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SUBMISSION: INQUIRY INTO THE CLEAN ENERGY FINANCE CORPORATION AMENDMENT (GRID RELIABILITY FUND) BILL 2020

The Australian Pipelines and Gas Association (APGA) represents the owners, operators, designers, constructors and service providers of Australia's pipeline infrastructure, with a focus on high-pressure gas transmission. APGA's members build, own and operate the gas transmission infrastructure connecting the disparate gas supply basins and demand centres of Australia, offering a wide range of services to gas producers, retailers and users.

APGA would like to thank the Standing Committee on Environment and Communications for the opportunity to comment on the Clean Energy Finance Corporation Amendment (Grid Reliability Fund) Bill 2020. We strongly support the legislative amendments proposed in the Bill and feel that they represent a balanced and pragmatic approach to realising the stated goal of the Grid Reliability Fund (GRF) to "unlock private sector investment for clean energy projects that will secure the grid and put downward pressure on prices".

Overview

APGA supports the government's stated commitment to "encouraging investment to support the reliability of the electricity grid and improve affordability for energy users." The Grid Reliability Fund (GRF) has the potential to facilitate the private sector investment needed to make the commitment to supporting electricity grid reliability and improved affordability a reality. However, a balanced and pragmatic and, above all, technology neutral approach is essential for maximising the GRF's potential.

APGA welcomes key legislative amendments proposed in the Bill that are in keeping with this pragmatic, technology neutral approach.

First, the Bill expands the definition of "low-emissions technologies" to include technologies relating to energy storage, electricity generation, transmission or distribution and electricity grid stabilisation that also "support the achievement of a low-emissions energy systems in Australia". The Explanatory Memorandum for the Bill specifically states that "certain types of gas-fired electricity generation will now fall under this new definition, if their position in the market supports the achievement of a low-emissions system".

Second, the Bill modifies the requirement for the Clean Energy Finance Corporation (CEFC) to invest at least 50 percent of its funds in renewable energy projects. The effect of the proposed amendment is that "all grid reliability funds for the purposes of the GRF portfolio (regardless of whether investments lie in renewable or non-renewable energy) will be excluded from

meeting this requirement…". The Explanatory Memorandum states that this "ensures that the GRF can be technology neutral and enables the CEFC to focus on the best investments to improve grid reliability without being constrained by the renewables requirement".

APGA welcomes these amendments and the overall pragmatic, technology neutral focus of the Bill on maximising private sector investment to increase grid reliability and affordability while enabling greater uptake of renewable and low carbon energy sources. Gas has a strong role to play in this regard both in terms of the flexibility of gas-fired generation and its capacity to support grid reliability in conjunction with high levels of wind and solar, and its own decarbonisation pathway through the future development of hydrogen and other 'green gas' technologies. Also, gas-fired power plants have as little as one-third the carbon intensity of some coal plants – making natural gas a lower-carbon energy option in its own right relatively speaking.

The economic value of using cost-effective, domestic energy resources such as natural gas to develop low carbon energy solutions and enhance grid reliability also should not be overlooked.

APGA also notes that the Bill's approach complements the pragmatic, technology neutral approach of the draft Technology Investment Roadmap discussion paper released for consultation earlier this year.

Renewables firming

This section focuses on the key area of opportunity identified above - using gas-fired generation to cost-effectively enhance grid reliability while supporting much greater uptake of wind and solar in the electricity system (i.e. renewables firming).

The Technology Investment Roadmap discussion paper released earlier this year noted that Australia will not be able to capitalise on economic opportunities from the "systematic deployment of low-cost renewable generation" if we "compromise energy security, reliability or affordability in an effort to reduce emissions". "Combining gas generation with renewables allows affordable, low emissions generation from solar and wind to be combined with the firming capability of gas generation…" (*Technology Investment Roadmap discussion paper*, 21 May 2020, p.11).

APGA shares this view.

The flexibility of gas-fired power generation (especially fast-start gas-peakers) makes it an ideal complement to intermittent renewable sources of energy like wind and solar. It keeps the electricity grid stable both during short term fluctuations in output (measured in seconds and minutes) and longer-duration periods where the wind doesn't blow and/or the sun doesn't shine.

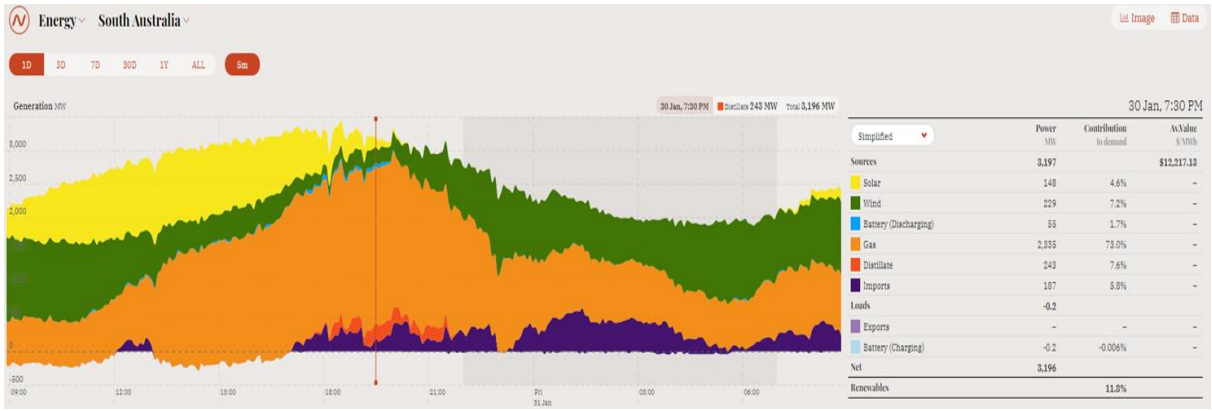
It is this role – supporting intermittent renewables in the electricity mix and thereby enabling higher renewable use overall – that represents the future of gas in the electricity system.

As a practical example, APGA would also like to highlight the example of South Australia (SA), where natural gas already supports a high percentage of intermittent renewables in the electricity mix. SA is an example of what the electricity system of the future may look like. It has a much higher percentage of zero carbon wind and solar than other NEM states, supported at regular intervals by plenty of fast-start gas, and its carbon intensity is very low due to the absence of coal.

The flexibility of gas in SA is demonstrated on both an inter-day and intra-day basis. In the year to 21 September 2020 the SA electricity supply averaged 44 percent gas and nearly 56 percent renewables, but these averages aren't always illustrative of the day-to-day practicalities. For example, on 30 January 2020, renewable energy accounted for almost 83 percent of SA electricity supply at 11:00 am, but by 7:30 pm natural gas was generating around 75 percent of the state's electricity. This huge intra-day swing occurred because wind levels dropped in the afternoon - followed later by solar PV - while exceptionally high temperatures drove a surge in electricity demand. If SA didn't have sufficient dispatchable gas-fired generation on standby, the situation could have presented a serious challenge to grid stability.

By contrast (to illustrate inter-day flexibility), on 23 January 2020 renewables generated equivalent to more than 120 per cent SA demand at times, while gas hovered below 20 per cent.

Graph: Electricity supply in South Australia – 24 hours from 9:00am 30 January 2020

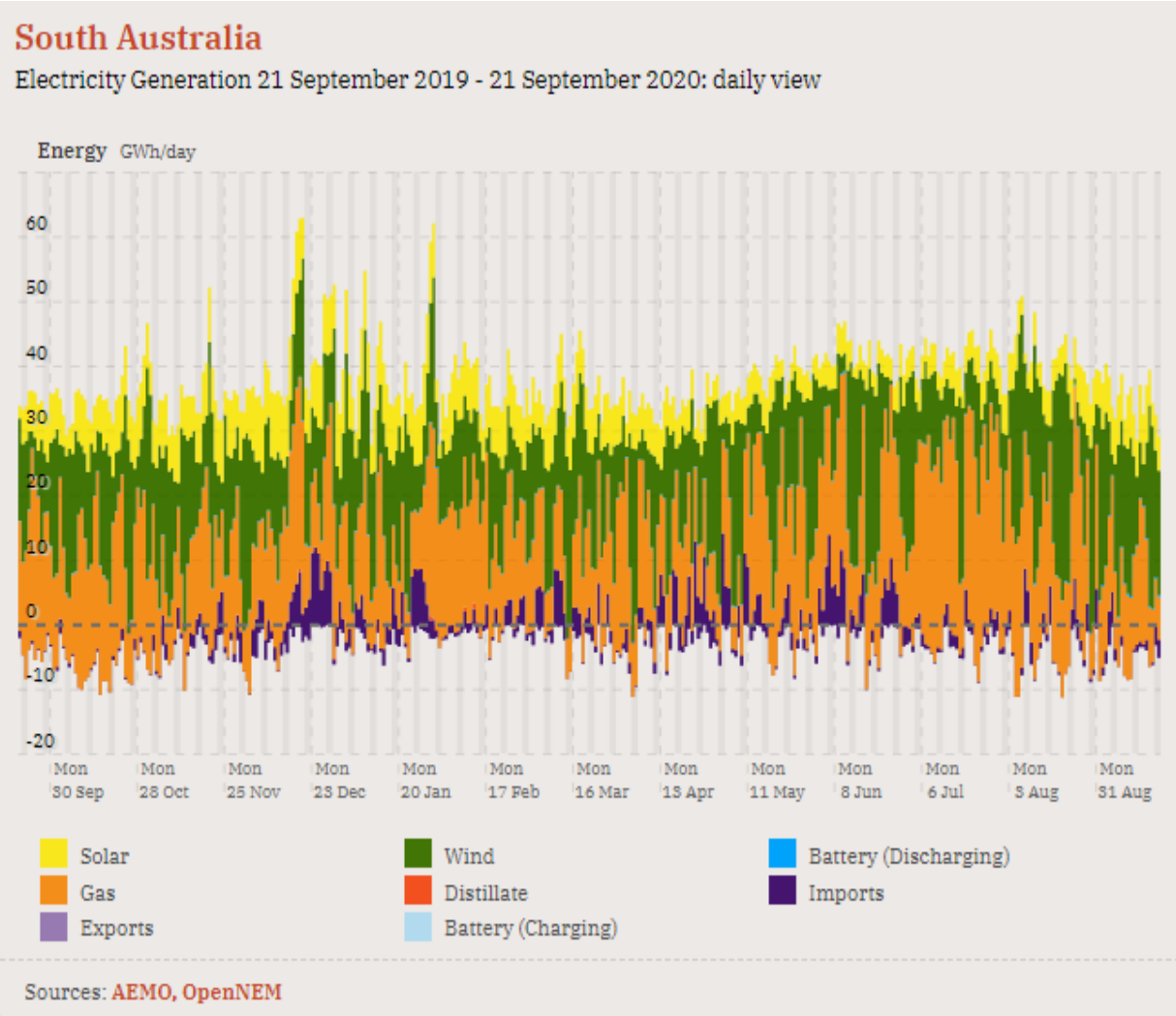


Source: OpenNEM.org.au

The New South Wales (NSW) electricity supply, by contrast, averaged 2.3 percent gas and just under 18 percent renewables over the past 12-months (to 21 September 2020) - but nearly 80 percent coal. When factoring in that some gas fired generation has only around one-third the carbon intensity of some coal plants, it is clear where the low carbon electricity future lies.

The graph below illustrates the strong interplay between gas and renewables in SA over the past 12-months.

Graph: Electricity supply in South Australia – daily view – year to 21 September 2020



Source: OpenNEM.org.au

Policy and the Investment Climate

A high level of industry investment is critical to cost effectively increase the reliability of the electricity grid – and successfully achieve the goals of the GRF. At the same time, it is vital that government recognises the role it plays in ensuring a stable policy environment that encourages rather than presents a barrier to investment. Maintaining a technology neutral approach to achieving clean energy policy goals – as the proposed Bill seeks to do – is one way to achieve this.

Conclusion

The gas transmission pipeline industry is ready to play its part in helping make the goals of the GRF a reality and bring about win-win outcomes for the industry, the economy and the environment. The proposed Bill and the technology neutral approach it has adopted are an excellent step in the right direction and APGA looks forward to engaging in the process further.

To discuss any of these issues further, please contact APGA's National Policy Manager, Andrew Robertson on or at .

Yours sincerely

STEVE DAVIES
Chief Executive Officer