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MEDIA ANNOUNCEMENT

Address by Robert Wheals, Group Executive Transmission, APA Group, at the Australian Domestic Gas Outlook Conference in Sydney, 15 March 2017

Clarity and Certainty Encourages Investment & Innovation

Introduction - Australia facing an 'energy crisis'

We've all been following the media frenzy since the start of 2017. Every day our newspapers are filled with commentary and debate on the issues around the recent South Australian electricity black-outs, energy security generally, high prices (both electricity and gas) and forecast gas shortages.

As recent as last week, in its latest report, AEMO has said that without a swift response, New South Wales and South Australia could face supply risks as early as the summer of 2018-19, Victoria in 2020-21 and Queensland between 2030 and 2036.

Also last week, at The Australian Financial Review Business Summit, the Prime Minister Malcolm Turnbull declared that the east coast of Australia is facing an 'energy crisis'. A day later, he elevated this to a national security issue, and called an urgent meeting with the chief executives in the gas supply and export industries, which is taking place today in Canberra, to address the issue.

"The crisis we had to have"

So why have I introduced my presentation today, which addresses the issue of "Transparency in the Gas Market", by focusing first on the looming energy crisis?

Because perhaps this is the "crisis we had to have".

And why do I say this?

Because this crisis will hopefully be the impetus to developing a national energy policy. The urgency and focus by our political leaders now on our national energy security should bring with it a focus on "transparency", or the "clarity" required, of all the facts.

The concern though is that in the heat of the crisis, emotions and populism will get in the way.

We therefore will need calm heads to develop and implement good policy, with "clarity" of vision & leadership so that sound long-term policy decisions can be made.

Let's get clarity of the facts

1. Electricity and gas energy markets respond to price signals

The claim is that the electricity and gas markets are not working effectively, and that there is a shortage of gas.

Let's examine that briefly:

Markets are designed to allocate resources to the highest bidder and markets are designed to respond to price signals.

In regard to the National Electricity Market (or NEM), generators are dispatched to produce electricity based on the principle of meeting prevailing demand in the most cost-efficient way. The NEM was designed to allocate electricity based on price. It was not designed to allocate electricity based on non-price criteria such as the level of carbon emissions of a generator in the electricity stack, or the reliability of that supply.

Secondly, there is no question that the gas market is tight right now. The 3 LNG projects with 6 trains at Gladstone will require in total over 4,200TJ per day of gas, trebling demand on the east coast of Australia.

The domestic Australian gas market is small by international standards, with a small number of buyers and sellers.

Gas sales are largely negotiated bi-laterally, but since the establishment of gas trading hubs, while still relatively small, gas sales at the Wallumbilla trading hub have been increasing and totalled 3.73 PJ for the last 6 months.

All that said, available gas is being traded amongst gas buyers & sellers, with price being the determining factor.

If supply is tight and not responding to price signals, the reasons are not with the functioning of the market. Rather, the reasons are more likely to rest with supply side barriers or impediments such as moratoriums and regulatory restrictions.

So I'd suggest the gas market is working as best it can given the external impediments that participants face. Greater information transparency will help, but real improvements in market outcomes can only come by alleviating supply side impediments.

When it comes to gas infrastructure, APA's 7,500 km interconnected east coast gas grid is unique on the planet for its ability to move gas seamlessly from 30 receipt points to over 100 delivery points. Today, we are able to offer the capacity, flexibility and level of innovation to give customers what they need for the changing gas market. In short, the pipeline industry has responded with the investment and innovation needed to enable the gas market to work effectively.

2. Facing up to economic reality

You might well then ask, "if the electricity and gas markets are working as designed, why are there claims that we have an energy crisis?"

The energy markets are doing what they are supposed to do, that is, sending out signals for more supply.

And as we know, there is no better cure for high prices than high prices. When markets operate normally, a rise in the price of a commodity typically triggers a boom in exploration and new supply.

So where is the supply response to the increases in gas prices over the past few years?

There are several well understood economic factors and commercial risks that have hindered the development of new gas resources:

(a) A slump in oil prices has led to a slashing of capital spending on oil and gas projects, and a lack of appetite to invest in longer term opportunities.

(b) The cost of new field development, in particular more marginal fields, is expensive and generally produces less gas per new well. This is leading to higher development costs and factors into the risk based decision of whether or not to invest.

(c) By international standards, the Australian domestic market in small, with a limited number of buyers and sellers. Production on the east coast is concentrated in a small number of large producers., And while we are seeing some disintermediation with some industrials buying directly from producers, the buy-side is dominated by just 3 retailers

In short, as Energy Minister Josh Frydenberg, last week put this very simply, "We're producing less than we should and we're exporting more than we have … it is affecting all parts of our energy system and we do need to fix it."

3. Undeniable consequences of political interference

In addition to these market factors, there has been constant political interference in the gas and electricity markets over the past decade:

(a) Moratoria or bans are restricting the development of onshore gas reserves (in particular Victoria, NSW and the NT). And this is despite our scientists telling us that unconventional gas poses a conventional, limited and manageable set of risks.

(b) Legislative uncertainty exists, for example, introduction of and uncertainty around the RET, drilling restrictions, potential changes to the Petroleum Resource Rent tax (PRRT), and the introduction of domestic reservation policies

(c) Environmental concerns are often based more on emotional or ideological factors rather than scientific and economic facts.

With gas increasingly setting the price for electricity as our major coal-fired power generators are being phased out, this uncertainty has a flow on impact to the electricity markets.

(d) There has also been intervention in the electricity market by subsidising of intermittent renewable energy through the introduction of the Renewable Energy Target (RET), which has led to this electricity being prioritised into the electricity mix. This is impacting both the price and the reliability of our electricity by crowding out base load coal generation and also leading to the mothballing of peaking gas generation, some 600MW at present.

4. Electricity market is being disrupted

There are plenty of parallels between what is happening in our electricity market and what is occurring in other industries like taxi services and media. Solar photovoltaic panels are just the beginning. Battery storage installed with solar PV panels will take distributed energy to the next step.

And where there is disruption there is opportunity. As an example, you may have heard that a Melbourne start-up, GreenSync, is trialling a digital exchange to pay battery owners to help stabilise the system by selling spare power to the grid during extreme demand peaks.

5. Lack of market transparency

While there are efforts underway to improve market transparency, it is well accepted that there is not a lot of transparency of market data. Most trades of gas or pipeline capacity take place on a bi-lateral basis with little opportunity for price discovery. And it is not currently straight forward to get information about reserves, production and drilling results.

On the basis that better information will attract additional investment and facilitate a liquid gas market, we should all be for it.

APA certainly supports COAG's focus on increasing market transparency.

Information transparency is the basis on which well-functioning markets operate. Improving the availability, quality and timeliness of gas market data will no doubt contribute to reducing uncertainties, improving predictability and facilitate planning.

That said, such measures can only go so far. The real issue, that of getting more gas out of the ground to market, needs to be addressed head on. That means addressing and taking leadership on some of the politically hard questions such as gas moratoria and environmental restrictions. By way of summary, recent market reviews, which include ACCC's East Coast Gas Inquiry, followed by Dr Vertigan's recommendations and AEMC's East Coast Wholesale Gas Market and Pipelines Frameworks Review (Stage 2) have made a number of recommendations to reform the east coast market.

Dr Vertigan's recommendations, released in December 2016, include greater transparency on the pricing and contract terms of pipeline access, a new framework for binding arbitration on access and pricing disputes and that the Gas Market Reform Group be charged with designing the new disclosure, transparency and arbitration frameworks with a deadline of mid-2017.

This approach was preferred by COAG to the more heavy handed regulatory approach recommended by the ACCC which recommended a lowering of the bar for the pipeline coverage test. From the industry's perspective, life has moved on as we work with the Gas Market Reform Group to effectively implement Dr Vertigan's recommendations as well as with our customers to ensure more gas gets into the system.

Further, key recommendations from the AEMC report included:

- Wholesale trading hubs at Wallumbilla and Victoria
- Short term capacity trading markets
- Improving information provided through the Gas Bulletin Board

What appears often to be overlooked, although I acknowledge it's not all that easily understood or readily interpreted, is that there is already a vast amount of information available, on the Gas Bulletin board (e.g. capacity, flows, uncontracted capacity etc.) as well on APA's website (utilisation, maintenance, standard T&Cs, tariffs, detailed asset information to name but a few).

Going forward, the reform agenda is driving towards more information provision, including hub services (compression, redirection, further pricing information), and importantly upstream information (reserves, production, commodity cost etc.).

APA generally supports all these efforts to improve information transparency across the entire gas market value chain.

But while it is accepted that more should be done to improve transparency in the gas market, and that there is an urgent need for more gas supplies, we cannot ignore the fact that at the heart of these problems is the lack of an integrated national energy policy, that is, an energy policy that prioritises and balances the threefold objectives of having reliable, affordable and clean energy, and provides for a plan on how to get there.

It is this lack of clarity and certainty, which is discouraging the necessary investment required to provide a sustainable energy future for all Australians.

Clarity and certainty will encourage investment & innovation

So where to from here?

There is not much value in lamenting the lost decade that has left Australia unprepared for the changes that are to come in our energy markets.

Rather, we need to put the facts on the table and give all Australians the transparency that they need to understand the trade-offs that will ultimately need to be made as we look to address the multiple objectives of supply reliability, affordability, and lower emissions intensity.

Prime Minister Turnbull said last week, "What Australians want is a result. They want energy security, energy that is affordable, and we need to meet what we agreed to in Paris".

But we simply just can't have all three, immediately.

I'd suggest there is little dispute that as a nation, that the one thing we can probably all agree on is that we want to move to a cleaner energy future.

What we need is clarity, or transparency, on how quickly we can move to that future, and what are the trade-offs in terms of affordability and security of supply.

The faster we want to move to lower emissions future, the higher the cost and the greater the risk to reliability. We need transparency over the options that are available, their costs, and how those costs will be distributed in the community.

And we need a logical mechanism to allow us to transition to that future, one that transparently encourages the entry of clean, affordable and reliable energy in a sustainable way. Call it an Emissions Intensity Scheme, or call it what you wish.

We also need to be mindful of knee jerk responses and 'silver bullet' solutions. We have Tesla saying that its batteries could fix Australia's energy problems in 100 days.

Yes batteries may be part of the solution in the future.

But gas is here now, and we have it in abundance in Australia. Gas can and should be a part of our future energy solution. The challenge is creating the right investment environment to access this energy supply.

We only have to look to the US, where in a matter of years it has been transformed from a country poised to import LNG, to one that is forecast to be a major LNG exporter.

Not only this, but low natural gas prices have allowed the US economy to grow at the same time as they have reduced greenhouse gas emissions - largely because of increased natural gas use for electricity

generation. In fact, natural gas is now the top fuel source for electrical generation, which has driven US CO2 emissions to their lowest levels since 1991.

But first, if we want sustainable investment and innovation, we need clarity and certainty of our energy policy … not more dithering … not more twisting and turning.

Conclusion

A certain investment environment, where the rules are well understood, will foster innovation and investment.

Take APA's East Coast Grid for example. APA has invested over $2 billion in capital expenditure and over $10 billion in acquisitions to create an interconnected network that has become the backbone of Australia's gas industry. Infrastructure spend has happened, and it has happened in large measure. Why? Because the incentives to invest were transparent and right.

The pipeline sector has demonstrably delivered for the benefit, ultimately, of the nation. And has done so entirely using private sector funds.

The pipeline sector did this because there was investment clarity and certainty. Remove the clarity and certainty and you take away the investment and innovation.

Importantly, when making his recommendations regarding revisiting regulatory coverage of pipelines, Dr Vertigan recognised this by saying, "Getting the regulatory settings for gas transmission pipelines right is important to promote an efficient transportation sector with competitive prices and more efficient gas trading markets".

Dr Vertigan went on to say, "In a tighter gas market, continued investment in pipelines and related services will be needed to provide flexibility and choice for consumers".

APA has made a number of recent announcements to support the development of the energy industry:

- We have entered into a 13-year power purchase agreement with Western Australian energy provider, Synergy, for both the energy and the Large-scale Renewable Generation Certificates ("LGCs") from the 20MW Emu Downs Solar Farm for 13 years from January 2018,
- We executed a non-binding heads of agreement with ASX-listed Cooper Energy to importantly bring new sources of gas supply to southeast Australia. Under the heads of agreement, we will negotiate exclusively to acquire, upgrade and operate the Orbost Gas Processing Plant in conjunction with Cooper Energy's development of the offshore Sole Gas Field,
- We announced that we had entered into a long-term (12-year) offtake conditional agreement with Alinta Energy that will underpin the construction of the 130MW Badgingarra Wind Farm in Western Australia, and
- We announced that we had contracted with Santos to commence the development of a new 450 kilometre pipeline, the Western Slopes Pipeline ("WSP"), from Santos' proposed Narrabri Gas Project in NSW to connect to the existing APA owned East Coast Grid through the Moomba Sydney Pipeline.

But continued investment such as this, from all industry players, requires clarity and certainty of energy policy settings.

Chief Scientist Alan Finkel therefore has an unenviable task ahead to come up with a road map to a lower-carbon economy securely and affordably. And once he does this, our political leaders will need to decide how to implement this.

But while we need our political leaders to have courage and resolve, as an industry, we too need to take ownership, stand tall, and offer up solutions.

At a recent CEDA lunch in Sydney, Frank Calabria, MD and CEO of Origin Energy outlined a 3 point plan to solving the energy crisis. This plan importantly included increasing the supply of gas, as well as encouraging investment in renewables, while making electricity more affordable.

It was at this lunch too that Nick Greiner, a former Premier of NSW, called for industry to be proactive in solving for our energy crisis.

We all have a responsibility to ensure that we create a certain environment in which we can all continue to invest. One that is clear and transparent.

Because nothing will encourage innovation and investment more than clarity and certainty.

Thank you.

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About APA Group (APA)

APA is Australia's largest natural gas infrastructure business, owning and/or operating around $20 billion of energy infrastructure assets. Its gas transmission pipelines span every state and territory on mainland Australia, delivering approximately half of the nation's gas usage. APA has direct management and operational control over its assets and the majority of its investments. APA also holds ownership interests in a number of energy infrastructure enterprises including SEA Gas Pipeline, SEA Gas (Mortlake) Partnership, Energy Infrastructure Investments and GDI Allgas Gas Networks.

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