italiano said.

"To deliver one of the State's largest infrastructure projects under the \$406 million budget set for the project is a significant achievement.

"The project required extensive consultation with land owners, environmental approvals, a new line route to be planned, the old 132kV wood pole powerline to be dismantled, and access tracks to be constructed, all before the 388 lattice steel towers and almost 2,900 kilometres of powerlines could be installed.

The new line provides a 500 megawatt increase in the capacity of the network in the Mid West, which will increase the potential for industry growth in the region, and provide the potential for the expansion of local industries and economies.

Importantly, it will facilitate the connection of renewable generation opportunities, particularly wind, and future gas-powered generation.

[CLICK HERE](#)

REVISED PLANS TO SECURE SAFE, RELIABLE & AFFORDABLE ELECTRICITY NETWORKS FOR NSW

NSW electricity distributors Ausgrid, Endeavour Energy and Essential Energy have submitted their revised five year plans for safe, reliable and affordable network services to the Australian Energy Regulator.

Chief Executive Officer Vince Graham said the proposals set out plans for the three electricity distributors to continue to safely improve their productivity and efficiency.

"These five-year plans are a balanced approach to reforming our electricity networks and reducing pressure on consumers' bills, while maintaining a safe and reliable power supply," Mr Graham, said.

"Our customers have told us that electricity needs to be more affordable – but most are not prepared to accept poorer service, more blackouts or increased safety risks to staff and the community.

"These are sensible plans to keep the average annual network price rise for residential customers to around inflation, while ensuring the networks remain safe, reliable and financially sustainable for the long term."

Since July 2012, Ausgrid, Endeavour and Essential Energy have been undertaking sweeping reforms initiated by the NSW Government that have achieved \$3 bn in savings.

Under the revised proposals submitted by the three networks combined operating and capital expenditure will reduce by 37% across the three businesses compared to the previous five years.

"This is a responsible way to reform the distribution networks and deliver progressive improvement to productivity and efficiency for the benefit of the customers we serve," he said.

"In contrast, the draft determination from the AER in November 2014 cut revenue by \$6.5 billion or 27% over the five year period, including a 66% real reduction to capital investment compared to the previous five years.

"The AER's draft decision is based on assumptions, modelling and processes that are critically flawed.

"The AER's Draft Determination would require immediate job cuts of 4,600 employees, or 37% of the workforce across these three networks."

The networks' revised proposals for the 2014-19 period accept some aspects of the AER's draft determinations and have incorporated these measures as part of their existing and effective reform processes.

However, the AER's draft decision relies heavily on a new econometric model to benchmark distributors' performance, which was not published by the required deadline of 30 September 2014.

“We urge the AER to carefully review our revised proposals in light of our shared objectives under the National Electricity Rules to deliver safe, reliable and affordable electricity for our customers.”

[CLICK HERE](#)

IDEMAND TO GROW DEMAND MANAGEMENT MARKET

TransGrid has unveiled its iDemand system, a research driven technological initiative aimed at developing methods for managing peak energy demand.

Unlocking demand management alternatives, reduces the need for infrastructure investment which means a more efficient supply of energy to NSW consumers and the community. By investing in demand management research, TransGrid is strengthening their ability to provide a safe, reliable and efficient supply of electricity.

iDemand is located at TransGrid’s Western Sydney site, consisting of batteries storing 400 kilowatthours of capacity filling a small shipping container, with solar panels installed on top as well as shading the centre car park. Using lithium polymer battery technology, for sustained power delivery, fast response time and relatively low maintenance requirements, the system has enough energy capacity to offset the equivalent of 40 households’ load at times of peak.

TransGrid has developed an interactive web portal that shows live status updates of the system’s

energy flow and storage, allowing the download of historical data to assist research in demand management.

The research tour and web portal launch on 25 November hopes to seek expressions of interest in iDemand research agreements from academics and industry members, to derive the most value from the installation. This is achieved by enabling learning and knowledge that will grow the market for demand management solutions.

TransGrid is committed to procuring cost-effective demand management as an alternative to network investment, and undertakes innovative activities such as iDemand in order to contribute to boosting uptake of demand management in NSW.

Visit the iDemand web portal at www.transgrid.com.au/idemand.

[CLICK HERE](#)

MAKING LIFE EASIER FOR ELECTRICITY CUSTOMERS

SA Power Networks has made it even easier for customers to report and monitor power outages by introducing a new update service available for a wide range of smart phones and other mobile devices.

Current interruptions information is now available to smartphone, tablet, laptop or computer, in a Google map format or by suburb/postcode search. Customers also can report an outage or a street light fault from these devices

and register to receive notification of meter reading dates in their area.

The new device-friendly functionality includes:

- » Search capability for outages – just enter your suburb or postcode for details of outages in your area (Media note: if you leave the search blank all published outages will be shown);
- » An outage map – gives a State-wide overview of outages, and with pinch and zoom you can get more local detail about the number of customers affected, the cause of outages, and when power is expected to be restored; and
- » Alerts for state-wide events affecting the electricity network.

Apart from optimising existing functionality for mobile devices, customers can also register for SMS or email notifications to be sent to their preferred mobile number or email address about power outages, meter reading dates, and other services that we may offer in future. They can also register family members to keep them informed.

[CLICK HERE](#)

ELECTRICITY DEMAND REACHES RECORD HIGH

Temperatures in March set new records in Queensland with demand on the electricity transmission network reaching an all-time high for March.

Demand on Powerlink Queensland’s network on 5 March reached 8809 megawatts – the highest demand on record for March and only 82 megawatts short of the all-time peak for Queensland, recorded on 18 January 2010.

The timing of the demand peak was also significant as the record was set later in the day, mainly due to the impacts of strong rooftop solar panel uptake across Queensland.

The all-time record demand on the transmission network of 8891 megawatts was at 3pm in 2010. This new record occurred later in the day at 5pm, with a second spike in demand at 7pm. The change in demand patterns was caused by the impact of increased rooftop solar panel generation.

The generation capacity of solar has grown from 140 megawatts in January 2010 to 1300 megawatts.

Queenslanders use solar generation until the late afternoon and then return to the electricity network to run air conditioners and other appliances from the early evening onwards.

This significantly reduces daytime demand on the network and effectively delays peak demand to late afternoon or early evening. It is predicted that increased solar uptake will continue to push the peak demand later in the evening from 5pm to 7pm.

Powerlink Chief Executive Merryn York said Powerlink's transmission network had reliably met yesterday's high demand without any issues.

"We plan and operate the network to allow for these hot conditions, particularly around this time of year," Ms York said.

"While it was a record peak demand for March, the Powerlink transmission network performed well and provided Queenslanders the electricity they needed to try and beat the high temperatures."

[CLICK HERE](#)

SECOND GAS PIPELINE TO TORQUAY

AusNet Services has commenced construction of a second natural gas pipeline from Geelong to Torquay in February, reinforcing the supply capacity for residents and business in the region. Scheduled for completion mid-2015, the \$2.9 million project will significantly eliminate the risk of supply interruptions during peak winter periods and help meet new connection growth in the areas.

AusNet Services General Manager Asset management, Alistair Parker, said the new pipeline will future-proof the gas network in the burgeoning areas south of Geelong and Torquay.

"As the natural gas network owner in western Victoria, AusNet Services continues to invest in key infrastructure to provide a safe and reliable gas supply to our customers," Mr Parker said.

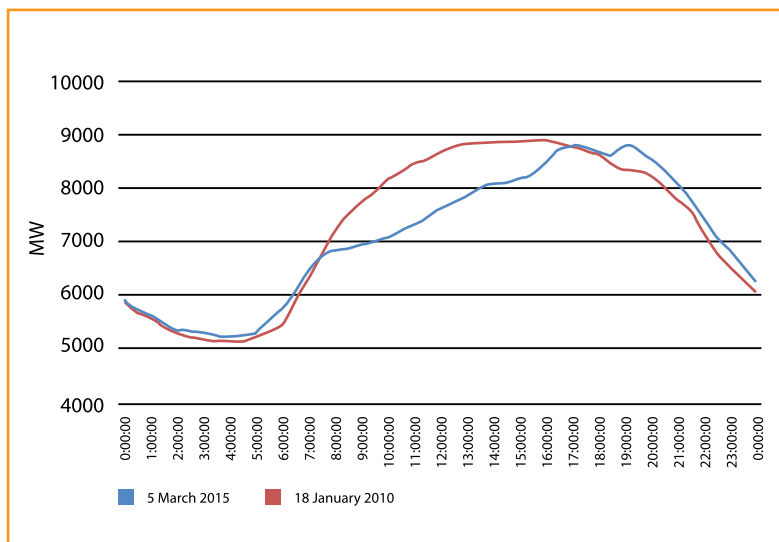
"With thousands of new homes being built in Armstrong Creek, Torquay and Jan Juc, there has been a strong up-take of gas for general heating, cooking and hot water systems.

"The new 11 kilometre pipeline will help secure the supply of gas to the residents during peak winter periods and provide capacity for up to an expected 5,000 additional homes in Torquay and Jan Juc," he said.

In addition to the new pipeline to Torquay, AusNet Services is preparing to extend its reticulated natural gas network to Bannockburn and Winchelsea, as part of the State Government's gas extension program.

[CLICK HERE](#)

FIGURE 1: QUEENSLAND DEMAND



JEMENA DELIVERS SAVINGS TO GROW THE NSW GAS MARKET

Lower distribution charges will be one of the keys to keeping gas a competitive fuel choice in NSW during challenging market conditions over the next few years, Jemena MD Paul Adams said in a speech to the Australian Domestic Gas Outlook conference in Sydney, Mr Adams outlined the gas distributor's vision for growing the NSW gas market, passing on savings from lower funding costs and efficiency gains to enable customers to keep using or connect to clean and efficient gas.

To offset the impact of rising wholesale gas prices, Jemena is proposing to reduce network charges over the 2015-2020 period for its 1.2 million residential and small business gas customers by up to 40 per cent in real terms.

If the Australian Energy Regulator (AER) accepts Jemena's proposal, a typical residential customer would save around \$563 over this period. Distribution costs currently make up around 50 per cent of a typical residential customer's bill.

Mr Adams said despite higher wholesale gas prices and tighter gas supply over the next few years, Jemena was forecasting more than 35,000 new connections (both residential and business) on average each year between 2015 and 2020 – a total of 185,000 over the next five years.

"Keeping our network charges low will encourage new connections. Despite more difficult market conditions, we're anticipating a 'connections boom' over the next two years, driven by construction in the greater Sydney area.

"Already, a large proportion of these new dwellings are deciding to connect to gas because it's a

premium product that has real advantages over electricity for cooking, heating and hot water.

"In the long term, growing our gas network will help drive our charges down as we can spread the largely fixed costs of distribution across a larger customer base."

[CLICK HERE](#)

CONNECTING OVER 700,000 CONSUMERS IN WA TO NATURAL GAS

ATCO Gas Australia's commitment to supporting growth and providing an energy choice to West Australians through clean, reliable natural gas has seen the state's largest gas distributor record a number of significant milestones to round out 2014, including connecting its 700,000th consumer.

In November, the number of homes and businesses connected to natural gas in WA surpassed 700,000 for the first time and coincided with a new benchmark in customer connections achieved in a single month. During November ATCO Gas Australia added 2,670 users to the network, the highest monthly rate of new connections achieved over the past five years.

"The number of new connections in November was an outstanding result. It takes the total of new consumers who are using natural gas to over 55,000 since ATCO began operating the gas network in July 2011," said Alan Dixon, former President of ATCO Gas Australia.

"Keeping our network charges low will encourage new connections. Despite more difficult market conditions, **we're anticipating a 'connections boom' over the next two years**, driven by construction in the greater Sydney area.

Mr Dixon said the rate of new customer connections reflects the increasing demand for natural gas in Western Australia.

"The strong growth we have experienced demonstrates that families want gas in their homes. In fact, on average, 92% of households in new subdivisions request a natural gas connection. Consumers recognise the benefits of using natural gas when cooking, for hot water systems as well as heating their homes."

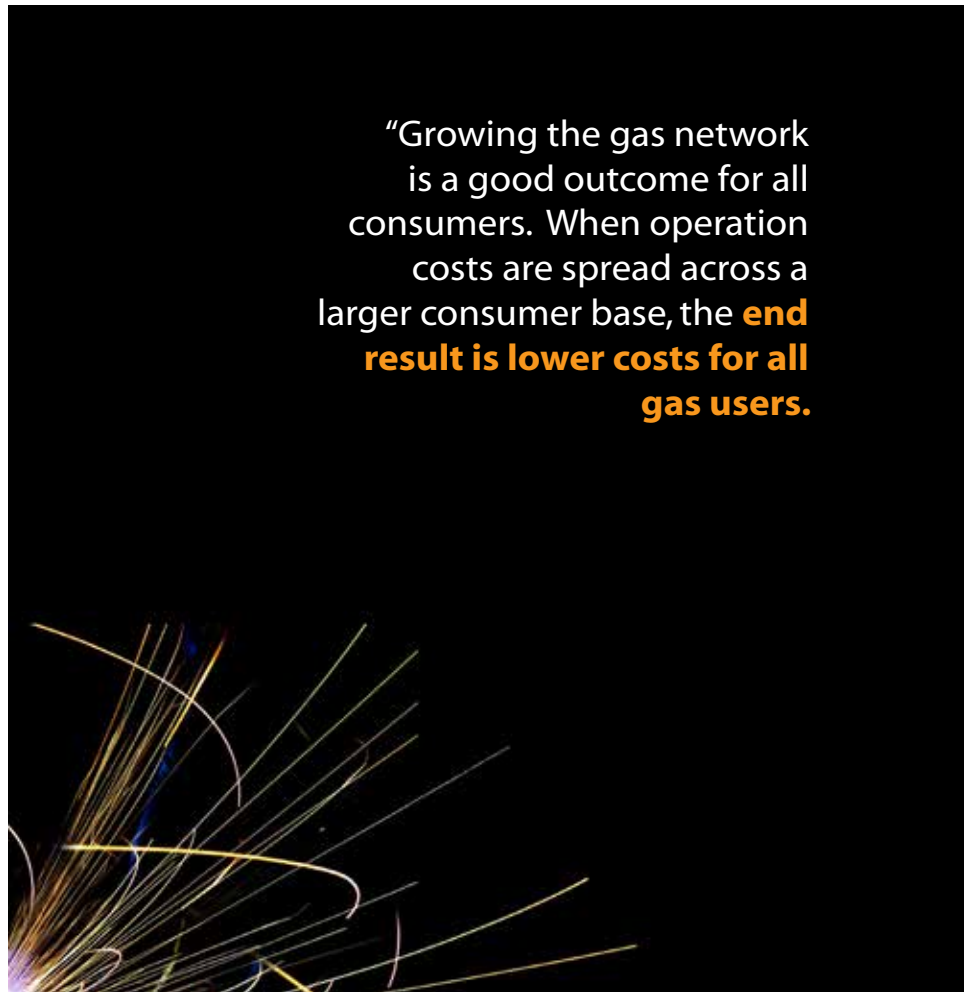
"Growing the gas network is a good outcome for all consumers. When operation costs are spread across a larger consumer base, the end result is lower costs for all gas users. With growth rates in Western Australia that are forecast to remain strong, ATCO Gas Australia is committed to supplying natural gas for the broader community, and continuing to provide a safe, reliable natural gas service to our more than 700,000 natural gas consumers," Mr Dixon said.

[CLICK HERE](#)

SAFETY IN SCHOOLS PROGRAM

TasNetworks will this year visit 10,000 primary-school aged children in Tasmania with its revamped Safety in Schools Program.

The education program is a free service which aims to reduce the risk of electrical incidents and prevent tragic accidents by educating Tasmanian children about electrical dangers, as well as energy efficiency messages.



"Growing the gas network is a good outcome for all consumers. When operation costs are spread across a larger consumer base, the **end result is lower costs for all gas users.**"

TasNetworks team members are trained as presenters to deliver the interactive and educational sessions to schools around Tasmania. There are two separate programs, for kinder to year two and years three to six.

In 2015 TasNetworks is relaunching the former Aurora Energy program, with the help of some brightly coloured characters called Sparks, her nemesis Shocker and a nifty robot called Socket.

"The Safety in Schools Program aims to reach 10,000 primary-

aged school children this year with important messages about electrical safety and energy efficiency," TasNetworks CEO Lance Balcombe said.

"The program is an important part of TasNetworks' commitment to educating the general public around how to be safe around electricity.

"We have seen many success stories with children taking what they have learnt and reinforcing key safety messages at home."

[CLICK HERE](#)

ENA ADVOCACY

AN INDUSTRY STANDARD TO SUPPORT COST-REFLECTIVE NETWORK PRICING

The foundation principles for utility pricing are as relevant today to the design of network tariffs as when they were first published over 50 years ago.

As a result of a recent rule change the original five principles developed by economist James Bonbright fifty years ago now have their counterpart in the new distribution pricing principles in the National Electricity Rules (NER).

Governments and the industry (network businesses and retailers) support cost reflective tariffs as an opportunity to improve price signals to reduce peak demand and reduce network costs.

Networks are currently in the process of engaging with customers and retailers on their proposed cost-reflective

network tariff structures to progressively apply from 2017. This includes seeking customer and retailer feedback on the more widespread use of demand charges to signal the future costs of network services. The Energy Retailers Association of Australia and the ENA are working together in a series of forums to address the potential barriers to the adoption of more cost-reflective network tariffs by residential and small business customers. Overcoming barriers to customers seeing and responding to the network price signal will potentially benefit customers through lowering their electricity bills.

Later in 2015 most networks will submit details of their proposed tariffs, and indicative pricing levels, in a Tariff Structures Statement provided to the Australian Energy Regulator. The timeframes were set down by the Australian Energy Market Commission in the Final Determination for the Distribution Networks Pricing Arrangements Rule change.¹

ENA is supporting network businesses engagement on network tariff reform through the development of an Industry Standard for Network Tariff Reform. Under an Industry Standard ENA will propose a set of best practice principles for the effective implementation of cost-reflective network tariffs, focusing on key areas including:

- » the development and implementation of cost-reflective network tariffs that are appropriate for each network and their customers;
- » mechanisms for transitioning customers to more cost-reflective network tariffs to avoid bill shock, and in particular for assisting vulnerable customers;
- » co-operative models for retailers to pass through network price signals to customers; and
- » supporting customers to make informed choices and manage their peak demand, through the development of better information and decision tools.

An ENA Industry Standard for Network Tariff reform publication is scheduled to be released in December 2015.

Table 1:

NER distribution pricing principles	
Simple, understandable	Network tariffs must be reasonably capable of being understood (6.18.5 (i))
Minimise unexpected changes (stability)	Networks must consider the impact of network price changes on consumers when determining how to transition customers to cost reflective prices (6.18.5 (h))
Revenue recovery	Networks must be able to recover total efficient costs (6.18.5 (g))
Fair distribution of costs	The tariffs that a network charges to a retail customer should reflect the efficient costs of providing those services to the retail customer (6.18.5 (a))
Promotes economic efficiency	Network prices should reflect the efficient costs of providing network services (6.18.5 (e))

¹ The dates for submission are 25 September 2015 (Victorian businesses), 27 November 2015 (NSW, ACT, South Australia and Queensland businesses) and 31 January 2016 (Tasmania).

ENA GIVES EVIDENCE TO SENATE INQUIRY

Addressing the Senate Standing Committees on Environment and Communications at a public hearing into the performance and management of electricity network companies, the Energy Networks Association (ENA) highlighted the significant reforms that have been made to the regulatory framework to benefit the long-term interests of consumers.

Clearly, consumers across Australia are concerned about retail electricity price increases over the last five years. Addressing these concerns has been a priority issue for network businesses and policy makers. Amongst all, these reforms represent a genuine effort to ensure that consumers have confidence in how networks are regulated.

The Committee has heard that the regulatory framework ensures that consumer interests are at front and centre of electricity price resets, which happen (typically) every 5 years. These are just some of the features of this process:

- » The regulatory framework is guided by an overarching objective of promoting the long-term interests of consumers in price, quality and reliability outcomes.
- » The independent AER fully examines the costs of delivering electricity services.
- » The AER has strong information-gathering powers, which means that the AER can request information from network firms it considers necessary.

- » It is the AER, and not network firms, which set the allowed cost of capital which drives up to 60 per cent of regulated revenues.

The ENA has emphasised that the debate about further changes in the regulatory framework needs to be robust and avoid the temptation of introducing poorly conceived “quick fixes”.

ENA’s evidence to the committee countered claims that networks are not supporting distributed energy resources. ENA highlighted that Australian electricity networks are connecting distributed renewables at world-leading rates - connecting a rooftop solar system every 2.8 minutes in 2014, almost the same rate as the entire United States, with around 1/15th of the population.

The ENA also provided the Committee with information that highlights the genuine opportunities to improve electricity system performance

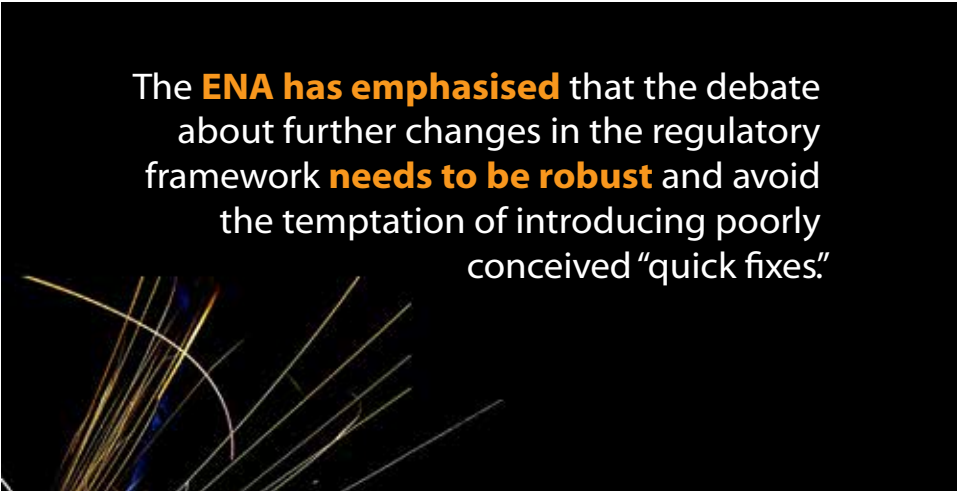
and services for customers, arguing that the focus should be on the opportunities to provide real benefits to consumers, including:

- » Tariff reforms which require efficient energy use and the economic use of distributed energy resources;
- » Encouraging consumers to shop around for savings in competitive markets – noting NSW and Qld customers could save up to \$300 per annum right now by choosing a more competitive market offer. In Victoria, even greater savings are possible.
- » The review of the Demand Management Incentive Scheme which has been actively supported by the networks sector.


The ENA looks forward to seeing the Committee’s report in April 2015.

For the ENA Submission to the *Senate Inquiry into Electricity Network Companies*

[CLICK HERE](#)



The **ENA has emphasised** that the debate about further changes in the regulatory framework **needs to be robust** and avoid the temptation of introducing poorly conceived “quick fixes.”



The current criteria for determining regulatory requirements is **now outdated** by changing technology and **requires a review** based on clear and consistently applied principles

REGULATING INNOVATIVE ENERGY SELLING BUSINESS MODELS UNDER THE NATIONAL ELECTRICITY LAW (NEL)

The increased availability, and decrease in installation costs, of solar panels and batteries has spurred a raft of new energy retailers offering new electricity products to home owners.

The AER has been registering these businesses under an exemptions section of the National Energy Retail Law; however they are now questioning whether the limited consumer protections offered under this framework are appropriate.

This consultation builds on the AER's **final statement of approach for energy selling by alternative energy sellers**, published on 2 July 2014, titled **Regulating innovative energy selling businesses under the NEL**.

The AER Website currently lists listed around 700 businesses with a retail exemption and 1,400 with a network exemption. The exempt businesses are divided into a number of classes. The ENA provided a submission to this consultation in February calling for

- » A light handed approach to regulation of these businesses;
- » A more comprehensive review than that being undertaken by the AER and coordinated with other current related reviews; and
- » The current criteria for determining regulatory requirements is now outdated by changing technology and requires a review based on clear and consistently applied principles..

Concurrent with this consultation the COAG Energy Council Energy Market Reform Working Group is also conducting a consultation, titled '**New Products and Services**' on the same issue.

For the ENA submission to the AER

[CLICK HERE](#)

ENA MEMBERS AND EMISSION REDUCTION FUND SAFEGUARDS

The Australia Government's first auction under the Emissions Reduction Fund (ERF) opened on 15 April 2015 and closed on 16 April 2015.

To support the investment being made under the ERF, the government is set to introduce its 'safeguard' (previously known as 'baseline') mechanism. These rules and regulations will be finalised in late 2015 and the safeguard mechanism will commence on 1 July 2016.

The safeguard mechanism is needed to ensure that the investments being made to lower Australia's greenhouse gas emissions profile in some sectors are not overtaken by increased emissions from other sectors.

The Australian Government is proposing to apply safeguards to businesses with historic emission averages over 100,000 tonnes of CO₂e.

This level of emissions is likely to only affect those electricity distribution and transmission companies that incorporate some generation capacity in their networks. For these companies the generation facility will be included as part of a broader electrical generation sector baseline. The connection between generators formed by the grid means that lower production by one generator must be met by generation elsewhere in the system. As a result, the Government is proposing that a single sector baseline covers all grid connected

electricity generation in the ERF Safeguard mechanism. Networks with generation facilities will be included under the broader electricity generation sector baseline and may only be required to operate under an individual baseline if emissions from the whole sector move above the sector baseline.

However, under the ERF Safeguard Mechanism the distribution of gas in a network will be treated as a single facility. Emissions from gas networks occur through maintenance operations and leaks from pipes, the extension of the networks or the addition of extra load to the network (e.g. as a result of having more customers connect). ENA believes that the application of a safeguard to distribution of gas would place an additional constraint on the expansion of gas distribution networks to provide efficient, relatively clean energy to 4.3 million Australian homes and 133,000 businesses.

ENA has previously argued that gas networks are already subject to direct financial penalties in the form of having to 'make good' fugitive emissions that come from leaks in the distribution system. As a result, gas distribution network service providers continually seek to minimise such losses. Similarly, existing regulatory frameworks require electricity transmission and distribution network service providers to manage networks and make efficient network investments which include consideration of losses.

Despite these arguments, the ERF Safeguard Mechanism looks likely to include several gas networks.

ENA's submission will advocate that gas networks be considered as a separate type of facility as is currently the case under the National Greenhouse and Energy Reporting (NGER) Act. The proposed Safeguard Mechanism currently allows for an industrial facility such as a mine site that undergoes a large expansion to renegotiate its baseline with the Regulator. Emissions increases from expanded networks are unlikely to meet the proposed 20% expansion threshold and ENA will argue that networks should have a separate baseline that allows for potential network expansion without an emissions penalty.

The ENA is working closely with ESAA and APGA to develop a response on this issue.

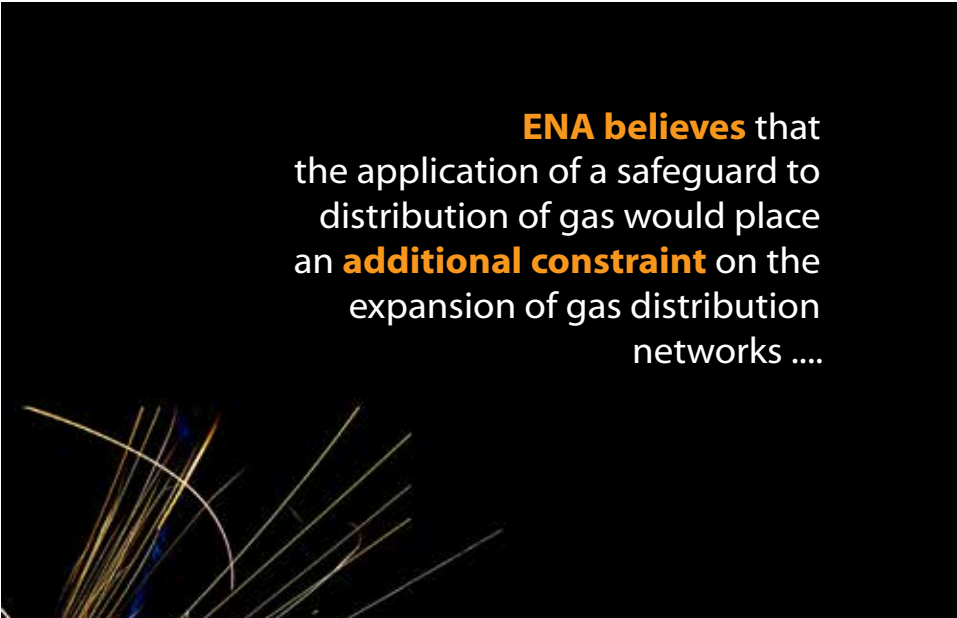
PENDING RULE CHANGE – RETAILER-DISTRIBUTOR CREDIT SUPPORT ARRANGEMENTS

AGL have lodged a Rule change proposal with the AEMC regarding credit support arrangements that retailers provide to distributors to protect distributors in the event of a retailer defaulting.

Distributors typically have a small number of customers and in some cases 50% of their business can be with a single retailer.

The ENA has had preliminary discussions with the AEMC and they intend releasing an Issues Paper in late May for consultation. The Rule change proposal is available.

[CLICK HERE](#)



ENA believes that the application of a safeguard to distribution of gas would place an **additional constraint** on the expansion of gas distribution networks

CHOICES FOR CONSUMERS IN POWER USE

The Australian Energy Market Commission (AEMC) released its Power of Choice (POC) review in December 2012.

Since that time, there has been a wave of activity undertaken to effect changes recommended in the POC review to improve the ability of customers to manage their electricity usage and actively influence their related costs.

A key part of this process relates to proposed changes in electricity metering. The AEMC has been undertaking an extensive consultation process (including six stakeholder workshops) since commencing consideration of metering issues in April 2014 and released the long awaited rule change for competition in metering and related services on Thursday 26 March 2015.

The key objective for the proposed rule change is to facilitate a market-led approach to the deployment of advanced meters for small customers, where consumers are able to drive the uptake of technology through their choice of products and services.

ENA considers that the effectiveness of a new metering framework should be judged upon whether it:

- » Enables a competitive, open and fair market for demand side services;
- » Benefits customers through economic achievement of future network operational benefits;
- » Facilitates broader adoption of advanced meters while minimising cross-subsidies and any associated price impact on customers;
- » Enables a transition to cost reflective network tariffs as quickly as practicable; and
- » Maintains current network services and efficiently leverages existing investments.

METERING ISSUES ON THE AGENDA

In addition to the rule change for competition in metering and related services there are related processes underway by several different parties:

- » Australian Energy Market Operator is undertaking consultation related to developing guidelines on:
 - Customer access to their energy consumption data to be provided in standard formats by retailers and distribution businesses;
 - Development of a minimum services specification for advanced metering;
 - Development of a shared market protocol as the communication link to channel data from advanced meters between parties.
- » The Energy Market Reform Working Group for the COAG Energy Council has been consulting on development and potential regulation of new energy products and services;
- » The Australian Energy Regulator (AER) has been consulting on:
 - Regulation of alternative energy sellers; and
 - Recovery of residual electricity distribution metering costs

The effective coordination of related issues across this range of processes will be critical to successful delivery of a holistic and appropriate system to provide systems and services that benefit delivery of effective services to customers.

Recognising that the resourcing implications are significant, ENA is coordinating engagement across the range of processes to support effective outcomes that delivers the network services critical to customer benefits.

The **key objective** for the proposed rule change is to facilitate a market-led approach to the **deployment of advanced meters** for small customers

ENA supports the intent of the AEMC metering rule change but remains concerned about the following:

- » With the capacity of the proposed changes to enable on-going cost effective and efficient delivery of network services. Specifically, the draft determination does not appear to provide sufficient certainty to support network investments which rely on continuity of smart meter services from a new metering coordinator on efficient terms;
- » That significant changes in allocation of roles and responsibilities are consistently applied throughout the changes to ensure that responsibilities, accountabilities and associated penalties are aligned;
- » That implementation and transition through to the new processes and responsibilities is managed to ensure that safety and security of supply of electricity to customers is maintained
- » That the time available for consideration of the draft determination and development of the final AEMC determination is sufficient to enable appropriate scrutiny.

ENA is coordinating a response to AEMC with and on behalf of members. The response is due to AEMC on 21 May, with the final determination due on 2 July.

The **Western Australia** Government's decision to **transfer of responsibility** for the economic regulation of Western Power network to the Australian Energy Regulator and move to a **national set of rules** is a significant and welcome step.

WA ELECTRICITY MARKET REVIEW

The ENA has welcomed the Electricity Market Review Options Paper and the response from the Western Australian Government, which were released on 24 March 2015.

The ENA has been a strong advocate of a truly national economic regulator for networks and a single set of regulatory rules to cover electricity networks across all of Australia's states and territories.

The Western Australian Government's decision to transfer responsibility for the economic regulation of Western Power network to the Australian Energy Regulator and move to a national set of rules is a significant and welcome step. This means that

consumers will benefit from the elimination of unnecessary complication and investment uncertainty.

Another positive is the Western Australia Government's commitment to undertake further reforms to enable introduction of full retail competition – an important step for delivering efficient consumer outcomes and choice. Full retail competition has resulted in significant innovation and cost savings to consumers in other Australian markets. While further reform will be needed to create the basis for competitive wholesale and retail markets in Western Australia, the recent announcement is progress for energy customers in Western Australia.

[CLICK HERE](#)

ENA PROJECTS

ENA KNOWLEDGE BANK

The ENA has commenced a project to build an industry-wide knowledge bank. *The ENA Knowledge Bank* will be a database containing the details of research, projects and innovation initiatives undertaken by ENA and its members, as well as the Australian Power Institute (API), furthering the collective knowledge of the industries which the ENA serves.

The objectives of the Knowledge Bank are to:

- » Help ENA members understand the state of industry knowledge and activity in Australia in relation to technical, commercial and regulatory knowledge and innovation;
- » Help the ENA, and its members, identify critical priorities and opportunities for additional activities to further industry knowledge;
- » Make it easier for ENA members to share information and make connections;
- » Avoid duplication of effort;
- » Develop a lasting, sustainable knowledge management tool for ENA members; and
- » Support the ENA's innovation strategy for the industry (including advocacy activities and regulatory reform submissions).

On completion, it is intended that the ENA Knowledge Bank will be hosted on the ENA website.

ENA has now commenced collecting project information for inclusion in the database, with the initial phase of the project scheduled for completion by June 2015. It is intended that this database will be continually updated, so that it becomes an ongoing, up-to-date resource for the industry.

For more information on the *ENA Knowledge Bank* or if you would like to provide information on research or projects for inclusion in the database, please contact Stuart Johnston at ENA at sjohnston@ena.asn.au.

EMBEDDED GENERATION PROJECT

The ENA Asset Management Committee (AMC) has commenced a project to explore the technical, regulatory and commercial implications for network businesses of integrating the continued growth of Embedded Generation (EG) into the Grid.

The AMC has commissioned this project to build on early research work by ENA around *The Impacts and Benefits of Embedded Generation* (IBEG) on electricity networks around Australia (the IBEG report 2011). This report, based on work by the CSIRO and Senergy Econnect Australia, provided the ENA, its members and stakeholders with a valuable initial assessment of the emerging technical, regulatory and commercial issues and the benefits EG could bring to managing peak demand.

Since 2011 there has been significant growth of embedded generation (EG) – particularly solar PV – across Australian electricity networks which have had significant implications for Australian distributors. From the technical issues related to voltage fluctuations and reverse power flows to the commercial impacts of reduced electricity demand and market rules and regulations struggling to keep up with the pace of this customer led transformation – the challenges are considerable, varied and pressing. There have also been significant changes to the regulatory and market conditions around the integration of EG.

At the same time, new opportunities are now beginning to emerge for delivering shared network and customer benefits through the integration of EG with other distributed energy resources (DER) such as energy storage and advanced demand management.

It is also recognised that many electricity consumers – almost 1.3 million of them – are actually “prosumers” as they both produce and consume electricity and typically utilise the electricity network for both of these activities.

In light of these and other developments, the ENA has recognised the need to commission a further piece of work to build on and update the IBEG report and present a contemporary view of:

- » The technical, regulatory and commercial impacts of the continued growth in EG for Australian distribution and transmission networks; and
- » The key policy and regulatory options which the ENA should consider in response to these impacts to ensure the safe, reliable and efficient operation of the electricity network in the long term interests of consumers.

This new reality represents a vastly changed environment for Australian network businesses and the market transformation has only just begun. This new report will try to support an effective and efficient transition process to ensure these businesses can meet the needs of consumers and prosumers well into the future.

The final report for this project is scheduled for completion in early August 2015.

For more information on the ENA AMC Embedded Generation project, please contact Stuart Johnston at ENA at sjohnston@ena.asn.au.

VEGETATION MANAGEMENT PROJECT

Vegetation Management is the largest recurrent annual maintenance activity undertaken by Network Service Providers (NSPs). Electric supply service reliability and public safety imperatives require that appropriate clearance between vegetation and electricity transmission and distribution lines is maintained. Accordingly, electricity supply and safety regulations around Australia require that vegetation is managed to maintain minimum specified clearances between power line infrastructure and vegetation.

The requirement to manage vegetation is common to all NSPs. However, the many different types, designs and specifications of power lines and other network assets combined with the diverse range of vegetation characteristics, terrain types, growth potential, and natural hazard risks such as bushfire risk, that occur around Australia make vegetation management one of the most complex business activities undertaken by NSPs.

Accordingly, vegetation management program design and implementation must factor in this great variability. By necessity, a range of vegetation management strategies, program specifications, operational techniques and implementation cycles are required for efficient management and to an extent this is borne-out in the range of different regulatory approaches and vegetation management program design features evident around the country.

In this context, ENA has commenced a research project to investigate the various vegetation management delivery models used across the country. The aim of the project is to try to identify and develop a set of best practice principles for NSP vegetation management programs across Australia, acknowledging the differences between jurisdictions in regard to regulatory requirements, approaches and practices, and variability in vegetation. The project also hopes to identify opportunities for efficiency gains and contractor safety performance within the vegetation management delivery model and key practice components and make relevant recommendations on initiatives that may assist in improving vegetation management practices and

performance for the electricity supply industry.

This project is scheduled for completion in early August 2015.

For more information on the ENA Vegetation Management project, please contact Stuart Johnston at ENA at sjohnston@ena.asn.au.

INTEGRATING RENEWABLES INTO THE GRID: STOCKTAKE DATABASE PROJECT

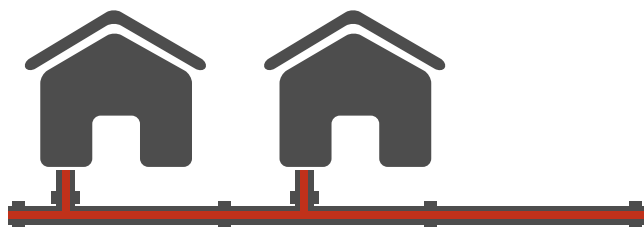
The Energy Networks Association (ENA) hosts the Stocktake database: *Integrating Renewables into the Grid*, providing a one-stop-shop of up-to-date renewable energy, grid integration projects and findings. The Database currently contains 176 renewable energy grid integration projects, including 60 international projects and 116 from across Australia, worth more than 4 billion dollars in asset investment.

ENA has now commenced the first update of the database. The initial refresh of stocktake results (domestic projects only) will be undertaken in March/April 2015 and is scheduled for completion in May 2015. The refresh of the database will also include an update of the associated database analysis report.

For more information on the existing **Stocktake database: Integrating Renewables into the Grid** or if you would like to provide information on new projects for inclusion in the database, please contact Stuart Johnston at ENA at sjohnston@ena.asn.au.

ENA PUBLICATION

NATURAL GAS NETWORKS – VALUABLE CONNECTIONS

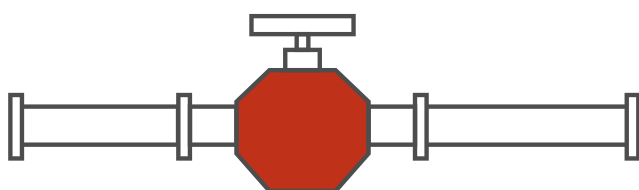
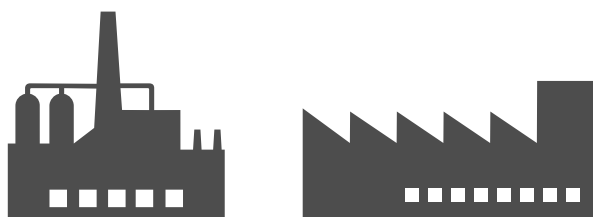


4,384,795 residential connections

Australia's domestic Natural Gas networks provide energy to almost half of Australia's households. Natural Gas heating, cooking and hot water appliances efficiently provide a safe, comfortable and low carbon energy source for millions of Australians.

133,924 commercial and industrial connections

Businesses use Natural Gas for cooling, heating, cooking and drying products for market. Natural Gas represents a key feedstock for industry and offers commercial operators exceptional reliability in production processes and operations.



88,636 km of Natural Gas network

Natural Gas network businesses operate \$9 billion of assets. This long life infrastructure is supported by investment in infrastructure, technology development, training, management and safety systems.

2,811 workers

Network operational staff work with gas transmission operators, plumbers, retailers and installers to ensure a continuous and safe supply of energy to Australian businesses and households.



1/4
LESS CO²e



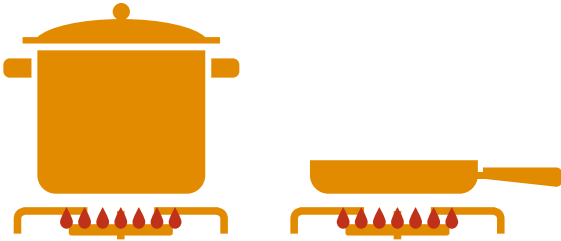
Delivering low emissions energy

In 2013 Natural Gas networks provided more energy than all the brown coal fired power stations in Australia. In Victoria, Natural Gas offers an energy source with less than one sixth of the greenhouse emissions intensity of electricity. In NSW, WA and Queensland, the greenhouse gas emissions of energy used in gas appliances and supplied from Natural Gas networks is less than a quarter of the emissions from the use of electricity.

Supporting the energy grid

In winter, gas heaters provide instant warmth for millions of Australian homes. ENA estimates that without Natural Gas for heating in NSW, the peak demand for electricity in winter could be up to 20% higher. In the 2014 summer heat wave, generation from gas fired power stations supplied 91% of the extra power required in South Australia against 5% for wind and 1% for solar.





Cooking with Gas

Natural Gas provides instant, responsive, heat adjustment - making Natural Gas the preferred energy source for cooking by many chefs. Cooking with Natural Gas enhances kitchen safety as gas burners cool quickly when turned off and the visible flame indicates when the cooker is on.

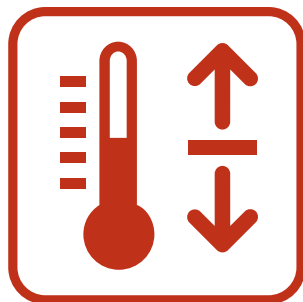
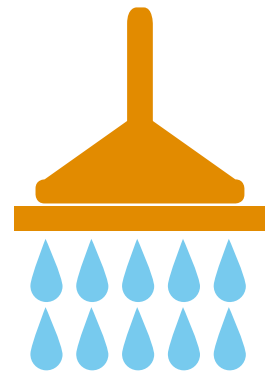
Outdoor BBQs can easily be connected to a Natural Gas network – removing the need to replace gas bottles.

Better for your wallet and the environment

A continuous flow gas water heater connected to a Natural Gas network never runs out and can reduce household carbon emissions by up to 83% over an electric resistance water heater.

Continuous flow hot water systems using Natural Gas provide similar levels of greenhouse gas abatement to more expensive electric-boosted solar water heaters and considerably more than heat pump water heaters. In addition, the purchase, installation and maintenance costs of a continuous flow hot water systems are cheaper than the alternatives. Continuous flow water heaters only power up when needed, giving complete control of energy costs for hot water.

REDUCED CO²e
83%



Comfort and Reliability

Natural Gas is an outstanding heating option where other systems can struggle to create and maintain a warm, comfortable home.

Natural Gas provides a fast, comfortable, instant and intensive source of heat without condensation.

Transporting the future – using Compressed Natural Gas

Vehicles powered by Compressed Natural Gas (CNG) are already giving Australia greater energy security.

CNG used in significant numbers of buses in Adelaide, Canberra, Perth and Sydney provides lower greenhouse gas emissions and particulates - improving air quality in our cities.

Logistics fleets use CNG fuelled trucks to lessen exposure to diesel price fluctuations. Passenger cars designed to use CNG are already in use overseas and allow for refuelling from the home – saving consumers time and money.

